Teachers' Emotional Intelligence as a Predisposition for Discrimination against Students with Severe Emotional and Behavioural Disorders

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STATEMENT OF AUTHORSHIP AND ORIGINALITY

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STATEMENT OF ETHICS APPROVAL

The research undertaken in connection with this thesis was approved by the Federation University's Human Research Ethics Committee (Approval Number: A14-156). Please refer to Appendix I for a copy of the Ethics Approval Letter. Permission was also obtained from the Department of Education and Training (DET) [Ref: 2015_002688, 29/06/2015] and Regional Directors of the Catholic Education Office (Ballarat and Sandhurst Dioceses only) [20/04/2015 and 24/04/2015]. Approval for research in Independent schools was sought directly by each school Principal. These approvals are not being presented to maintain anonymity.

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ABSTRACT

Students with Emotional Behavioural Disorders (EBD) are among the most challenging students to teach. Personality Trait Theory predicts teachers' level of Emotional Intelligence (EI) would affect their cognitive-affective-behavioural reactions towards students with EBDs, and influence level of academic achievement and difficult behaviour of these students. This research explores which teachers are more predisposed to discriminate against EBD students, and identifies the most 'effective', supportive EI teacher traits. Underlying psychological processes, such as genetic EI make-up of teachers, may prove to be most valuable in determining whether more practical strategies for dealing with students' behaviour/emotions are effectively applied and successful. An Attribution Model framework helped assess teacher reactions towards students.

Two hundred and sixty one teachers from 51 Victorian schools participated in the study by completing self-report questionnaires, including the Trait Emotional Intelligence Questionnaire. A quantitative survey methodology used vignettes, with each school contact person randomly giving 50/50 surveys to their teachers (depicting a student with either mild or severe EBD symptoms).

Pathway analysis revealed that teachers with higher EI reported less stigmatising and punitive intentions and likely greater helping behaviours. A new EI Process Model of Stigmatisation was proposed to measure teacher reactions through an affective-cognitive-behavioural sequence, rather than a cognitive-affective-behavioural sequence. Teachers' EI levels also related to their own levels of psychological distress and/or compassion stress, which influenced likely helping or punitive outcomes. Despite behavioural severity of EBD students, teachers higher in EI still indicate more supportive helping behaviours.

Specifically-identified 'ideal' teacher EI traits should lead to greater helping and be psychologically beneficial to both students and teachers. These results assisted development of an assessment tool (ASET – Assessment Screen for Emotionally Intelligent Teachers), which lays a sound foundation for schools and others to profile or recruit teachers with best 'qualities' to effectively teach students EBD students.

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LIST OF ABBREVIATIONS

ABS	Australian Bureau of Statistics
ADHD	Attention Deficit Hyperactivity Disorder
AHISA	Association of Heads of Independent Schools Australia
AITSL	Australian Institute for Teaching and School Leadership
AMOS	Analysis of a Moment Structures
ANOVA	One-way Analysis of Variance
APPA	Australian Primary Principals' Association
AQ	Attribution Questionnaire
ASET	Assessment Screen for Emotionally Intelligent Teachers
ASPA	Australian Secondary Principals' Association
ATAR	Australian Tertiary Admission Rank
AUD	Australian Dollars
CaSPA	Catholic Secondary Principals' Association
CFI	Comparative Fit Index
DET	Department of Education and Training
DSM-V	Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition
ECI	Emotional Competency Inventory
EIS	Emotional Intelligence Scale
EPG	Extracted Profile Group
EPS-Model	Emotional Intelligence Process Model of Stigmatisation
EQ	Emotional Quotient
EQ-i	Emotional Intelligence Inventory
EQ-i:S	Emotional Intelligence Inventory Short Version
ER	Emotion Regulation
ESCI	Emotional and Social Competence Inventory
ESI	Employee Satisfaction Inventory

FA	Factor Analysis
GFI	Goodness of Fit
ID	Intellectual Disability
ITE	Initial Teacher Education
MBI	Maslach Burnout Inventory
MBI-ES	Maslach Burnout Inventory – Educators Survey
MEIA	Multidimensional Emotional Intelligence Assessment
MI	Mental Illness
MSCEIT	Mayer-Salovey-Caruso Emotional Intelligence Test
NEO-FFI	Neo Five Factor Inventory
PBP	Pupil Behavior Patterns
PCA	Principal Components Analysis
RMSEA	Root Mean Square Error of Approximation
RTS	Reactions to Teaching Situations Survey
SE	Self-Efficacy
SEIS	Schutte Emotional Intelligence Scale
SPSS	Statistical Package for the Social Sciences
SRMR	Standardised Root Mean Squared Residual
TAMS	Teacher Attribution Model Survey
TEIQue	Trait Emotional Intelligence Scale
TEMAG	Teacher Education Ministerial Advisory Group
TLI	Tucker-Lewis Index
TMMS	Trait Meta-Mood Scale
UK	United Kingdom
WLEIS	Wong and Law Emotional Intelligence Scale

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SECTION I – INTRODUCTION

"I have come to a frightening conclusion.
I am the decisive element in the classroom.
It is my personal approach that creates the climate.
It is my daily mood that makes the weather.
As a teacher I possess tremendous power to make a child's life miserable or joyous.
I can be a tool of torture or an instrument of inspiration.
I can humiliate or humor, hurt or heal.
In all situations, it is my response that decides whether a crisis will be escalated or de-escalated, and
a child humanized or de-humanized"

Ginott, H. (1975). *Teacher and child: A book for parents and teachers*. New York, NY: Macmillan.

The researcher, as a psychologist, spends most week days conducting student disability and neuropsychological assessments within various primary and secondary schools across Victoria. She observes students in specialist settings, counsels children with emotional and behavioural problems and supervises other child counsellors. She also assesses Student Disability Program funding applications within some Victorian school systems. This gives the researcher many insights into the day-to-day occurrences and activities of schools, teachers and students, as well as Victorian school-system's special education models, criteria and processes.

On a practical level, teachers are responsible for the bulk of regular counselling referrals that the researchers' psychology company receives. Teachers generally refer students whom they see as having severe social, emotional and/or behavioural problems. In some instances, these behaviours are diagnostically questionable, particularly when not all teachers report the same behaviours from the same student within their classroom.

During informal observation conducted by the researcher, and after spending numerous years in schools and classrooms settings and receiving feedback from teachers, parents and students regarding problematic behaviour, the researcher became aware of the differences in how student misbehaviour was perceived and handled by teachers. For some teachers, a student's misbehaviour was able to be diffused, whereas, for other teachers, similar misbehaviour would escalate. Often

teachers within the same school were using the same behavioural strategies, however, the effectiveness of those strategies seemed inconsistent across the different students or teachers. Over time, continued inquiry and informal observation brought the researcher to consider that the difference in student behaviour and academic performance was perhaps related more to what teachers were doing, how they were emotionally handing students' inappropriate behaviour and the different relationships that teachers had established with their students. This reflection is not referring to the structured behavioural techniques and strategies that teachers are using, but rather the teacher's *personal* approach and methods.

This inconsistency between teachers raised the question as to why some teachers describe a specific student as misbehaving and disruptive, yet others, who have the same student in their class, do not. Why do some students report having respect for some teachers but not others? Why do some students who misbehave request to be in particular teachers' classes and request transfers from others? Is this problem positioned solely in the student's issues, presentation or attributes, or are there other processes taking place?

After discussions with principals, teachers and psychologists, and extensive independent research and reflection, the researcher hypothesised that these differences in teacher approaches or behaviours towards students could possibly be a result of teachers' differences in emotional capacities. This is interpreted as referring to the product of teachers' differing levels of Emotional Intelligence (EI). Research has shown a teacher's EI to influence student misbehaviour, academic progress and performance. The researcher wanted to understand these processes more comprehensively and find a different type of solution to the problem that didn't involve standard behaviour management strategies. These are assumed to be a 'one fits all' method (for both teacher and student) and they are observed to be inconsistently effective.

CHAPTER 1 – Introduction to the Research Project

1.1 Brief Overview of the Research Project

The current study determines the teacher EI traits and other characteristics that predict supportive rather than punitive behaviours towards students with Emotional Behavioural Disorders (EBD), and that also relate to teachers' psychological well-being. The study also challenges the claim in the literature that it is a student's presentation or severity of behaviour that causes stigmatisation. The 'ideal' teacher EI traits that are deemed advantageous and psychologically beneficial to both students and teachers are also specifically identified, and a corresponding assessment tool is developed.

1.1.1 Project Purpose and Aims

The main aim of the current study is to determine how students with EBDs would be perceived and treated by teachers based on teachers' level of EI and whether teachers' level of EI increases or decreases stigmatisation. The main hypothesis is that teachers who have higher EI will be less stigmatising and punitive and the likelihood of helping behaviours by those teachers will be higher. Do teachers have the necessary personality trait disposition and characteristics required to see beyond a student's surface level behaviour?

This study also explores how teachers' EI levels relate to their own levels of psychological distress and/or compassion stress as a result of working with students with EBDs. Do teachers' own levels of psychological distress and compassion stress, as a result of their EI, also form part of the stigmatisation process towards students?

Gathering such information also allows this study to challenge one evolving claim in the literature, that a student's behavioural presentation is the main cause of stigmatisation. Is a teacher's EI the greatest influence over how students with EBDs are perceived and treated, or are there stronger indications that it is in fact the student's presentation (e.g. violent behaviour) that has the greatest influence over stigmatisation?

1.1.2 Methodological Framework Overview

This current research project is founded on assumptions underlying Personality Trait Theory. It is fair to assume from such Personality Theories, that a teacher's trait EI would influence the whole attribution process; that is, teachers' cognitive-affective-behavioural reactions to EBD students. By drawing on the Attribution Theory as the general methodological framework (Corrigan et al., 2003; Weiner, 1986), this study explores teachers' cognitive-emotional-behavioural processes that lead them to either help or punish students with severe Emotional and Behavioural Disorders (EBD). This study is also influenced by Poulou and Norwich's (2002) Process Model, which outlines other important factors that relate to helping behaviour. This study demonstrates the applicability of a new Attribution Model developed by the researcher, namely the 'EI Process Model of Stigmatisation' (EPS-Model), based on theoretical and statistical arrangement of these two original theoretical models.

Teachers from 1,803 State, Catholic and Independent secondary and primary schools within Victoria were invited to participate in this study that required them to complete self-report questionnaires. A quantitative survey experimental methodology was employed through the use of vignettes, where teachers were assigned to one of two vignette conditions for comparison (which depicted a hypothetical student with either mild or severe EBD symptoms).

This study focuses on teachers' own EI development, and their ability to cope and regulate their own emotions to promote supportive interactions and engagement with their students as a way of preventing and managing disruptive student behaviours (Jennings & Greenberg, 2009). It may produce insight into new cultural change strategies that seek to reduce inequality in classrooms.

The results of the current study also assisted in the development of an assessment tool (ASET – Assessment Screen for Emotionally Intelligent Teachers), which enables schools to profile individual teachers with respect to the extent they possess many desirable 'qualities' required to effectively teach students; especially those with EBDs. The identified qualities can valuably contribute to the progression of teacher selection processes in Victoria by proposing a way to measure and identify these teachers.

1.1.3 Contribution to Literature and Knowledge

This study reintroduces and contributes to the well-known, ongoing issue of stigmatisation (Corrigan, 2000; Dridan, 2013; Lam, Tsang, Chan, & Corrigan, 2006) and discrimination (Crocker, Major, & Steele, 1998; Oswald, 2005; Sutherland, 2008; Sutherland & Oswald, 2005) against students with special needs within educational contexts. The unique aspect of this study is the shift in focus to teachers' innate EI traits as the central influence behind stigmatisation and discrimination, rather than just purely concentrating on the nature of student presentations and their behavioural challenges.

There is far more known about the conscious or cognitive processes of stigmatisation towards individuals, than the unconscious or intrinsic characteristics that are difficult to observe or measure. This study presents one way to capture and measure these 'invisible' contributors. This project aims to fill a knowledge gap in this area as it is a perspective that is rare to find within special education discriminatory studies. A new focus on the future direction of the stigmatisation issue demonstrates that students' behaviours and teachers' cognitive processing alone are not necessarily the primary sources of stigmatisation and discrimination.

Students with EBDs are of increasing concern for teachers (Conway, 2006) and deemed the most challenging and difficult group of students (Westwood & Graham, 2003). Teachers' perceptions of students' behaviour can predict their own responses and treatment of students and consequently influence the academic achievement and behaviour of students (Woodcock & Vialle, 2010, p.177). Many links are already established between teachers' emotional experiences and emotional competencies and the manner in which they engage, instruct and manage students' misbehaviour. Students gain information about their performances from classroom and teacher cues (Graham, 1990) which contributes to how they perceive themselves; influencing their self-esteem and own emotional response and behaviours. The current study explores these processes further by testing new as well as existing factors found in the literature that helps to explain the link between nominated teacher factors and student misbehaviour. This assists in establishing new connections between teacher characteristics and desirable classroom outcomes for all students, including those with EBDs.

The current study also positions itself within the research on teacher stress, burnout, and compassion fatigue in the context of education, which generally concentrates on predictors of teachers' psychological well-being and occupation longevity. There are limited, if any, studies that identify specific EI traits as resiliency factors to teacher psychological distress, compassion stress, poor mental health and attrition. No obvious research reports could be found from a concerted literature search to show the psychological consequences of teachers (psychological distress and compassion stress) in relation to the Attribution Model within stigmatisation in education.

This research project is also positioned within the recent controversial Federal Government emphasis on 'teacher selection' or 'teacher effectiveness' and the attempts of the Victorian State Government to implement a consistent policy. The research promotes and advocates for the practical implementation of a requisite criteria for teachers to be selected on the basis of their level of EI, not just on their experience, education and performance. This study determines new factors that are considered important in quality teaching and also proposes and presents a new practical method of assessing for these factors.

The topic and concept of EI is still in its infancy, which suggests that the findings within the current study will build upon what is already known. The study also assists researchers in understanding EI as concept, its possible functions and context applications more thoroughly.

1.2 Operationalisation of Theoretical Concepts and Variables

The following terms, theoretical concepts and variables are frequently used throughout the current study and so it was essential to explicitly define them. These conceptualisations and operationalisations assist in comprehending the related literature and in eliminating any ambiguity of the factors being measured empirically and quantitatively.

1.2.1 Emotional Behavioural Disorders

The term Emotional Behavioural Disorder (EBD) is a generic term that refers to children with externalised or internalised emotional or mental health issues (Achenbach, 1991). Students with

externalised emotional-behavioural presentations tend to act out, become aggressive, outspoken, defiant, abusive, impulsive, hyperactive and noncompliant (Smith, 2007). Those students with internalizing problems are often withdrawn and may silently struggle with anxiety, depression, and self-harming behaviours. The term EBD incorporates students whose presentations are considered problematic, extreme, severe and persistent in that they interfere with many areas of their life such as their learning, relationships and development. Such emotional and/or behavioural problems occur over a long period of time and to a marked degree (Smith, 2007). In Australia, the terms mental health disorders, behaviour disorders, and disabilities tend to co-exist.

1.2.2 Emotional Intelligence

Salovey and Mayer's (1990) broad definition delivers a universal and common meaning of EI that aids in understanding the concept generally. They define EI as "the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p.189). It is also commonly agreed that "people vary in their ability to perceive, understand, use and manage emotions" (Cherniss, 2010, p. 111).

1.2.3 Trait Emotional Intelligence

The current study employs Petrides, Fredrickson and Furnham's (2004) theoretical model and definition of trait EI as "a constellation of behavioural dispositions and self-perceptions concerning one's ability to recognize, process, and utilize emotion-laden information. It encompasses various dispositions from the personality domain..." (p. 278) and is measured via the TEIQue (Petrides' Trait Emotional Intelligence Questionnaire; Petrides, 2009a). Petrides' trait EI claims to include all "personality facets that are specifically related to affect" (Petrides, Pita, & Kokkinaki, 2007, p. 274). Petrides EI traits are listed and defined in section 10.7.2 of this thesis.

1.2.4 Stigmatisation

Stigma, according to Goffman is "an attribute that is deeply discrediting" to the bearer as it reduces them "from a whole and usual person to a tainted, discounted one" (1963, p. 3). In context,

these 'attributes' or stigma refer to the perceptions that a teacher may have towards a student. Stigmatisation in the current study is the cognitive perceptions that teachers have regarding the student with EBD's presentation that precedes discriminatory behaviour. Stigma exists when people experience "discrimination that leads to unequal outcomes" (Link & Phelan 2001, p. 365). Stigma is a process that commences with a stigmatising trigger (such as challenging behaviour) and progresses through a cognitive-affective process to result in discrimination (Lam, Tsang, Chan, & Corrigan, 2006). Stigmatisation is measured through the Attribution Process Model (figure 10.2)

1.2.5 Discrimination

'Discrimination' in this investigation refers to "the actions or behaviours of those people who reject or exclude another as a result of their perceptions or stigma" (Dridan, 2013, p. 10). Discrimination is the action of either withholding opportunities from a stigmatised person, or reacting punitively towards them solely because they are a member of a stigmatised outgroup (Crocker et al., 1998). A teacher's lack of willingness to support or help a student may be another example of a discriminatory consequence for a student as a result of their teacher's perception. Discrimination translates into higher Punitive Behaviour and/or lower Helping Behaviour; two variables within the current study. The Attribution Process Model measures discrimination levels through its established application to various helping behaviours (Corrigan et al., 2003; Dooley, 1995; Reisenzein, 1986; Willner & Smith, 2008).

1.2.6 Likely Helping Behaviours

Likely Helping Behaviours refer to a teacher's willingness to become proactively and supportively involved with an EBD student, despite their presentation. This refers to teacher behaviours that are more likely to bring about positive and/or longer-term change for the student (Cunningham & Sugawara, 1989). This can be measured through the willingness of a teacher to use strategies that help promote positive teacher-student interactions, such as setting aside time for the student, changing the instructional method, or trying to understand the student.

1.2.7 Likely Punitive Behaviours

Likely Punitive Behaviours, also known as Discriminatory Behaviours, are intended to bring about the immediate cessation of difficult behaviour through the use of authority or 'quick fixes'. It is also the act of withholding opportunities from a student. Such methods do not assist the student with longer-term change. Punitive strategies can include avoiding the student, transferring a student to another class, making threats, preaching, punishing and withholding privileges (Cunningham & Sugawara, 1989). Such punitive behaviours can often create 'distance' between teachers and students, limiting the communication and interaction between them and does not contribute to the effective integration of the challenging student into the classroom.

1.2.8 Cognition

Cognition refers to a person's perceptions, thoughts and beliefs.

1.2.9 Perception of Student/ Responsibility/Control

Perception of Student (Responsibility/Control) is a cognitive variable that refers to the level of responsibility and control that a teacher perceives the student with an EBD to have over his/her presentation. This also measures the level of 'blame' placed onto the student for his/her presentation.

1.2.10 Perception of Self/Personal Responsibility

Perception of Self (Personal Responsibility) is a cognitive variable that refers to the level of personal responsibility that a teacher perceives themselves to have over the student with EBD's presentation. This also measures their level of perceived personal blame for the student's presentation.

1.2.11 Self-Efficacy

In the current study, the Self-Efficacy cognitive variable refers to the perceptions that are considered to be a determinant of teachers' behaviours and actions in the classroom. Such perceptions relate to teachers' beliefs about their own confidence and skills in managing, coping, teaching and engaging with an EBD student.

1.2.12 Perceived Risk

The Perceived Risk cognitive variable refers to teachers' perceptions as to the student with EBD's level of dangerousness or violence propensity. Perceived Risk has been found to significantly predict helping behaviour in studies on stigmatisation (Corrigan, 2002; Weiner, 1995).

1.2.13 Affect

Affect is broadly defined as an emotional reaction to a situation or event that can be directed at others or oneself. 'Affect' is a general and all-encompassing term, used to describe affective states, emotions and feelings. Affect includes culturally generic feeling states such as anger, irritatation, aggravation, sympathy, concern, pity, fear, stress, anxiety, helplessness, depression, burnout, hurt/offence and indifference. These feeling states were found to cluster into two Affect variables used in the current study, namely 'Compassion' and 'Negative Affect'.

1.2.14 Compassion

Compassion is "a feeling of deep sympathy and sorrow for another who is stricken by misfortune, accompanied by a strong desire to alleviate the suffering" (Dictionary.com, 2017), and it is believed to be an essential component of the helping relationship (Figley & Nelson, 1989; Herman, 1997). Teachers' reported affective levels of sympathy, concern, pity and indifference were found to comprise the Compassion variable.

1.2.15 Negative Affect

Negative Affect refers to the level of negative emotional states that teachers reported experiencing as a reaction to a student with an EBD (high to low levels of Negative Affect). The Negative Affect variable was measured through feelings of anger, irritation, aggravation, stress, anxiety, helplessness, depression, burnout and hurt/offence as a way to determine affect levels.

1.2.16 Attribution Theory

Attribution Theory refers to the perceptions of an individual regarding the causes of his/her or another person's behaviour, which predicts their emotional and behavioural reaction. As Corrigan et al. (2003) state: "People make attributions about the cause and controllability of a situation… that leads to inferences about responsibility. These inferences lead to emotional reactions such as anger or pity that affect the likelihood of helping or punishing/rejecting behaviours" (p.165). This whole cognitive-affective-behaviour process outlines the Attribution Pathway Model.

1.2.17 Causal Attribution Factors

Causal attribution factors refer to the *specific* factors that a teacher attributes or perceives, to be the cause of an EBD student's presentation. These perceived causes can be either internal or external to a student with an EBD (factors within the student or factors in the student's environment). Four broad causal attribution factors are considered in the current study as possible causes of the student with EBD's behaviour; namely Child, Family, Teacher and School factors.

1.2.18 Psychological Consequences

The different ways that teachers react to students with EBDs challenging behaviours and/or students' personal backgrounds can result in psychological consequences for teachers that affect their well-being. The term psychological consequences aims to generally encompass the broad and interrelated range of research terms found in the literature such as teacher burnout, emotion exhaustion, compassion fatigue and/or other mental health problems, as they have all been found to impact on teacher well-being (Ahola et al., 2014; Ganster & Rosen, 2013; Russ et al., 2012). Based on the patterns of this existing research, it was proposed that the negative psychological consequences for teachers that relate to the current study's variables could be categorised into two types; Psychological Distress and Compassion Stress.

1.2.19 Psychological Distress

Psychological distress refers to a group of variables found in the literature that are considered to be negative psychological consequences that effect teacher well-being. In the current study, the level or severity of the negative affective experiences of teachers (referred to as the 'Negative Affect' variable) is considered to be associated with the likelihood of a teacher experiencing or developing Psychological Distress, as well as teachers perceiving themselves to have lower levels of Self-Efficacy and higher levels of Perceived Student Responsibility/Control.

1.2.20 Compassion Stress

Compassion stress can develop as a result of caring too much, over-engaging in a career, or, in this case, over-engaging with a student. Compassion stress, as the term chosen for the current study, can develop as a result of a teacher's interaction with a student's personal suffering or even trauma (e.g. family violence at home), as opposed to developing burnout which is more a result of the environment (e.g. student behaviour)(Collins & Long, 2003; Maslach, 1982; Pryce et al., 2007). It is the psychological consequences of this more 'extreme' caring or 'rescuing' that can lead teachers to experience compassion stress. It is theorised in the current study that teachers who are significantly high in the variables Compassion, Negative Affect and Perception of Personal Responsibility are more vulnerable to experiencing compassion stress.

1.2.21 Teacher Effectiveness

Effective teachers are those who possess the teacher EI traits that are likely to be advantageous to students (especially those with EBDs), as well as to teachers. In the current study, the most effective teacher EI traits are selected based on their relationships with higher helping and supportive behavioural outcomes for students, and lower discriminatory or punitive behavioural outcomes. Effective teacher traits are also selected in consideration of longevity and teacher resilience to psychological distress and compassion stress.

1.3 Background and Problem Overview

1.3.1 Teacher Emotions in Education

As students with EBDs are commonly educated in mainstream classrooms, this highlights the important role that general education teachers, as well as special education teachers, have to play for such students. There is ample evidence to show that a student's formal learning environment is largely influenced and shaped by the student's teacher (Jennings & Greenberg, 2009). Teachers' emotional interactions with students has been clearly indicated in the literature to be just as important, if not more so, than academic knowledge and good instruction skills. Even the most academically skilled teacher may struggle to help a child excel academically if there is not some kind of positive engagement with the student. Teachers need to have insight into the specific needs of students with EBDs, as well as the capacity to create a supportive and nurturing environment so students with EBDs can receive the type of emotional and educational support that they require.

The level of emotional support from teachers affects not only their interactions with students but plays a significant role in students' adjustment, development, emotional wellbeing and academic achievement (Jennings & Greenberg, 2009). Teachers' inability to regulate their own emotions and emotionally express themselves, for example, may have serious implications for their teaching outcomes as a result of their interactions with students. Hamre and Pianta (2005) found that the quality of teachers' emotional approach towards their students greatly influences students' education. When this idea is applied to children with EBDs or children at-risk of mental health, social and academic issues, then teachers' quality emotional support plays a critical role in their students' achievement and wellbeing.

Cooper (2011) conducted an international research literature review on teacher strategies for students with EBDs. Specifically, he aimed to identify sources which "suggest the likely replicability of effective interventions" (p. 72). Well-designed large-scale random controlled trials (RCTs) were given precedence. In his review of available research, effective teacher qualities and skills were given particular focus, as was finding approaches that promote positive educational engagement of students

with EBDs. The teacher-student relationship was considered to be a most significant factor in approaches to teaching and learning. The literature presented reinforced that teachers who exhibited factors such as emotional warmth were more likely to improve the well-being of students. This included school engagement and academic achievement. There was also evidence to suggest that teachers who possessed qualities of empathy and positive regard, created an environment that promoted positive student engagement. Severity of EBD symptoms have shown to be reduced when teachers possess particular skills, even those disorders with biological components such as Attention Deficit Hyperactivity Disorder (ADHD) (Cooper, 2011).

1.3.2 Teacher Disposition

There is ongoing debate about the degree to which individuals can be taught to be effective teachers. Are EBD teachers born or can they be made (Whitbeck, 2000)? Scott et al. (2012) state that "not everyone is cut out to be a teacher of students and that there are traits or characteristics beyond the simple delivery of instruction" (p. 4). Wadlington and Wadlington (2011) proclaim that "teachers' dispositions directly affect their effectiveness as educators" (p. 323). Following this view effective teachers are those who possess the teacher traits that are likely to be advantageous to students (especially those with EBDs), as well as themselves.

It has been established that teachers "vary in their ability to perceive, understand, use and manage emotions (Cherniss, 2010, p. 110) and these differences in teachers' emotional experiences, emotional capacities or competencies refer to their EI. This study specifically views EI as "a constellation of behavioural dispositions and self-perceptions concerning one's ability to recognize, process, and utilize emotion-laden information. It encompasses various dispositions from the personality domain..." (Petrides, Frederickson, & Furnham, 2004, p. 278). In this research project, teachers' EI traits are considered innate and stable, and therefore unteachable, as consistent with Trait Personality Theory (Caspi et al., 2003; McCrae & Costa, 1999).

Trait EI can predict the way teachers behave and respond towards students, therefore, those teachers with lower EI would cognitively perceive the student with an EBD more negatively. EI plays

an important role in the management of students' disruptive and oppositional behaviours and these students are less inclined to act out as a result (Nizielski et al., 2012). This study identifies those effective EI teacher traits that are more likely to promote positive educational and emotional outcomes for students and teachers. There are already many teacher interventions for students with EBDs, however, the inconsistency found in the use and effectiveness of such strategies is likely to be the result of individual teacher characteristics (such as EI), their resultant reactions towards the challenging behaviour and the way they engage and interact with the student with an EBD, rather than the specific strategies themselves (e.g. Andreou & Rapti, 2010; Kokkinos, Panayiotou & Davazoglou, 2005; Poulou & Norwich, 2002; Sutherland & Oswald, 2005).

1.3.3 Stigmatisation and Discrimination

Students with EBD form one group of students with special needs who can be stigmatised and discriminated against. Taylor et al. (2010) purports that it is because of the observed nature of the child's presentation and the extent of the students' problematic behaviours that leads to stigmatising judgements. It has also been found that students with EBDs receive varying amounts of help and support from their teachers as a result of how teachers perceive them (Sutherland et al., 2008). Stigmatisation refers to the negative cognitive perceptions that teachers have regarding the student with EBD's presentation that precedes discriminatory behaviour. Discrimination refers to the unequal support and help that some students within the same class might receive (Link & Phelan 2001, p. 365). This can include a teacher's lack of willingness to support or help a student, withholding opportunities, reacting punitively, or performing behaviours that are intended to bring about the immediate cessation of difficult behaviour through the use of authority or 'quick fixes'. The problem with these methods, whether intentional or not, is that they do not assist with positive longer-term behavioural change for students and they further impair the student/teacher relationship.

Social Psychology Theories or perspectives regarding stigmatisation tend to focus on a person's presentation or behaviour as being the primary source of stigmatisation that attributes 'blame'. This study challenges the claims that the student is the primary cause of their stigmatisation

and discrimination and explores many other factors and variables that relate to stigmatisation. This study commences with establishing teacher's positionality within the context of students with EBDs. It was considered important to explore teacher characteristics and their reactions in working with students with EBDs, as it is this teacher-student interaction that determines more positive behavioural and academic outcomes (and others) for both students and teachers. The relationships between student behaviour severity, teacher EI trait factors, cognitive perceptions, affective reactions and psychological well-being are examined as a starting point in understanding stigmatisation, or the variables that may relate to helping outcomes for EBD students.

1.3.4 Teacher Reactions

Stigmatisation can be seen as a process that commences with a trigger (such as students' behaviour) and progresses through a cognitive-affective reactive process resulting in discriminatory behaviours (Lam, Tsang, Chan, & Corrigan, 2006). This sequence of reaction refers to the processes found within the Attribution Model, which provides a validated measure of discrimination used in the current study, and has been applied to various other helping behaviours (Corrigan et al., 2003). Cognitive and affective variables have been found in the research to relate to likely helping behaviours (Corrigan et al., 2003; Weiner, 1979; Wilner & Smith, 2008) and are employed in the current study.

An important relationship that has been clearly established in the literature, as well as within educational contexts, is the way in which a teacher's perception of a student can predict their own responses and treatment of a student (Brophy, Rohrkemper & Ball, 1981; Poulou & Norwich, 2002; Soodak & Podell, 1994). Teacher perceptions of their own confidence and skills in managing, coping, teaching and engaging with a student with an EBD was explored in this study as self-efficacy. How much responsibility and control teachers perceived the student with EBDs to have over his presentation, as well as their own perceived level of responsibility were investigated in this study as the three Cognitive variables (Self-Efficacy, Perception of Student and Perception of Self).

Another factor identified in the literature that interferes with a person's decision to help, and is considered to be an exception to the predictable pattern of helping behaviour, occurs when there is a

perceived risk in helping another person. Therefore, this study included a fourth Cognitive variable that refers to teachers' perceptions as to the EBD student's level of dangerousness or violence propensity (Perceived Risk).

There are many links already established between teachers' emotional experiences and emotional competencies and the manner in which they engage, instruct and manage misbehaviour. This study helps to understand this relationship further. The two Affect variables used in the current study include teachers' reported levels of feeling 'Compassion' (e.g. feelings of sympathy and concern) and 'Negative Affect' (e.g. feelings of stress, anger, anxiety, depression, burnout). Compassion can be considered as feelings directed towards others (other-directed) and Negative Affect can be considered as 'self-directed' feelings, as further explained later in this thesis.

1.3.5 Teacher Psychological Well-Being

Psychological consequences for some teachers who work with students with EBDs include a decrease in tolerance and an increase in emotional exhaustion and negative feelings, due to the high emotional demands placed on them. This can lead to discriminatory behaviours, as operationalised in the current study, as teachers have a reduced emotional capacity or self-perceived ability to meet the needs of their students. This can cause avoidant behaviours or more punitive or 'quick fix' approaches by teachers in an attempt to avoid the source of the stress or their internal negative affective states. Whether this is intentional or not, it is likely to lead to a reduction of teaching quality. The quality of education suffers when teachers choose to stay in the profession, despite being burnt out (Moore-Johnson, 2006) or emotionally exhausted.

The current study pursued understanding of the different ways that teachers might react to students with EBDs' challenging behaviours and/or their personal backgrounds and the resultant psychological consequences of this for teachers. Based on patterns in existing research, it was proposed that the negative psychological consequences for teachers in responding to students with EBDs can be demonstrated through two collections of variables. The first relates to general psychological distress (as related to burnout and emotional exhaustion consequences), and includes the

variables high Negative Affect, low Self-Efficacy and high Perception of Student Responsibility. The second trio of variables refer to compassion stress (as related to compassion fatigue) and includes high Negative Affect, high Compassion and high Perception of Personal Responsibility.

Both these groups of variables, which suggest the likely presence of negative psychological consequences for teachers, could also influence the process of stigmatisation towards students. Similarly, Kokkinos (2007) suggests that burnout is associated with teacher perceptions of misbehaviour (cognitive response) and that teachers also develop negative feelings (affective response) such as becoming discouraged about their ability to manage and instruct their students. The Attribution Model could also be useful in measuring the cognitive and emotive processes behind teacher psychological distress and compassion stress, resulting in discriminatory behaviours.

The most interesting finding from research on sources of teacher stress across numerous contexts, is that whilst the stress factors are considered to be common across most teacher settings, teachers do not uniformly react to them (Milstein & Farkas, 1988). This again supports the idea that variability in teacher stress reactions and psychological consequences most likely lie within the individual teacher. Therefore, EI is important to the study of stress and burnout as it can identify those teacher characteristics that are more resilient to experiencing higher levels of negative emotional states, poorer mental health and resultant psychological problems, as well as the factors that could reduce discrimination in the classroom.

1.3.6 Teacher Selection

In addition to teachers' usual academic tasks, teachers are also role models for students' emotional development and have responsibility for ensuring that they are displaying effective coping behaviours themselves (Nizielski et. al, 2012). While teachers may care about students, it is a different competency to be able to gain accurate insight and understanding into a student and to be able to practically apply this 'care' in an emotionally appropriate way. This idea relates to one of the current key areas of focus in Victorian education, that is to select the most capable candidates for a teaching career who have the personal attributes that are present in effective teachers.

A recent document released by the Victorian Education Minister, James Merlino, called for "Raising the quality of teaching and the status of the profession through a robust approach to selection into initial teacher education" (2016, p. 4)". This comment stems from a perceived reduction in the quality of graduate teachers nationally, that is attributed to the lowering of university entrance scores into teacher education across the country and a resultant emphasis on addressing the issue of teacher selection and quality at State level (Dinham, 2013).

The Education Minister proposed that entry standards into initial teacher education courses should reflect more than just academic capability and that the characteristics and qualities of effective teachers, or the likelihood of developing them, could be assessed and measured at the teaching course admission stage. It was suggested that Victoria could develop a system-wide suitability selection approach for teacher training, however, little is known about the criteria for informing capability and suitability for teaching other than Australian Tertiary Admission Rank (ATAR) pathways, despite the extensive body of literature on teacher effectiveness and the impact of teachers on student learning and outcomes.

It was acknowledged by the Australian Secondary Principals' Association (ASPA, 2015) that the personal attributes related to teacher effectiveness "have not yet been definitively determined and as such this is an area that would benefit from further research" (p. 5).

Trait EI and teacher effectiveness has not yet been substantially researched, however, trait EI is still associated with the extensively explored claims of personality factors affecting job performance and other teaching outcomes. The current study attempts to identify some common EI teacher traits that are advantageous to working with students and that relate to a teacher's likelihood of providing students with the 'quality' teaching and support that they require. The traits or characteristics that relate to teacher resiliency and psychological well-being need to be included when determining an effective teacher in the teaching profession, as these characteristics could reduce the rate of poor mental health, teacher attrition, compassion stress and general psychological distress.

1.4 Research Questions

The current research project aspired to answer the general research question:

▪ <u>Are some teachers predisposed to discriminate against students with Emotional Behavioural Disorders?</u>

This question was answered by taking into consideration Petrides' (2009) Theory of Trait EI within the general assumption that a teacher's personality can predict behaviour. This general question explored whether a teacher has the necessary disposition required to see beyond a student's surface level behaviour. It also helped to identify the particular teacher traits that influence a teacher's ability to comprehend or to be aware of the emotional needs and motives of students with EBDs and to supportively attend to their needs.

The following question helped to respond to the general research question more specifically:

▪ <u>Which teacher EI traits lead to greater supportive or discriminatory behaviours?</u>

By drawing on the theoretical framework of Attribution Theory as a way to investigate stigmatisation and discrimination, this study attempts to capture the perceptions and likely affective and behavioural reactions of teachers towards students with EBDs. The levels of stigmatisation and discrimination across teachers' general EI levels and individual traits were compared through the following descriptive questions.

1.4.1 Descriptive Questions and Hypotheses:

The current project queried and hypothesised the following specific relationships:

- *Is there a relationship between teachers' EI traits and their responses towards students with EBDs?*

Hypothesis 1: That there will be a relationship between teachers' levels of EI and their behavioural outcomes towards the student with an EBD. Those teachers with higher EI will be more likely to use supportive helping behaviours, and those with lower EI will be more likely to use punitive

approaches (figure 1.1 demonstrates how a teacher's level of EI influences their level of Likely Helping Behaviour via a cognitive-affective process).

EI and Teacher Perception

- *How does teachers' EI relate to the way they perceive their students and themselves?*

Hypothesis 2: That there will be a relationship between teachers' EI and their perception about level of responsibility and control. Specifically, those teachers with higher EI will perceive the student to have less responsibility and control over his/her presentation and perceive themselves to have higher responsibility over the student's presentation; and that those teachers lower in EI will perceive the student to have more responsibility and control over his/her presentation and perceive themselves to have lower responsibility over the student's presentation (figure 1.1 demonstrates how a teacher's level of EI directly influences their level of Perceived Student Responsibility/Control and Personal Responsibility [as cognitive variables]).

Hypothesis 3: That there will be a relationship between teachers' EI and self-efficacy. Specifically, those teachers with higher EI will perceive themselves to have higher self-efficacy in dealing with the student with an EBD; and those teachers lower in EI will perceive themselves to have lower self-efficacy in dealing with the student with an EBD (figure 1.1 demonstrates how a teacher's level of EI directly influences their level of Self-Efficacy [as a cognitive variable]).

Hypothesis 4: That there will be a relationship between teachers' EI and their perception of a student's level of dangerousness. Those teachers higher in EI will perceive the student to have a lower violence propensity; and those teachers lower in EI will perceive the student to have a higher violence propensity (figure 1.1 demonstrates how a teacher's level of EI directly influences their level of Perceived Risk of the student [as a cognitive variable]).

Causal Factors

- *To what do teachers attribute the cause of a student's EBD?*

Attribution Stages

- *How do teachers' perceptions about the cause of a student's presentation relate to their perception about how much responsibility the student, as well as themselves, have over the student's presentation?*

- *How do teachers' perceptions about the extent of control and responsibility that they and the student have over the student's presentation relate to their affective response?*

Hypothesis 5: That there will be a relationship between teachers' perception about the level of responsibility and control and their affective response. Those teachers who perceive the student to have higher responsibility and control over their presentation and perceive themselves to have less responsibility over the student's presentation will feel lower compassion and higher negative affect (figure 1.1 demonstrates how a teacher's level of Perceived Student Responsibility/Control and Personal Responsibility [as cognitive variables] directly influences their level of affective response [Compassion and Negative Affect]).

- *How do teachers' affective responses relate to their likelihood of supportive or discriminatory behaviour?*

Hypothesis 6: That there will be a relationship between teachers' affective responses and helping behaviour. Specifically, those teachers who feel more compassion towards the student are more likely to use supportive helping behaviours; and those teachers who feel more negative affective states towards the student are more likely to use punitive or discriminatory behaviours (Figure 1.1 demonstrates how a teacher's level of affect [Compassion or Negative Affect] directly influences their level of Likely Helping Behaviour).

Severity of Student Behaviour and Teacher Helping Behaviour

In addition, the descriptive questions below challenged one evolving claim in research, that the severity of a student's behavioural presentation is the main cause of stigmatisation. It was also

questioned as to whether perceived student risk was a factor influencing teacher helping behaviour; irrespective of a teacher's disposition.

- *Is a student's level of difficult or challenging behaviour a stronger predictor of teacher helping behaviour than EI?*

- *How does a student's level of difficult or challenging behaviour relate to teachers' likely supportive or discriminatory behaviour?*

Hypothesis 7: That there will *not* be a significant relationship between the severity of a student's behaviour and teacher helping behaviour. Teachers higher in EI are still more likely to use supportive helping behaviours and teachers lower in EI are still more likely to use more punitive or discriminatory behaviours, despite the level of behavioural severity of the student with EBD (Figure 1.2 demonstrates that despite the level of student behaviour a teacher is hypothetically exposed to (high or low behaviour severity), a teacher's level of EI (high or low), will still determine their level of helping behaviour (Likely Helping/Punitive Behaviour).

- *Is there a relationship between the student's level of difficult behaviour and teachers' perceived violence propensity of a student?*

- *How does a student's level of violence propensity, as perceived by teachers, relate to teachers' likely supportive or discriminatory behaviour?*

Hypothesis 8: That there will be a relationship between teachers' perceived risk of student dangerousness and their helping behaviour. Those teachers who perceive the student to be a higher violence risk will be more likely to use punitive and discriminatory approaches; and those teachers who perceived the student to be a lower violence risk will be more likely to use supportive helping behaviours (Figure 1.3 displays the level of Perceived Risk and its directional statistical relationship with Likely Helping Behaviour outcomes).

Teacher Well-Being

This study also explores whether teachers' Emotional Intelligence levels relate to their own levels of psychological distress and/or compassion stress as a result of working with students with Emotional Behavioural Disorders. The discriminatory effects of these psychological consequences on students was also considered within the Attribution Model processes.

- *Do teachers' own levels of psychological distress and compassion stress form part of a stigmatisation process towards students?*

Hypotheses 9: That there will be a relationship between teachers' psychological distress and/or compassion stress and likely helping behaviour. Those teachers who indicate the experience of psychological distress and/or compassion stress will be lower in likely supportive helping behaviours (Figure 1.4 displays the cognitive and affective variables that are predicted to be related, and that would suggest the likely presence of Psychological Distress in a teacher. Figure 1.5 shows how the affective and cognitive variables are predicted to relate to each other that would suggest the likely presence of Compassion Stress).

ASET Tool

The final question below was designed as a first step in the development of the Assessment Screen for Emotionally Intelligent Teachers (ASET) tool.

- What are the 'ideal' teacher EI traits that would be required for a teacher to effectively teach a student with an EBD?

1.5 Summary of Hypothesised Relationships

Teacher EI	Cognitive	Affective	Behavioural
High EI →	Lower Student control → Higher Personal Responsibility Higher Self-Efficacy Lower Perceived Risk	Higher Compassion → (Other-directed) Lower Negative Affects (Self-directed)	**Supportive (Helping)**
Low EI →	Higher Student Control → Lower Personal Responsibility Lower Self-Efficacy Higher Perceived Risk	Lower Compassion → (Other-directed) Higher Negative Affects (Self-directed)	**Punitive (Discriminatory)**

Figure 1.1 Diagram of predicted teacher outcome of trait EI Process Model of Stigmatisation

Teacher Level of EI	Student Experimental Groups	Teacher Behavioural Outcome
High EI →	*High Behavioural Severity* *Low Behavioural Severity*	→ **Supportive Helping Behaviours**
Low EI →	*High Behavioural Severity* *Low Behavioural Severity*	→ **Punitive Behaviours (Discriminatory)**

Figure 1.2 Diagram of predicted outcome of experimental groups (High vs. Low Behavioural Severity)

Teacher Level of Perceived Risk	Relationship	Teacher Behavioural Outcome
Higher Perceived Risk	(+)	Higher Punitive Behaviour
Lower Perceived Risk	(-)	Higher Helping Behaviour

Figure 1.3 Diagram of predicted outcome of teachers based on their level of Perceived Risk of student violence

Cognitive	Relationship	Affective
Lower Self Efficacy	(-)	Higher Negative Affect (self-directed)
Higher Student Responsibility	(+)	

Figure 1.4 Diagram of variable relationship patterns, that if present, are likely indicators of Psychological Distress.

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Affective		Affective		Cognitive
Higher Compassion (other-directed)	(+)	Higher Negative Affect (self-directed)	(+)	Higher Personal Responsibility

Figure 1.5 Diagram of variable relationship patterns, that if present, are likely indicators of Compassion Stress

1.6 Significance of the Study

The unique aspect of this study is the focus on teachers' innate EI traits as the central influence behind stigmatisation and discrimination. Most studies that explore stigmatisation within education have generally only concentrated on the conscious cognitive processes and factors, as well as the nature of student presentations as the reason for their stigmatisation. The introduction of a measure of trait EI adds a further dimension and school of thought to the cognitive Theory of Attribution. Personality Trait Theory has rarely been seen within such studies of stigmatisation. There is generally a focus of the stigmatised individual as possessing particular personality traits or characteristics, for example, rather than the stigmatiser's personality being the source of the stigmatisation. To date it appears that no studies have explored an individual's cognitive-emotional-behavioural reaction as related to their trait EI. The popular cognitive Attribution Model of Stigmatisation has not been considered as a consequence of trait EI within Personality Theory, let alone within the context of special education.

This study is founded on assumptions within the personality realm, which emphasize the individually unique "emotion-related behavioural dispositions" of teachers (Perez, Petrides & Furnham, 2005, p. 123) as opposed to exploring the socially constructed or 'child blaming' theories of stigmatisation (Jaeger & Bowman, 2005). Ogilvy (1994) suggests that medical theories hold the child "responsible for his failure to learn and diverts attention away from consideration of contextual factors" (p. 63). Jennings and Greenberg (2009) highlighted that most interventions for students with EBDs have tended to focus on the students' development, and that "there has been little focus on teachers' own development despite evidence that teachers make important contributions to

desirable classroom and student outcomes" (p. 496). In fact, the lack of specific teacher education on the importance of emotional issues in the classroom, or how to successfully manage them, is surprising given the high emotional demands placed on teachers.

The current study also connects teachers' psychological distress and compassion stress to discriminatory behaviours, which has not been demonstrated within the Attribution Model or stigmatisation studies within special education.

1.6.1 Teacher Education/Knowledge:

The level of emotional support from teachers affects not only their interactions with students but plays a significant role in students' adjustment, development, emotional wellbeing and academic achievement. It is important for teachers to understand how the quality of their emotional approach towards their students greatly influences their students' education and behaviour. It is important for teachers to understand the factors and processes that influence a high-quality interaction with their students, such as their ability to cope and regulate their own emotions to promote supportive relationships as a way of preventing and managing disruptive behaviour (Jennings & Greenberg, 2009). It is also important to identify the teacher characteristics that could be deemed disadvantageous to students as well as identifying some of the positive and negative effects of such EI traits on helping students.

Teachers and school hierarchies need to have insight into the specific needs of students with EBDs, as well as the capacity to create the 'right' kind of environment so students with EBDs can receive the type of emotional and educational support that they require. More understanding and awareness of EBDs could help general education teachers to more positively analyse student presentations, leading to greater educational opportunities and psychological well-being for students with EBDs. The Attribution Theory/Model identifies factors that should be targeted in anti-stigma programs, such as the perceptions that lead to discriminatory behaviour. This study may offer a starting point in helping to reduce inequality in classrooms. Teachers could also be encouraged to reflect and be aware of their own thoughts and behaviours as a way of improving student performance.

1.6.2 Practical Application:

This research project helps to identify whether there are individual teacher traits that are advantageous to working with students, especially with EBDs. The results of the study assisted with the development of an assessment tool (ASET – Assessment Screen for Emotionally Intelligent Teachers), that enables schools to profile individual teachers in relation to whether they have the highly desired 'qualities' or EI traits required to effectively teach students and those with special needs. The purpose of developing this assessment screen was to find ways to practically help reduce or control stigmatisation and discrimination towards students with EBDs in the specialist or mainstream classrooms through a process of teacher selection.

The outcomes from having such information on teacher characteristics would be beneficial to both teachers and students with EBDs. As an example, teachers' inability to regulate their own emotions and emotionally express themselves, may have serious implications for their teaching outcomes as a result of their interactions with students. In turn, such an emotional application may also leave a teacher feeling stressed and burnt out, amplifying the negative emotion cycle.

SECTION II - LITERATURE REVIEW

This section of the dissertation presents a review of the theoretical and empirical research that appears relevant to the context, aims and hypotheses of the current study. That is, in ascertaining what the ideal teacher traits and characteristics are that determine supportive rather than discriminatory behaviours towards students with EBDs, and that also predict positive teacher psychological well-being. The aim was to also challenge the claim that it is a student's presentation or severity of behaviour that causes stigmatisation.

This literature review section has been structured into eight chapters (chapters 2 – 9) that assist in clearly containing and presenting the different theories and positions embedded within the project. All the concepts embedded within each chapter also interweave across chapters, enabling the chapters to be read methodically as a whole document, or as separate investigative components.

Each chapter defines and illustrates the main conceptual frameworks used in the current research project. Statistical and theoretical relationships, documented from previous research, help to identify and clarify the choice of variables in the current study and their connection to the proposed notions. Established theoretical and empirical study results, which support the current project's hypothesised stances, are presented. Opposing research perspectives and findings are also explored in order to help form a thorough knowledge base, develop a critical understanding of the existing research, and to provide rationale for a chosen position. The list below summarises the literature review chapters that follow, which are labelled according to their primary collated concepts and areas of investigation:

Chapter 2 – Emotional Behavioural Disorders (EBD)

Chapter 3 – Emotional Intelligence (EI) and Trait Emotional Intelligence

Chapter 4 – Psychometric Considerations of the TEIQue

Chapter 5 – Teacher Reactions to Student Behaviour

Chapter 6 – Stigmatisation and Discrimination – A review of Attribution Theory

Chapter 7 – Student Behaviour and Stigmatisation

Chapter 8 – Teacher Stress, Burnout and Psychological Distress

Chapter 9 – Emotionally Intelligent Teacher Selection

a) *Literature Reliability and Validity*

Throughout the literature review process the most recent publications took priority, however, all relevant information was considered and reviewed. Australian publications also took precedence over international studies where possible, especially to understand the problem through demographics within the current study's cultural and geographical context. Australian studies were significantly limited, so international studies were relied upon to help understand problem prevalence and to fill conceptual gaps. As expected, international research publications provided the bulk of the review, mainly comprising studies from America, England and Greece.

Attention was placed on the quality of research publications, reports, theoretical articles, and book publications, by ensuring that they were peer-reviewed and from reputable and expert authors and sources. The studies included were also deemed methodologically and theoretically sound. Following such review measures ensured greater reliability and validity of the information presented and, thus, that proposed by the current study.

b) *Research Approach*

The bulk of the chosen research was selected from journals that were accessed electronically from within the fields of education, psychology, social sciences and humanities. The main literature search was done August to December 2-16, with an update in April 2017. The key terms, which were searched and retrieved from databases and journal publications, are specifically reported throughout the literature review, therefore, this presented summary is not an exhaustive list of terms. The researcher aimed to limit the studies to those that were most specifically situated within the project's

contexts of stigmatisation, education, special education, disability, personality, EI, Trait EI, teacher reactions, challenging student behaviour, teacher effectiveness, teacher selection, attribution, helping behaviour and teacher burnout. Those studies that most closely resembled or replicated parts of the current study's framework, methodology or inquiries were prioritised.

Due to the limited research completed within some contexts, the search had to be expanded to include other disciplines as a way to further understand processes, relationships or effects. This may have occasionally extended to welfare, nursing or occupational contexts. Trait EI was also limited in the current study's contexts so other EI models and personality studies had to be researched to expand the knowledge and possible functions of the concept more generally.

The terminology varied within some contexts and variables more than in others. EBD was another difficult term to locate due to its lack of universal use, both nationally and internationally, and its vague overlap with other disorders and conditions. Alternate terms, such as difficult behaviours, problematic behaviour, challenging behaviour and student misbehaviour, had to be searched. At times, specific disabilities or conditions, which co-exist with EBDs needed to be introduced, such as ADHD, autism spectrum disorder, child conduct disorder or mental health studies. Disability studies contributed immensely to understanding helping behaviours and perceived risks of challenging behaviour.

Within these contexts, numerous concepts and variables that present most recent developments, or most established relationships, towards the current study's goals and hypotheses were sought. The most well established variables that appeared in journals, that were linked to the current study, were self-efficacy, teacher burnout, and Attribution Theory. Variables that assisted in developing a critical or opposing understanding of the topic were also utilised.

Some of the key words described above were combined for the database search as a way of eliminating a large number of irrelevant articles and to keep the search results as specific as possible. Once many relevant publications were located, their references were followed up to expand on the

research in the subject areas. The key words were constantly adapted to capture the different

terminologies and concepts used by researchers that were discovered throughout the search.

CHAPTER 2 – Emotional Behavioural Disorders

The current chapter introduces the Emotional Behavioural Disorder (EBD) student population within an Australian and educational context. The following information was taken from Australian studies to help establish the prevalence, presentation and identification of EBDs. As there were limited Australian studies, international research was drawn upon to assist with understanding EBD presentations and the consequences of these presentations for both the student and teachers. Theories are presented that explore links between teacher reactions and possible impact of this on EBD student outcomes. Problems with applying interventions for students with EBDs are also discussed, with the premise that effective implementation lies more within teacher factors.

2.1 Emotional Behavioural Disorders in an Australian Context

Students with EBD are becoming of increasing concern for teachers in the Australian classroom (Conway, 2006). A study by Westwood and Graham (2003) conducted in South Australia and New South Wales reported that teachers perceived students with EBDs to be the most challenging and difficult group of students with disabilities that they have to manage. It is clear in Australian and International studies that students with EBDs "add to teachers' concerns in the classroom and threaten their teaching authority" (Poulou & Norwich, 2002, p. 112).

2.1.1 Emotional Behavioural Disorders Defined

EBD is a broad and vague term used mainly in the education system to refer to a student's problematic behaviours, poor regulation of emotions and difficult relationships, which are extreme, severe and persistent in that they interfere with many areas of a child's life such as their learning and development. The emotional and behavioural problems occur over a long period of time and to a marked degree (Smith, 2007). The term also overlaps with many mental health disorders found in childhood (Poulou & Norwich, 2002). Students with EBD present with behaviours that require a high degree of supervision and management by teachers (Ages, 2011; Kokkinos & Davazoglou, 2009; Karaj & Rapti, 2013).

There is no agreed-upon definition across Australian states and territories to represent children with emotional or behavioural problems. Cumming (2011) identified terms currently used in Australia to describe children who have an emotional or behavioural problem such as; mental health disorder, mental health concerns, disruptive behaviour disorder, conduct disorder and socially unacceptable behaviours. Some states argue for the inclusion of students diagnosed with other disabilities or conditions such as ADHD (Conway, 2006).

The category of EBDs can capture students who fall within psychological diagnostic categories found within the *Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition (DSM-V)* (American Psychiatric Association, 2013), such as mood disorders, oppositional defiant disorder, attention-deficit hyperactivity disorder, conduct disorder, psychotic disorders, eating disorders, and anxiety disorders (Caldarella et al., 2009; Oliver & Reschly, 2010). In the Australian context, mental health disorders, behaviour disorders, and disabilities tend to co-exist. The provision of services within Australian school systems generally occurs within the area of disability.

Mental health problems and behaviour disorders in children are frequently defined and measured by Achenbach's (1991) Child Behaviour Checklist. This survey, often administered and interpreted by psychologists and paediatricians, typically refers to the way a child's symptoms present; whether they *internalise* their emotions or *externalise* them through conduct and difficult behaviour (Poulou & Norwich, 2002).

Externalizing behaviours are described by Smith (2007) as behaviours that are exhibited externally and are obvious to other people, while internalizing behaviours manifest internally and often go unnoticed. Children with externalizing disorders are the most challenging and evident to teachers due to the disruptive nature of their behaviours (Smith, 2007). These children tend to act out, become aggressive, outspoken, defiant, abusive, impulsive, hyperactive and noncompliant (Smith, 2007). According to Smith (2007), those students with internalizing problems are often withdrawn and may silently struggle with anxiety, depression, and self-harming behaviours.

Students with EBDs form one category of children who are considered to have special education needs within various State Education Departments in Australia. Each state and territory government is responsible for its own policies and service implementation. All state and territory jurisdictions "recognize some form of severe emotional disturbance or mental health status as qualifying for additional funds" to help support the student in the classroom (Conway, 2006, p. 17). Some state governments have a strong focus on inclusion of students with special needs into mainstream classes, whereas others focus on specialist settings for students with EBD. Conway (2006) reported that some of the largest groups of students receiving special needs funding assistance are those diagnosed with a mental health disorder. Over 35% of all students with a disability label in one anonymous school region in Australia had a mental health diagnosis, "and the rate of identification is increasing" (Conway, 2006, p. 17).

The Victorian Department of Education refers to some students with behavioural problems as having a 'Severe Behaviour Disorder'. The 'Program for Students with Disabilities - Operational Guidelines for Schools 2017' (Wellbeing Health and Engagement Division Department of Education and Training, 2016), recognises Severe Behaviour Disorder as one of the disability categories that is eligible for funding. These criteria specify the disorder as:

a) Student displays disturbed behaviour to a point where special support in a withdrawal group or special class/unit is required; AND

b) Student displays behaviour so deviant and with such frequency and severity that they require regular psychological or psychiatric treatment; AND

c) The severe behaviour cannot be accounted for by: Intellectual Disability, Sensory (vision, hearing), Physical and/or Health issues, Autism Spectrum Disorder or Severe Language Disorder; AND

d) A history and evidence of an ongoing problem with an expectation of continuation during the school years.

Due to funding restrictions, this Severe Behaviour Disorder category only captures those students with extreme EBDs, consequently other students with lower to moderate severity levels of EBD are not provided with any funding support.

The term EBD was chosen for this Victorian study as it captures both the children with overt behaviour problems as well as those who have internal emotional or mental health issues. There is wide acceptance of the term EBD in the educational community as it covers a general range of problems. The term EBD attempts to create a generic classification for teachers and parents to use that helps to explain a child's maladaptive behaviours that they find disturbing or concerning.

2.1.2 Prevalence of Emotional Behavioural Disorders

Due to the various state government education systems definitions and philosophies, and the identification criteria of children with EBDs, it is difficult to determine the actual prevalence in Australia. Depending on the definition and criteria used, boys reportedly make up a ratio of anywhere from 2:1 to 9:1 compared with girls, or 86-92 percent (Conway, 2006) of children diagnosed with EBDs. According to Stephenson et al. (2000), the ratio was found to be 2.5 boys to 1 girl for primary-aged students in Sydney.

One point that seems to be agreed upon is that age is not an influencing factor on the prevalence of EBDs. Studies that explore primary or secondary levels of EBD in Queensland and Victoria appear consistent in their frequency of diagnosed children. The proportions of students diagnosed with EBDs were 3.6% of students for primary year levels and 4.4% for secondary year levels in Queensland. In Victoria, however, the proportions were 4.2% and 3.1% respectively. Sugai and Evans (1997) found a consistency of 2% across early education and primary grades in Western Australia.

A national study of mental health in Australian children and adolescents was conducted using The National Health and Wellbeing Survey (Sawyer et al., 2000). Sawyer et al. discovered from their results that approximately 14% of all Australian children and adolescents between the ages of 4 and 17 years had mental health problems and 7% of children and young people scored in the clinical range for

somatic complaints and delinquent behaviours. Conway (2006) identified 3.7% of children and adolescents as having depression, 3% had conduct disorder and 11.2% were identified as having ADHD.

2.2 Identification of Emotional Behavioural Disorders

In some earlier Australian studies by Vinson (2002), and Stephenson, Linfoot, and Martin (2000), teachers reported the most common behavioural difficulties regularly encountered in their classroom. Such student behaviours identified included: swearing, disobeying, clowning around, refusing to cooperate, confronting or disrupting the teacher and learning process, distraction, problems with listening, physical aggression, attention seeking and an inability to remain on task. Harrison, Vannest, Davis, and Reynolds (2012) found that the most common problematic behaviours in the classroom included being distracted from tasks, not following directions, excessively moving and talking without permission.

Problematic behaviour can be viewed on a continuum from minor acts, such as tapping a pencil, to severe violations such as fighting and bullying. They can also vary in their levels of mild, moderate or intensive intensity. It is recognised that some problem behaviour is typical at different developmental stages and minor misbehaviour can be expected in classrooms (Last, Perrin, Hersen, & Kazdin, 1996), but it is the behaviour that is left unmanaged that is at risk of increasing and becoming severe and resistant to intervention (Conoley & Goldstein, 2004). Problem behaviours can become so severe and chronic that they interfere with all areas of schooling, as well as teacher, student and parent relationships and many other areas of functioning (Walker et al., 2004). Every teacher will experience a student with behavioural problems, but it is the response of the teacher that can impact significantly on whether the student behaviours are maintained or intensified (Lannie & McCurdy, 2007; Solar, 2011).

2.3 Causes of Emotional Behavioural Disorders

Conway (2006) identified a relationship in his data where the prevalence of mental health and behavioural problems was higher for those children and adolescents who were from low

socioeconomic backgrounds, parents with lower paid employment, and blended and stepfamilies. Other family factors were identified as being related to child mental health. These included, unstable relationships with parents, the death of a parent, inadequate parenting skills, family conflict, violence, separation, family breakdown, and parents with serious mental health, alcohol, or drug problems.

In relation to teacher reactions, more personalised learning is seen as important for students with EBDs because many of these students come from traumatic or unstable home environments that perpetuate their emotional problems and antisocial behaviours. Students with EBDs may often face abuse and neglect (Horwitz, Bility, Plichta, Leaf, Hastings, & Haynes, 1998). Internationally, family stress and low income status appear to be key predictors of a child developing an EBD. One-third of children with emotional disorders have an annual family income of less than AUD $16,000 (Feifer, 2006, in Prince, 2011). This highlights how important it is for teachers to provide students with EBDs with the care and support that they are lacking in other aspects of their lives. The challenge for teachers is to not only educate these children but to also facilitate their social and emotional development (Richardson, Tolson, Huang, & Lee, 2009).

2.4 Consequences of Problem Behaviour

2.4.1 EBDs and Student Academic Outcomes

Problem behaviour has negative effects on both teaching and student learning outcomes (Kendzioa & Osher, 2009; Osher, Bear, Sprague, & Doyle, 2010). Teachers have reported through the research that students with EBDs are difficult to teach and are prone to school failure (Kauffman, 2001). Students with EBDs exhibit learning problems (Kauffman, 2005) and make less academic progress than those with learning disabilities and their nondisabled peers (Anderson, Kutash, & Duchnowski, 2001).

Researchers agree that a student's behaviour is a strong predictor of how a student will perform academically (Oliver & Reschly, 2010). A large study conducted by Saleem and Mahmood (2011) confirmed the findings of the majority of related research. Through multistage sampling, 1,571 adolescent students' emotional and behavioural problems were assessed using the School Children

Problem Scale (Saleem & Mahmood, 2011). After comparing these results with the student's results on a school-based academic examination, it was found that behavioural problems were a predictor of poor exam performance. Longitudinal studies have confirmed the long-term consequences for students who present with EBDs at a young age. Breslau et al. (2009) found that teacher ratings of students who were 6 years old predicted their poor reading and mathematics achievement at age 17. The low academic and social functioning skills of students with EBDs also improve very little or not at all over time (Siperstein, Wiley, & Forness, 2011; Wehby & Kern, 2014).

2.4.2 EBDs and Social Factors

Students with EBDs struggle with their development of social skills. This impedes the students' abilities to form appropriate and healthy relationships with teacher and peers (Gresham, 2002). They may have an inability to take turns, have poor problem solving capacity and misunderstand social cues or social conventions. Students with EBDs often have language and communicative deficits. Due to some EBD students' antisocial behaviours, such as fighting or withdrawing from peers, peer rejection is common (Kamps et al., 1999). Walker, Colvin, and Ramsey (1995) believe that if antisocial patterns in children are not intervened upon by third grade they are at risk of chronic behaviour problems and EBDs.

Another Australian report on mental health disorders (Zubrick, Silburn, Burton, & Blair, 2000) revealed the relationship between primary mental health problems, such as conduct disorders, and secondary morbidity outcomes such as juvenile delinquency and contact with the juvenile justice system.

2.4.3 EBDs and School Absence

Absence from school is one of the greatest barriers to helping students with EBDs with more positive outcomes. Students with EBDs may start to frequently stay away from school, making it difficult for teachers to intervene. Students with EBDs in America are at risk of dropping out of school at a rate that is almost double that of all students with disabilities (Wagner & Cameto, 2004). Dropping out of school has proven to be one gateway to a whole host of other problems for the student

with EBDs. This can involve increased substance abuse, criminal activity, antisocial behaviour and physical risk to themselves and others.

In Australia, Daraganova, Mullan, and Edwards (2014) conducted a longitudinal study that identified reasons for student non-attendance within primary schools. Their results were based on parent reports and concluded that "emotional or behavioural problems were an important correlate of high levels of school absenteeism" (Daraganova, Mullan & Edwards, 2014, p. 61).

Daraganova et al. (2014), during their examination of the relevant literature, made reference that "the attendance rate in all government primary schools in 2009 was above 91 per cent for all states and territories except the Northern Territory, where the attendance rate varied from 82 to 86 per cent depending on the year level" (p.4). They also reported on the factors associated with non-attendance in Australian secondary schools. One of the main factors identified for school absence included children who have emotional or behavioural problems (House of Representatives 1996; Reid, 1999). Liang, Flisher, and Chalton (2002) also found that the physical and mental health of students was also a major contributor to high levels of non-attendance. School factors, such as a warm, friendly teacher-student relationship were also found to relate to school attendance in a number of research studies (O'Keefe 1994; Trent & Slade 2001).

2.4.4 Long-Term Consequences

If untreated, severe behavioural problems throughout childhood can continue into adulthood. Those students with EBDs who display poor academic progress and resulting school failure tend to be associated with higher adult unemployment, mental health issues, higher rates of incarceration and poorer social support (Bradley, Henderson, & Monforte, 2004).

Students with EBDs are at greater risk of unemployment, and lower earnings than that of students in any other disability category, adjustment problems, and involvement with the justice and mental health systems (Wang et al., 2005). A study consisting of 1,593 males and 1,423 females found that teacher ratings of students at age 6 and 20 predicted criminal convictions by the time the students were aged up to 24 (Hodgins, Larm, Ellenbogen, Vitaro, & Tremblay, 2013).

2.5 Behaviour Management Interventions for Students with EBDs

Exploring the research on specific interventions for students with EBDs is outside the scope of the current study, however, it is noted that many strategies have proven to be practically effective in the classroom with students with EBDs. Teacher responses for addressing the academic, behavioural and social needs of students with EBDs may include implementing specific programs, identifying and addressing the conditions that trigger and reinforce challenging behaviour, teaching and reinforcing appropriate behaviour and new skills, and adapting the classroom environment by clarifying expectations and establishing routines and structure (Epstein, 2008). There is inconsistency, however, in the use and outcomes of behaviour strategies, whether they are explicitly specific and practically structured or not; possibly due to a number of reasons. The most obvious, related to the context of the current study, is that success of behavioural interventions may depend on the trait EI make-up of a teacher. There are no explicit instructions that are provided to teachers on how to implement personal emotional strategies as a reaction to students; such as how to feel, when to feel it, how to identify it and what to show.

2.5.1 Teacher Attributions

Another reason related to this inconsistent success of interventions, may be that teachers frequently attribute the cause of difficult student behaviour to factors outside of their own teaching (Mavropoulou & Padeliadu, 2002; Soodak & Podell, 1994). For example, teachers tended to look outside the classroom environment and attribute challenging student behaviour to family factors. This was demonstrated in Soodak and Podell's study (1994) where they asked teachers to provide suggestions on how to help failing students, particularly those who were "difficult to teach". Another study conducted by Medway (1979) similarly found that teachers were more likely to attribute challenging student behaviour to, respectively, student factors, family factors, then teacher factors. It is worth noting that the current pattern of Attribution Theory suggests it is the perceived causal factors that lead to the likely positive or negative reactions of teachers.

There appears to be disparity between what is known in research about effective behaviour management for students with EBDs and what school systems and/or individual teachers are actually implementing (Cook, Landrum, Tankersley, & Kauffman, 2003; Fitzpatrick & Knowlton, 2009). It is impossible to identify the impact of personality factors of teachers within such studies, however, it is hoped that the current study may help to address some of the reasons as to the inconsistent outcomes of behaviour management strategies, beyond the instructional step-by-step, assumedly emotionally detached, practical applications.

2.5.2 Disciplinary Strategies

It has been found that teachers are still turning to ineffective disciplinary strategies such as punishment, removal from the classroom, detentions, suspensions and expulsions, despite the limited empirical evidence to support the effectiveness of these methods (Osher et. al, 2010). As has already been discussed, such punitive and exclusionary methods tend to increase and escalate challenging behaviour (Dishion & Dodge, 2005; Dishion, Dodge, & Lansford, 2006) and are considered a form of discrimination in some studies (Dridan, 2013).

Efforts continue in the research field to find effective strategies to manage and benefit students with EBDs, however, what if the solution lies with the teachers themselves rather than with the strategy? At the very least, trait EI may account for whether a teacher even participates or has input into implementing the school system's chosen practice. Perhaps there is even an under-representation in the practice-based research of those teachers who are not motivated to assist in or participate in research let alone helping students with EBDs. What if trait EI influences teachers' cognitive and emotional reactions, which then determines effective outcomes for all involved?

The current study is related to the literature on the implementation of student behavioural strategies in that a teacher's trait EI, is proposed to influence the attribution process, possibly resulting in the type of behaviour management technique a teacher finally uses. This also refers to the implicit psychological processes that play out in the classroom, which are much more internally developed and motivated than practical classroom strategies. However, teacher EI may translate into whether research

practice-based interventions are likely to be effective, based on these variables. Are some teachers more inclined to use short-term ineffective punitive and discriminatory type methods, or are they innately more motivated towards consistently helping and persisting with more effective strategies over the longer-term?

2.5.3 Perceived Strategy Effectiveness

Another factor to consider in exploring teachers' struggles with implementing effective behavioural strategies is whether teachers believe that the problem behaviours presented can be changed. In some studies, the challenging behaviour of students led teachers to attribute causes which made them decide the student was beyond help (Andreou & Rapti, 2010). Therefore, a teacher's sense of their own level of control over a student's presentation may be an important factor in whether, or how, interventions are implemented. If a teacher perceives that whatever intervention they aim to implement is not going to make a difference or change the student or the situation, then they will most likely be reluctant to even try. This is possibly a reaction based on feelings of hopelessness of the circumstances. As a way to understand this idea, beliefs that people can recover from mental illness has been related to more positive attitudes (Freeman, 1961; Schwartz, 1957). In Poulou and Norwich's (2002) study, teachers' use of 'negative incentives', such as punishments or threats, reprimands or removal of positive incentives, was predicted by teachers' perceptions of the effectiveness of these techniques. Such techniques were found to be used by teachers, especially for coping with student conduct and mixed behavioural difficulties in their classrooms.

From a different context, Wanless and Jahoda's (2002) study revealed that when disability care staff were responding to challenging client behaviours, they described strategies which emphasised immediate control and prevention of harm, despite the potentially reinforcing properties of such interventions (Hastings, 1995, 1996). Wanless and Jahoda (2002) also described the significant role that care staff can play in the development and maintenance of the challenging behaviour of their clients. Much like the teacher-student interaction, how a disability care staff responds can have long-term reinforcing consequences. Staff behaviour was also reinforced by the immediate removal or

termination of the stressful situation. In this way, teachers may tend to turn to short-term 'quick fixes' to manage the situation rather than focusing on what might be beneficial for the student's behaviour change over the longer term. This may suggest that some teachers turn to quick routine and immediate interventions in an attempt to alleviate their anxiety in a challenging situation. In this concept, it may depend on the coping skills of the teacher as to whether they need to reduce their overwhelming emotions of stress or anxiety by habitually drawing on an automatic, 'quick fix' behaviour management strategy or not.

2.6 Cycle of Negativity (Transactional Process)

It can be understood that by teachers consistently experiencing opposition and behaviour challenges, evidently some are likely to feel hopeless and stressed and grasp at an 'easy' way to manage students. Hastings (2002) has studied the cumulative impact that challenging behaviour can have on staff well-being and burnout. Pervasive negativity from some students with EBDs can lead to a deterioration in hope, motivation, and care for some teachers, causing them to begin to think in negative ways and avoid or withhold instruction from such difficult students. Evidently interventions seem out of reach or even impossible for some teachers.

A decrease in patience and a flattening of affect can additionally occur with expressions of negativity to students. The more stress a teacher experiences, the less tolerant they become of difficult behaviours (Kokkinos, Panayiotou, & Davazoglou, 2005). Some studies found that general classroom teachers tended to display little tolerance for student misbehaviour (Chazan, 1994; Muscott, 1996; Shen et al., 2009). This decrease in tolerance and increased feeling of negativity towards students can result in a reduction or termination of teacher effort in working toward classroom goals.

If students with EBDs were to experience increased negativity and decreased support and patience from their teachers, then their acting out is likely to escalate. In a cyclical process, increased negative student behaviour increases teacher's negative thoughts and actions, resulting in more discriminatory behaviour towards the student (Sutherland & Oswald, 2005).

This cycle of negativity is described by Kokkinos (2007) as the Transactional Process. His theory suggests that the environment (such as the classroom or student with EBD) and the teacher's personality react together to result in a negative cycle where each maintains the other (Kamps et al., 1999). Unfortunately, many teachers become stuck in this cycle and experience burnout (Kokkinos, 2007). As will be demonstrated in a later chapter (Section 18.5.2), many studies have concluded that teaching students with EBDs can lead to significant rates of teacher stress and burnout (Chang, 2013; McCann & Johannessen, 2004; Sutton & Wheatley 2003; Tsoupoupas et al., 2010). This can have severe physical and psychological effects on teachers. It can cause detriment to the teaching profession as a whole, and the quality of education that students receive is reduced.

2.7 Chapter Summary

Students with EBDs are generally taught in Australian mainstream classes and teachers consider them to be the most challenging group of students (Westwood & Graham, 2003). This is due to their often frequent and recurrent externalised problematic behaviour. Students with EBDs form one category of students with special needs within Australian Education Departments' Student Disability Programs. The prevalence of students with EBDs in Australia is not clearly known due to the varying definitions and criterions, but is suggested to be male dominated (Conway, 2006). Students with EBDs' problematic behaviours can interfere significantly with all aspects of the student's functioning and has both short and long-term negative consequences for the student (Bradley, Henderson, & Monfore, 2004). Students with EBDs present with difficulties in learning, have poor social and relationship skills and can develop chronic mental health problems (Gresham, 2002; Osher, Bear, Sprague, & Doyle, 2010; Wang et al., 2005).

Consequences for some teachers who work with EBD students includes a decrease in tolerance towards students with EBDs and an increase in negative feelings, due to the high emotional demands on teachers (Kokkinos, Panayiotou, & Davazoglou, 2005). This can result in the reduction or termination of teacher support towards the student as well as increase teacher stress and burnout (Hastings, 2002).

In addition to academically educating students with EBDs, a teachers' role is to also facilitate the students' behavioural, social and emotional development (Richardson, Tolson, Huang, & Lee, 2009). There are many teacher interventions for students with EBDs, however, variation has been found in the use and effectiveness of such strategies. The current study argues that this inconsistency is a result of individual teacher characteristics (such as EI), their resultant reactions towards the challenging behaviour, and the way they interrelate with the student with EBD, rather than the specific strategies themselves.

The response of the teacher can impact significantly on whether student behaviours are maintained or intensified (Lannie & McCurdy, 2007; Solar, 2011). Punitive and exclusionary reactions have been found to increase and escalate challenging behaviour (Dishion & Dodge, 2005; Dishion, Dodge, & Lansford, 2006). An increase in a teacher's negative perceptions and behaviours towards a student with an EBD, negatively acts as a cyclical process which escalates student behaviour (Kokkinos, 2007). Teacher's positionality within the context of EBD students is important to establish as it is this teacher-student interaction that determines more positive behavioural and academic outcomes (and others) for both students and teachers. Hence, the importance of exploring teacher characteristics such as EI and reactions in working with students with EBDs.

CHAPTER 3 – Emotional Intelligence and Trait Emotional Intelligence

This chapter provides an introductory context to the general concept of EI and its historical and current progressions. The conceptual confusion and conflicting results among EI studies are reviewed and commonalities identified. The different theories currently used to explain EI are summarised systematically, and critiqued based on their limitations in operationalising and measuring the concept. A theoretical model of trait EI is introduced, operationalised and discussed in relation to its important distinctions from other models.

3.1 Emotional Intelligence

Researchers have spent ample time trying to understand the nature of traits, personality and resultant behaviour in the workplace (Furnham, 1994). A new topic, however, has come to the forefront of social science research in the last two decades; namely, EI. EI has increasingly become one of the most widely researched areas of the 21st century (Cherniss, 2010), with the development of various models and theories attempting to explain what constitutes EI. The sudden increase in EI research is demonstrated in Federation University Australia's electronic database of available publications. The number of publications that related to the exact words 'Emotional Intelligence' are presented below in reference to the year they were published:

1000-1969 = 5
1970-1979 = 8
1980-1989 = 14
1990-1999 = 782
2000-2009 = 10,541
2010-2016 = 17,326

Much recent exploration of the concept of 'Emotional Intelligence' has focused on its effects in the workplace, particularly, how the study of emotions can add to understanding organisational behaviour (Fisher & Ashkanasy, 2000). The general agreement among researchers is that individuals

who are higher in EI are more likely to achieve success in the workplace. Organisations are enthusiastically exploring the construct of EI, as a result of these findings, with the goal of discovering ways to boost employee satisfaction, loyalty, commitment and performance (Goleman, 1995).

EI studies have also focused on the relationship between EI and effective leaders in the work place. Leaders who are considered emotionally intelligent possess qualities of self-awareness, social awareness, relationship management (Goleman, Boyatzes, & McKee, 2002), self-management, and sensitivity to others' needs (Cherniss, 2010) enabling them to effectively lead others to meet their goals.

Teachers' EI, however, is an under-examined area, which is surprising given the universal agreement that the teaching profession has such high emotional demands. In relation to classroom teachers, they also require many of these same traits, and can function more effectively as leaders, when they are able to perceive and understand their own as well as their student's emotions (Iordanoglou, 2007). This reportedly helps teachers to guide their students towards social and academic goals. EI is deemed to be an essential ingredient for 'teacher effectiveness' or high quality teaching practice (Sutton & Wheatley, 2003) and there is only a handful of studies that examine the effects of teacher EI and effective teaching qualities (Hamre et al., 2007). The compelling evidence drawn from the limited research invites further investigation of the area.

3.1.1 Historical and Current Trends in Emotional Intelligence

A teacher's emotional experience, emotional capacities or competencies refer to the term Emotional Intelligence. The notion of EI has been evolving in the literature since the 1920s, with Thorndike's concept of 'social intelligence' which he describes as the "ability to understand and manage people and to act wisely in human relations" (Perez, Petrides, & Furnham, 2005, p. 123). Gardner's 'multiple intelligences' followed Thorndike (1920) with his intrapersonal and interpersonal concepts (1983). According to Gardner (1999), "interpersonal intelligence denotes a person's capacity to understand the intentions, motivations, and desires of other people and, consequently, to work effectively with others" (p.43). Contrastingly, "intrapersonal intelligence involves the capacity to

understand oneself, to have an effective working model of oneself – including one's own desires, fears and capabilities – and to use such information effectively in regulating one's own life" (p.43).

The construct of EI did not really start to take shape, in its current form, until the 1990s when Salovey and Mayer (1990) introduced the first formal model and empirical studies of EI. Salovey and Mayer (1990) defined EI as "the ability to monitor one's own and other's feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). In this way, EI is still a relatively young concept which became a popular topic again with the release of Goleman's book in 1995. Goleman (1995) promoted and influenced further research as well as conceptualisation of the EI construct and models.

Some researchers have proposed that EI is an invalid concept (Landy, 2005; Locke, 2005) due to the original theoretical and measurement inconsistencies. Others render the name of the concept invalid and argue that EI should not be conceptualised as an intelligence at all (Locke, 2005). In defence of EI, other researchers suggest that EI is a newly developing area and is an exciting key component of the expanding interest in emotions in many different settings (Ashkanasy & Daus, 2005). As each EI theory can have multiple measurement strategies, many researchers (e.g. O'Connor & Little, 2003; Petrides & Furnham, 2001; Warwick & Nettelbeck, 2004) advocate for a clear distinction between theoretical models.

3.2 Emotional Intelligence (EI) Models

It was assumed by researchers who were involved in the early development of EI tools, that they were all measuring the same single uniform construct. The lack of a coherent operational framework in the study of EI, however, has led to numerous conflicting outcomes in the research (Petrides, 2010). Factor analyses of different EI measures demonstrate their unique constructs that, according to several studies, show little correlation with one another (Engelberg & Sjöberg, 2004; Warwick & Nettelbeck, 2004).

There are three broad principles outlined by Cherniss (2010) on which most theorists and researchers would probably agree in relation to the concept of EI. Although these do not necessarily

assist in the development of a unified construct or definition of EI, they provide some common ground. The first premise is that emotions play a crucial part in life. Secondly, Cherniss (2010) states that "people vary in their ability to perceive, understand, use and manage emotions. And third, these differences affect individual adaptation to a variety of contexts, including the workplace" (p. 111).

The main criticisms of EI models are their lack of empirical evidence and lack of consistent operationalised definition. This has caused conceptual confusion and conflicting results among EI studies as theorists have tended to use different models and theories to explain EI (Perez, Petrides, & Furnham, 2005).

Substantial disagreements regarding the terminology and operationalisation of EI have led theorists to start to cluster EI into different theoretical models of EI. Distinguishing between definitions and models has been one way that researchers have tried to resolve the EI controversy. The main differences in these models rest in the way they are measured according to some researchers (Passmore, 2010). Ashkansky and Daus (2005) suggested that distinctions should be made between theoretical models and measurement strategies, especially when one particular model can be measured in numerous ways. According to Cherniss (2010) there are currently three main groups of contemporary EI models: namely the ability, trait and mixed EI models.

One of the first researchers to highlight the need for differentiation between EI models was Petrides (2001). Petrides' idea is supported by the lack of significant correlations between ability and trait EI models (Engelberg & Sjoberg, 2004). A distinction had already been put forward by Mayer et al. (2000) in relation to ability and mixed models, however their proposal was deemed incomplete as they did not adequately identify why the types should be separated in relation to the psychometric implications. Whilst Mayer et al. (2000) insist that ability EI can be measured through self-reporting measures, Petrides (2001) argues that this is both theoretically and empirically invalid. The most popular EI approaches to defining and measuring EI are presented below:

3.2.1 Ability-Based EI Models and Measurements

Mayer, Salovey, and Caruso developed an EI "mental ability" or "information processing" approach that relates more to cognitive ability tests than personality (Mayer et al., 2008). They defined EI as "the set of abilities that account for how people's emotional perception and understanding vary in their accuracy. More formally, we define Emotional Intelligence as the ability to perceive and express emotion, assimilate emotion in thought, understand and reason with emotion, and regulate emotion in the self and others" (Mayer, et al., 2000, p.396). Mayer et al.'s (2000) definition of EI has been widely used and accepted by researchers, irrespective of the varying methodologies behind it. Their current model consists of the four basic abilities of perceiving, using, understanding and managing emotion. Mayer et al.'s most recent ability test measure, the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT), assesses actual performance on tasks. Ability EI measurement tools are based on maximum performance, similar to an IQ test (Petrides, Peerz-Gonzaliz, & Furnham, 2007).

The MSCEIT assesses participants on 12 measures, grouped according to the four branches of EI (Mayer et al., 2000). Items from each branch usually consist of some form of stimulus, such as a picture of a face, with questions relating to what was shown within the picture. The test is scored based on social consensus, meaning that participants score highly on EI if their score overlaps with the collected 'standardized' scores of a worldwide sample of hundreds of participants.

3.2.1.1 Limitations of Ability EI

Criticisms exist in relation to the ability model and the MSCEIT assessment tool. Zeidner, Roberts, and Matthews (2004) described the four factors of EI, contributing to the ability model, as psychologically ambiguous. While the ability EI model attempts to objectively measure face perception in the MSCEIT test, a participant's subjective comprehension of a painting is determined by a range of processes that are unrelated to EI, such as a person's cultural perceptions and past experiences, to name a couple.

MacCann et al. (2003) highlight issues with negatively skewed distributions and kurtosis when scoring the MEIS or MSCEIT test using consensus methods. It also becomes challenging to distinguish between the majorities of participants at the top end of the scale. The internal consistency of the MSCEIT can also be brought into question as the "no emotion" response option (neutral) can lead to an overly inflated reliability coefficient.

As previously mentioned, a number of researchers have also developed self-report measures based on the ability model, which changes the theoretical outcome being measured. EI is a subjective construct and one cannot assess a subjective construct in an objective way (Petrides Perez-Gonzalez & Furnham, 2007). Therefore, the operationalisation of *ability* EI was considered invalid by Petrides et al. (2007).

3.2.2 Mixed Models and Measurements of EI

Some EI researchers have generated mixed models that include personality characteristics mixed with EI abilities. Bar-On (1998), as a popular example, commenced with the broad conceptualisation of EI put forth by the ability model and expanded on it by adding some personality-related concepts. He believes that both emotional and cognitive intelligence contribute equally to people's success in their daily lives (Bar-On, 2006).

Bar-On (1998) defined his "emotional and social intelligence" model as "a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands" (Bar-On, 2006, p. 14). The main components of his model are intrapersonal skills, interpersonal skills, adaptability, stress management and general mood (Bar-On, 1997, 2006). Each factor can be sub-divided into a number of skills and competencies.

The Emotional Intelligence inventory (EQ-i) measures one's potential to succeed, based on their emotional quotient (EQ) score. The EQ-i is a self-report measure that consists of 133 question items where participants respond using a five-point Likert scale format. The results produce a total EQ score, as well as scores on the five factors mentioned. Various studies have demonstrated the

predictive validity of the EQ-i tool in areas such as physical health and performance at school (Bar-On, 2006).

Bar-On sees EI as a construct that develops over a lifetime and can be improved through various methods and approaches. This would make sense given that his model can be seen as personal skills based, not primarily trait based. Like most EI theories, however, he proposes that those people higher in EI are better equipped to deal with problems in the environment, compared with those lower in EI, who struggle to meet the demands of their circumstances.

Boyatzis and Goleman's theoretical model (Goleman, 1998) was designed to include the social and emotional competencies that relate to effective performance in the workplace. Their mixed model was inspired by Salovey and Mayer (1990) and is closely related to the Bar-On model in that it combines ability EI with social and emotional competencies.

Following an analysis of their original five cluster model (Goleman, 1998), Boyatzis, Goleman, and Rhee (2000) developed an improved four cluster model and definition of EI: "Emotional intelligence is observed when a person demonstrates the competencies that constitute self-awareness, self-management, social awareness and social skills at appropriate times and ways in sufficient frequency to be effective in the situation."(Boyatzis et al., 2000, p. 3). The four competency "clusters" proposed by Goleman (1998) consisted of, self-awareness, self-management, social awareness and relationship management. These factors were comprised of 20 competencies.

The measures associated with the Boyatzis-Goleman Model included the Emotional Competency Inventory (ECI) and the Emotional and Social Competence Inventory (ESCI). The ECI consists of 110 items that measure 18 competencies within the four mentioned clusters. The assessment is a 360º assessment as it includes self-ratings, peer-ratings and supervisor ratings (Conte, 2005). As a result of the criticisms regarding the clusters and competency scales of the ECI, the assessment tool was revised using factor analysis of the ECI instrument and the competency scales were adapted accordingly.

The result was an assessment tool named the ESCI (Emotional and Social Competence Inventory), which contains 12 competencies (Boyatzis, n.d.): Emotional Self-Awareness, Emotional Self-Control, Adaptability, Achievement Orientation, Positive Outlook, Empathy, Organisational Awareness, Coach and Mentor, Inspirational Leadership, Influence, Conflict Management and Teamwork.

More recently, Goleman (2006) discussed a distinction between Social and Emotional Intelligence. He proposed that the social awareness and social skills factors from his previous models, now be considered as a form of Social Intelligence, as opposed to EI (Cherniss, 2010). Goleman (2001) also made a distinction between emotional competencies and EI, suggesting that 'competencies' were defined as learned skills or capabilities that increase work performance, whereas EI is the basis upon which these skills are learnt. The current study reported herein also supports Goleman's differentiation between the two terms.

3.2.2.1 Limitations of Mixed Methods of EI

Consistent with the problems already mentioned as to what the broad EI term incorporates, MacCann et al. (2003) emphasise there is also disagreement on what exactly constitutes EI within the general framework of a mixed model. As already mentioned, maintaining so many different definitions of the EI construct leads to confusion, and having such diverse theories leads to divergent validity of the tests.

Self-report formats, which are common among mixed model assessments, are not predictive of actual EI performance, according to Matthews, Roberts, and Zeidner (2004). Gohm (2004) also agrees that "humans are notoriously poor at evaluating their own ability" (p. 223). It was suggested that measures should be based on behavioural assessment due to the implicit rather than explicit nature of EI (Matthews et al., 2004). There is also the possibility that people may "fake good" on self-report measures such as the EQ-i (Paulhus & Vazire, 2009). Respondents may also be inclined to respond in a socially desirable manner, or refer to themselves in a favourable light. There can also be inconsistency between how a person reports that they behave compared with their actual behaviour.

3.2.3 EI and Demographics

Research related to the Mayer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) reveals significant increases in EI as individuals aged (Mayer, Caruso, & Salovey, 1999). Current statistics on the MSCEIT also show significant gender differences. Women have higher EI than men in global scores and specific ability scores, including perceiving and identifying emotions, facilitating thought using emotions, and understanding emotions. Managing emotions was the only area where females did not attain higher scores than males (Mayer et al., 1999). It must be remembered when studying these results that they are difficult to compare with Petrides' Trait EI Theory (2001) as this 'ability' model suggests increases in a person's ability, which is quite possible when it is based on a set of skills as opposed to innate personality. As will be discussed in the next chapter on the TEIQue psychometric properties, there is stability in trait EI across age, and only small effect sizes found for gender.

Similar to Mayer et al. (1999), the Bar-On Model also found that older people were more emotionally and socially intelligent than younger people and that females are more aware of emotions than males. With the exception that men are more skilled at managing emotions (Bar–On, 2006). As already mentioned, these theories are based more on ability or mixed-models of EI, which suggest that EI can be improved through learning (Lopes, Cote, & Salovey, 2006). Lopes et al. (2006) state that it still cannot be assumed that all emotional abilities have the same capacity for development. They also pointed out that there are no studies that have effectively explored or measured the effects of a training program on the development of specific EI abilities.

3.3 Trait EI Model

Petrides' trait EI claims to include all "personality facets that are specifically related to affect" (Petrides, Pita, & Kokkinaki, 2007, p.274). Petrides (2010, p. 137) defines trait EI as "a constellation of emotional self-perceptions located at the lower levels of personality hierarchies and measured via the trait emotional intelligence questionnaire". The model consists of four broad factors which are made up of 15 trait facets, as listed in Table 10.1. The theoretical model is measured with its own self-report instrument, namely the Trait Emotional Intelligence Questionnaire (TEIQue).

3.3.1 Operationalising Trait EI

Petrides trait EI refers to "a constellation of behavioural dispositions and self-perceptions concerning one's ability to recognize, process, and utilize emotion-laden information. It encompasses various dispositions from the personality domain..." (Petrides, Frederickson, & Furnham., 2004, p. 278) and is measured through self-reporting. Many researchers accept that trait EI is best assessed using self-report measures or observer ratings (Schutte, Malouff, & Bhullar, 2009). As demonstrated, ability EI refers more to an individual's actual performance that has proven to be difficult to measure scientifically and is more closely related to a cognitive intelligence model. These conceptualisations are important to distinguish between as they impact on the whole methodological framework as well as the validity of the theoretical conclusions drawn from the construct (Petrides et al., 2004). Trait EI assesses behavioural tendencies and self-perceived abilities whereas ability EI assesses actual abilities and "should be studied primarily with respect to psychometric intelligence" (Petrides & Furnham, 2001, p. 426). Petrides and Furnham (2001) set out these distinctive foundations of EI and emphasised that trait EI should be investigated primarily within a personality framework, which is what the study reported herein encompasses. EI is explicitly theorised by Carroll (1993) to lie outside the realm of human *cognitive* ability.

Petrides (2010) argues that his Trait EI Model is unrelated and incompatible to other traditional models of EI, as they attempt to measure the subjective nature of EI rather than a cognitive ability. According to Petrides, trait EI is the only theory that provides an operational definition, therefore, the only theory with real scientific utility. Whilst this is a bold statement, Petrides' theory does seem to be the most reliable in relation to its framework – that is the measurement and outcomes of trait EI appear consistent with its operational definition. The Trait EI Model evidently measures what it purports to measure. Therefore, Petrides' corresponding trait EI operational definition, framework and measurement instrument was used for the current study. The psychometric considerations of the TEIQue are explored in more detail within chapter 4.

3.4 Chapter Summary

EI is not a new concept but has increasingly become one of the most widely researched areas (Cherniss, 2010) and is continuing to expand. Most recent research on EI has focused on its effects in the workplace and has added understanding to organisational behaviour (Fisher & Ashkanasy, 2000) specific effective leadership qualities or characteristics. The generalised finding is that individuals who are higher in EI are more likely to achieve success in the workplace.

Teachers' EI seems to be an under-examined area, which is surprising given the emotional demands of teaching. EI is deemed to be an essential ingredient for 'teacher effectiveness' or high quality teaching practice (Sutton & Wheatley, 2003) and there is only a handful of studies that examine the effects of teacher EI and effective teaching qualities (Hamre et al., 2007).

A teacher's emotional experience, emotional capacities or competencies refer to the term EI. There are substantial disagreements regarding the terminology, operationalisation and measurement of EI. This has caused conceptual confusion and conflicting results among EI studies that have led researchers to start to group EI into different theoretical models. The three contemporary EI models are namely the ability, trait, and mixed-models. The core difference between them is in the way that they are measured. Ability is more related to actual skills and cognitive ability, whereas trait theories relate more to personality-type characteristics. There is consistency in researcher perceptions that "people vary in their ability to perceive, understand, use and manage emotions" (Cherniss, 2010, p. 111). There are no studies that show emotional abilities to have the capacity for development or to effectively measure the effects of training programs on the development of EI.

Petrides, Furnham, and Frederickson (2004) defined trait EI as behaviour dispositions and self-perceptions encompassing various characteristics from within personality domains. The current study investigates the Trait EI Model within a personality framework as recommended by Petrides (2009b). Due to this theory providing an operational definition, it surmounts many of the limitations of other models, by measuring what it purports to measure. Petrides (2009a) Trait Emotional Intelligence Questionnaire (TEIQue) is presented in the next chapter, as a framework, instrument and method for measuring the construct of EI.

CHAPTER 4 -

Theoretical and Psychometric Considerations of the TEIQue

The current chapter provides a description of the Trait Emotional Intelligence Questionnaire (TEIQue) instrument as well as a summary of its origins. The major criticisms of the Trait Emotional Intelligence Model are presented, followed by its advantages and rationale as the choice of utilising the TEIQue for the current study. The reliability, validity and psychometric properties of the TEIQue are reported. The use of the TEIQue for statistical purposes is explored and methods for overcoming the identified psychometric problems are proposed.

4.1 Introduction to the TEIQue as a Research Instrument

The TEIQue is a self-report instrument that is used to comprehensively measure emotion-related self-perceptions; that is namely trait EI. Many different measures exist within trait EI, however, the TEIQue is the only instrument that comprehensively covers the sampling domain of trait EI, as detailed by Petrides (Austin et al., 2008).

The latest version of the TEIQue instrument provides 15 individual trait facet scores that represent EI in four specific areas: Well-Being, Self-Control, Emotionality and Sociability. In addition, there are two auxiliary facets, Adaptability and Self-Motivation, that do not contribute to the four broad factors. An overall global trait EI score is derived by adding scores from each of the 15 trait facets (Petrides, 2009). A table of Petrides 15 facets is presented in Table 10.1.

4.1.1 TEIQue Scales in Historical Context

The early development and evaluation of the TEIQue began in 1998 preceding Petrides' doctoral dissertation (2009). Petrides based his tool on the traits and dispositions that were identified in earlier EI models. Petrides and Furnham (2001) attempted to "systemise and evaluate an approach that largely exists already" (p. 427) through an exhaustive content analysis of core elements that were common to numerous early EI models and theories. Petrides (2009) lists examples such as personality

intelligence, alexithymia (difficulty in experiencing, expressing and describing emotional responses), affective communication, emotional expression and empathy. Since this time, the instrument has been revised and adapted, leading to the current version. The current TEIQue Long Form has been translated into over fifteen different languages.

4.1.2 Criticisms of the Trait EI Model

The major criticism of the Trait EI Model is the use of a self-report measure. The self-perceived abilities and behavioural tendencies, based on self-reports cannot be related to actual emotional abilities (Perez et al., 2005). Self-report measures are problematic due to a number of factors such as social desirability, response set patterns and lack of self-awareness. These factors may limit the ability to accurately measure EI. It could be said that the lower an individual's EI is, the more inaccurate judgement they are likely to have of their emotional abilities (Cherniss, 2010). Petrides (2009, p. 15) questions, "How can we say whether someone's 'emotion perception' score is accurate or not when that person is the only one with full access to the information that is required to make this judgement?" The self-report measure can be considered as an appropriate subjective assessment of one's own beliefs, attitudes and/or degree of emotions (Leahy, 2002), but may not necessarily reflect emotional abilities (Ciarrochi, Chan, Caputi & Roberts, 2001; Schulze et al., 2007).

Another concern related to EI lies in its purported relationship with Personality Theory. Many researchers have disputed that EI offers little to no incremental validity over psychometric personality measures (MacCann et al., 2003; Mayer et al., 2000). However, these critics are challenged by some studies that have demonstrated the TEIQue's incremental validity with measures of the Big Five (Costa & McCrae, 1992) (Conscientiousness, Neuroticism, Openness, Extraversion and Agreeableness) and Eysenckian Giant Three (Eysenck, 1994) (Neuroticism, Extraversion and Psychoticism) personality constructs (Gardner & Qualter, 2010; Mikolajczak et al., 2007; Petrides, Pita, & Kokkinaki. 2007).

4.2 Choice of a Trait EI Model for Current Study

The choice to use the trait EI construct was prompted by the volumes of literature that reinforced the difficulties in measuring EI through objective measures. This was not considered to be a valid operationalisation of what seems to be an inherently subjective construct. Therefore, this project proposes to use an accepted scientific approach and framework to studying trait EI. This study tries to overcome the serious limitations of other EI studies by encompassing the model and framework proposed by Petrides (2009). This Trait EI Model has also progressively been the subject of approximately 15 years of research by various researchers (translated across 26 countries).

According to Austin et al. (2008) and other researchers, the TEIQue is the only known psychometric measurement that covers all constructs of trait EI comprehensively. Due to its large number of facets, the TEIQue was appropriate to use for profiling and identifying the specific teacher traits that relate to this project's chosen variables. This gave potential for investigation of its clinical utility, similar to existing personality measures, on developing 'ideal' trait profiles for positively predicted outcomes. The TEIQue has also been found to correlate with other popular measures of personality that show its place within Personality Theory and frameworks such as McCrae and Costa's (1987) Big Five (Pérez-González & Sánchez-Ruiz, 2014; Petrides, Pita, & Kokkinaki, 2007). These properties of the TEIQue form the beginning of a future teacher profile screening tool.

Petrides (2009) reported that the TEIQue instrument should not be Factor Analysed at the item-level due to unreliability and extremely non-normal distributions. The 15 facets cannot be interpreted as factors in the statistical sense. He advised to use other dedicated instruments to assess them for more in-depth coverage. The current study required thorough investigation of the individual trait facets as they presented in teachers, and so no other instrument could have provided the comprehensive and essential factors to cater for this. Rather than attempting to develop a completely new theoretically sound Trait EI Model, another objective of the current study was to perform an exploratory factor analysis at the item-level, with the proposal that the TEIQue could, in fact, be adapted and utilized for individual trait facet clinical profiling. Due to the large number of items

within each facet, there was scope for the TEIQue items to be reduced to form independent factors suitable for statistical analyses.

Many studies have found the TEIQue instrument, which is the complete foundation of Petrides' theoretical model, to have excellent reliability values and validity. This is further demonstrated and cited in the following sections.

4.3 Reliability of TEIQue

In this section an outline of the reliability of the TEIQue is provided. The information below provides internal consistency results based on the current United Kingdom (UK) normative sample (n = 1721) as derived from the TEIQue Technical Manual (Petrides, 2009).

Table 4.1

Cronbach Alpha Values across UK Gender Norms (Petrides, 2009, p.19)

	TOTAL α (N = 1721)	FEMALE α (N=907)	MALE α (N=759)
ADAPTABILITY	.75	.74	.73
ASSERTIVENESS	.77	.76	.73
EMOTION EXPRESSION	.89	.89	.87
EMOTION MANAGEMENT	.70	.68	.72
EMOTION PERCEPTION	.73	.70	.75
EMOTION REGULATION	.81	.79	.78
IMPULSIVENESS (LOW)	.74	.75	.74
RELATIONSHIPS	.68	.68	.69
SELF-ESTEEM	.80	.81	.78
SELF-MOTIVATION	.69	.71	.70
SOCIAL AWARENESS	.82	.80	.83
STRESS MANAGEMENT	.80	.80	.76
TRAIT EMPATHY	.70	.67	.70
TRAIT HAPPINESS	.87	.87	.85
TRAIT OPTIMISM	.81	.81	.78
EMOTIONALITY	.78	.75	.80
SELF-CONTROL	.79	.78	.78
SOCIABILITY	.82	.79	.82
WELL-BEING	.83	.83	.84
GLOBAL TRAIT EI	.90	.89	.92

The TEIQue variables demonstrated adequate to high Cronbach alpha values that were stable across gender (Petrides, 2009). Petrides reported on the advantage of the TEIQue as being robust at the factor and global level, and also to small samples (n < 50) compared with most personality inventories. The UK internal consistency alpha values are provided in Table 4.1 for each of the 15 individual trait facets, the four broader factors and global trait EI. The EI facets and factors are also split according to gender.

4.3.1 Gender

Males scored higher than females in global trait EI, according to Petrides' UK data, but only had a small effect size (*d*=.22). Many discrepancies were found between the factor and the facet scores, which this overall gender difference failed to represent. Males scored higher in Emotion Regulation (*d*=.61) and Stress Management (*d*=.55), whereas females scored higher in Relationships (*d*=.36) and Empathy (*d*=.30). In considering these results, it should also be noted that the standard deviations were equivalent across comparisons, suggesting similar dispersity in the responses of males and females.

4.3.2 Age Stability

Test-retest data from various studies confirmed the hypothesis that trait EI, the same as personality traits (from age 30 to 65) remain relatively stable during adulthood (Terracciano, Costa, & McCrae, 2006). This was an expected finding since trait EI has been conceptualised as a broad personality trait. Based on a sample of 58 individuals, all TEIQue facet scales were found to have high temporal stabilities after being retested after a period of 12 months. All test-retest correlations were significant beyond the .01 level, with the exception of Empathy. The TEIQue's overall attenuated stability coefficient was .78, p<.01.

Petrides' (2009b) clarifies that stability does not necessarily imply immutability:

There are two major ways in which the TEIQue profile changes may take place. First, severe, abrupt, and unforeseeable changes in a person's life circumstances (e.g., divorce, rapid

promotion, health problems) can have a pronounced and lasting impact on all aspects of personality, including EI. Second, profile shifts may occur in response to conscious efforts on the part of the individual (Petrides, 2009b, p. 21).

Petrides suggests that this change in latent personality trait factor would not occur as a result of a self-help seminar or educational books or training, but would be a more likely result of longer-term psychotherapy. Most EI interventions that claim to boost EI are unproven and unscientific.

4.4 Validity of the TEIQue

The TEIQue Technical Manual provides statistical evidence for the validity of the TEIQue as do many other published studies undertaken recently. Petrides demonstrates strong evidence for conceptual, criterion, concurrent, discriminant, incremental, predictive and construct validity (Petrides, 2009a).

4.4.1 Trait EI in Personality Space

It is important to verify the link between trait EI and mainstream personality literature to validate its position in personality space. Factor location studies have been completed by many researchers such as Petrides, Pita, and Kokkinaki (2007) and Pérez-González and Sanchez-Ruiz (2014) who confirm trait EI to be a distinct construct. The reasoning behind this assertion is that trait EI can be isolated in personality space and as a compound construct because it correlates with several higher-order personality dimensions. As the factor is 'oblique' rather than 'orthogonal' to the Giant Three (Eyesenck, 1994) and the Big Five (McCrae & Costa, 1987) personality measures, it lies at the lower levels of personality hierarchies. These studies also helped to tie trait EI into the field of psychology and into strongly established Personality Models.

The Five Factor Model of personality, for example, as developed by Costa and McCrae (McCrae & Costa, 1987), is an internationally accepted, comprehensive personality assessment. It includes five dimensions of personality on which adults differ. The first factor is Openness to Experience which reflects an individual's tendency to be curious, creative, imaginative and

independent. Conscientiousness reflects individuals' tendencies to be organized, efficient, dependable, committed and goal directed. Extraversion reflects an individual's tendency to be outgoing, social, warm, energetic and enthusiastic. Agreeableness reflects an individual's tendency to be friendly, cooperative and compassionate. Neuroticism reflects an individual's tendency to experience negative emotions, insecurity, instability, anxiousness and sensitivity (McCrae & Costa, 1987).

Within major personality dimensions, such as the Big Five, for example, EI was found to correlate negatively with Neuroticism (-.25) and positively with Extraversion (.33), Conscientiousness (.34), and Openness to Experience (.24). EI was found to be independent of Agreeableness (-.05) (Petrides, 2009). Petrides (2009) has highlighted such links within his descriptive trait facet and factor qualitative interpretations (as shown in section 10.7.2).

EI traits are considered to be mapped onto constructs rather than contexts. Scientifically developed personality inventories are now accepted to be valid and generalizable across contexts (Schimdt & Hunter, 1977, 1998; in Petrides, 2009, p. 7):

> As a measure of emotion-related self-perceptions, the TEIQue can provide vital and consistent cross-situational information about an individual's personality and behaviour… The TEIQue transcends the arbitrary boundaries that restrict the utility of inventories assuming that people's personality changes from context to context (Petrides, 2009, p. 7).

4.4.2 Trait EI Biology

It is suggested that there are biological foundations to trait EI as demonstrated in behavioural-genetic, neuroscientific, and neuroendocrinological research. Vernon, Villani, Schermer, and Petrides (2008) proposed that correlations between trait EI and Big Five Personality Traits (McCrae & Costa, 1987) are primarily attributable to genetic factors as well as secondary environmental factors. This suggests that the same genes are responsible for the development of the individual differences in both the established personality traits (Big Five) and EI traits. Petrides, Mikolajczak, Mavroveli, Sanchez-Ruiz, Furnham, and Pérez-González (2016) report that the heritable proportion of global trait EI found

in related studies has reached about 40%. This is a similar percentage to studies measuring personality trait proportions.

4.4.3 Criterion Validity (related to current study contexts)

The TEIQue's criterion validity has been demonstrated through many organisational, clinical and educational studies. The following examples are not exhaustive but rather demonstrative. Trait EI has been significantly associated with coping styles (Kim & Agrusa, 2011; Laborde, You, Dosseville, & Salinas, 2012), reactions to stress (Mikolajczak, Menil, & Luminet, 2007), relationships satisfaction (Smith, Heaven, & Ciarrochi, 2008), symptoms of borderline personality disorder (Sinclair & Feigenbaum, 2012), life satisfaction (Petrides, Pérez-González, & Furnham, 2007), dysfunctional attitudes and depression (Petrides, 2009), Asperger's syndrome, academic performance, and social variables (Engelberg & Sjöberg, 2004). Lower scores on the TEIQue have also been found to relate to increased truancy and anti-social behaviour at school (Petrides, Furnham, & Frederickson, 2004). Generally, trait EI Theory shows that high scorers are usually more adaptive and low scorers tend to be more maladaptive.

The following categories provide a sample overview of research which is generally located within the current study's contexts.

4.4.3.1 EI in Clinical Research

A comprehensive meta-analysis confirmed trait EI to be a strong predictor of well-being and mental health (Martins, Ramalho, & Morin, 2010; see also Petrides, Pérez-González, & Furnham, 2007). This also included studies with clinically diagnosed conditions, such as Asperger syndrome (Petrides, Hudry, Michalaria, Swami, & Sevdalis, 2011) and borderline personality disorder (Sinclair & Feigenbaum, 2012). Higher EI trait has generally predicted lower stress, anxiety and depression symptoms (Martins et al., 2010).

4.4.3.2 EI in Social and Interpersonal Research

Research has explored the links between trait EI and interpersonal relationships. High EI traits have related to positive marital satisfaction, relationship quality, and effective communication between partners. Low EI traits have negative relationships with detrimental communication styles such as avoidance and withholding (Malouff, Schutte, & Thorsteinsson, 2014). A positive link has been found between trait EI and favourable parenting styles, as reported by adolescents (Gugliandolo, Mavroveli, Costa, Cuzzocrea, & Larcan, 2016). Factors explored included parental involvement, autonomy support, and warmth.

4.4.3.3 EI in Educational and Vocational Research

Most trait EI research in education has focused on the construct's direct relationship with student academic performance, which does not relate to the current study. Career and vocational choice is another area of education-related application. These type of studies relate more closely to the field of personality profiling. Differences were found in the trait EI profile of university students across different departments. Art students, for example, scored higher in the trait EI Emotionality factor than technical study students (Sanchez-Ruiz, Pérez-González, & Petrides, 2010).

4.4.3.4 EI in Organisational Research

Trait EI and workplace performance is a well-researched area. A meta-analyses confirmed strong positive effects on job performance (O'Boyle, Humphrey, Pollack, Hawver, & Story, 2011). Many studies have shown the relationship between trait EI and well-being in the workplace. Trait EI positively relates to job satisfaction (Schutte & Loi, 2014) and negatively to job stress and burnout (Mikolajczak, Menil, & Luminet, 2007). Leadership and behaviour skills have also shown consistent relationships with trait EI (Walter, Cole, & Humphrey, 2011).

4.4.4 Incremental (Predictive) Validity

It has been consistently demonstrated in both primary and meta-analytical studies that the TEIQue has superior psychometric properties and incremental validity compared with other self-report

measures of EI (Di Fabio & Saklofske, 2014; Martins et al., 2010). Eighty studies were analysed by Martins, Ramalho, and Morin (2010) to investigate the relationship between EI and health factors. Compared with all the other selected trait and ability EI measures, the TEIQue was the strongest predictor of physical, psychosomatic, and mental health variables.

Martins, et al. (2010) found that the TEIQue had a higher association with mental health (r=.50) than the Bar-On EQ-i (r=.44) in a meta-analysis of EI and health (n=19 815) (e.g. correlation values: 0 = no correlation, .5 = moderate correlation, 1 = strong correlation). This was also found for the Schutte Emotional Intelligence Scale (SEIS; r=.29) (Schutte et al., 1998) and the Trait Meta-Mood Scale (TMMS; r=.24) (Salovey, Mayer, Goldman, Turvey, & Palfai, 1995). The TEIQue was also a superior predictor of eleven psychological criteria compared with the SEIS and the Multidimensional Emotional Intelligence Assessment (MEIA) (Gardner & Qualter, 2010).

Andrei, Siegling, Aloe, Baldaro, and Petrides (2016) were the first to synthesise the TEIQue literature by systematically reviewing and meta-analysing the incremental validity of the trait EI (as operationalised through the TEIQue). One hundred and fourteen incremental validity analyses of the TEIQue were found and reviewed (within 24 articles). The results indicated that the TEIQue consistently explained incremental variance in criteria, which were primarily related to individual differences in affect (i.e. burnout, anxiety, depression), behaviour (i.e. alcohol abuse, eating disorders), cognition (i.e. academic achievement), and desire (i.e. craving, sensation seeking). The TEIQue was a predictor of numerous psychological and emotion-related variables (as listed above), beyond higher order personality dimensions (as in the Big Five, and the Giant Three). The overall meta-analytical effect size of 0.6 confirmed the distinctiveness and theoretical significance of trait EI.

Following their incremental validity meta-analysis of the TEIQue, Petrides et al. (2016) stated:

Future research in the organizational domain could examine the role of trait EI in jobs that are heavy in emotional labour. It will also be beneficial to propose and test specific mechanisms through which trait EI affects organizational variables, particularly job performance (Petrides et al., 2016, p. 274).

4.5 Assumptions about Scale Development and the TEIQue

Petrides (2001) clearly states that the TEIQue individual trait facets are likely to be highly correlated, as expected in many personality measures, and therefore should not be perceived as factors in a statistical sense. He emphasises that the lowest level at which the TEIQue should be analysed is at the facet level, not the item. Whilst the TEIQue claims to be the only inventory that covers the trait EI sampling domain comprehensively (Austin, Parker, Petrides, & Saklofske, 2008) it could be argued that there are many problems with this type of extensiveness or broadness. Petrides' TEIQue seems to measure many different theoretical factors or constructs within one facet. Whilst the constructs may be closely related, they probably should be measured separately so they are specific to what is actually being measured. Petrides' scales seem to run contrary to the important and common assumption that single scales should measure a single construct that can cause problems with interpretation of research. Guilford highlights that "any test that measures more than one common factor to a substantial degree yields scores that are psychologically ambiguous and very difficult to interpret" (1954, p. 356). McNemar (1946) agrees, pointing out:

> Measurement implies that one characteristic at a time is being quantified. The scores on an attitude scale are most meaningful when it is known that only one continuum is involved. Only then can it be claimed that two individuals with the same score or rank can be quantitatively and, within limits, qualitatively similar in their attitudes towards a given issue (McNemar, 1946, p. 298).

One of the general problems within personality research has been the question as to whether the broader EI factors, such as Sociability and Emotionality in this case, can be regarded or interpreted in any meaningful sense. When they are subdivided into their individual trait facets, it needs to be determined whether these individual facets, that underlie the broader EI factors and global EI, are conceptually meaningful. Briggs and Cheek (1986) argue that "it is best to have an instrument with a known factorial composition before attempting to validate it" (p. 111).

Petrides (2009) acknowledges that researchers who are interested in analysing the 15 specific trait facets should use other more appropriate tools. However, as already demonstrated, none of the other EI measures available cover a broad enough range of trait-related EI factors, and with the same level of background theoretical research. Petrides has demonstrated that his scales satisfy the usually accepted standards for internal reliability.

According to Horst (1966):

Unfortunately it is not always recognised that a criterion of a good test is that the correlations among the item scores shall be as large as possible... If a person is attempting to measure a large number of things, then he should specify as accurately as he can what each of the things is and should attempt to measure them separately by separate groups of highly correlated items (Horst, 1966, p. 147).

Broad constructs, as in the TEIQue, should still be considered important, however, the components on which it is built should be more carefully considered. It is shown that scales that are broad can easily hold high consistency, even though the scale itself is polymorphous. This point can be discounted, as long as the broader scales can be meaningfully understood. Some researchers, such as Briggs and Cheek (1986) believe that "it is unacceptable to continue using a total score alone when to do so deliberately ignores the distinctions that are conceptually meaningful and empirically useful" (p. 129). It is difficult to know how to interpret a high score by using the broader trait EI factors. If the broad Emotionality Scale is taken as an example, one person may score high on Emotion Expression while another scores high on Emotion Perception. The end results may produce similar overall scores for the two participants, but it is not clear what specific factors are being measured or what weights are being given to the different factors. Despite these possible limitations, the researcher needed to decide on the purpose of the analysis and the 'type' of information that could be drawn from the analysis to determine whether the factors mentioned are important. The current study took these crucial points into consideration and decided to only focus on the individual trait facets and the global EI score, as

these were the factors that carried the most meaning in relation to answering the research questions. The individual trait facets and global EI provide the most relevant and specific information.

Whilst the TEIQue has proven to have strong theoretical foundations, a goal of this project was to explore the possibility of transforming the TEIQue into a more statistically valid measure of the individual trait facets, whilst holding as much of its theoretical basis as possible (of the many years work of Petrides). Resolving the ambiguity of the item pool was attempted by trying to extract more interpretable variables from these items through the systematic process of factor analysis. An examination of the TEIQue items helped to determine the number and nature of the items that possibly exist in each individual facet. It was boldly stated by Briggs and Cheek (1986) in their paper on 'the role of factor analysis in the development and evaluation of personality scales', that "if a construct is broad and multi-faceted, then each component should be specified and measured as clearly as possible with items grouped into homogeneous item clusters" (p.130). Factor analysis has been considered a useful method in clearing up the psychometric and conceptual confusion within personality scales. This conclusion forms the basis of chapter 11, in which the TEIQue was factor analysed as part of the development of more statistically sound trait EI scales.

4.6 Chapter Summary

The TEIQue is a self-report instrument that measures trait EI. The TEIQue is reportedly the only instrument that comprehensively covers the sampling domain of trait EI (Austin et al., 2008). The latest version of the TEIQue instrument provides 15 individual trait facet scores that represent EI in four specific areas: Well-being, Self-control, Emotionality and Sociability. In addition, there are two auxiliary facets, Adaptability and Self-Motivation. A global trait EI score is derived from each of the 15 trait facets (Petrides, 2009).

The major criticism of the Trait EI Model is the use of a self-report measure. Petrides disputes that the individual is the only person that can fully access this type of information and make that judgement. Another concern related to trait EI is its claim to relate to Personality Theory (MacCann et al., 2003; Mayer et al., 2000), however many studies have demonstrated the TEIQue's incremental

validity with measures of the Big Five (Costa, & McCrae, 1992) and Eysenckian Giant Three

(Eysenck, 1994) personality constructs (Gardner & Qualter, 2010; Mikolajczak et al., 2007; Petrides,

Pita, & Kokkinaki, 2007).

The current project used the TEIQue's accepted scientific approach and framework to study

trait EI. The choice to use EI as a trait construct was an attempt to overcome the serious

operationalisation limitations of other EI studies by encompassing the model and framework proposed

by Petrides (2009). The Trait EI Model is also the result of many years of research across numerous

countries. Due to its large number of facets and comprehensiveness, the TEIQue was also an

appropriate tool for using the many traits to identify teacher profiles. These mentioned properties of

the TEIQue contribute to the development of a teacher profile screening tool.

Many studies have found the TEIQue instrument, which is the complete foundation of

Petrides' theoretical model, to have excellent reliability and validity. Test-retest data from various

studies also confirm the assumption that trait EI, the same as personality traits (from age 30 to 65)

remain relatively stable during adulthood (Terracciano, Costa, & McCrae, 2006). As with personality,

EI traits are considered to be mapped onto constructs rather than being generalizable across contexts.

Despite Petrides (2001) cautioning that the TEIQue individual trait facets should not be

perceived as factors in a statistical sense, the current study required thorough investigation of

individual trait facets as they presented in teachers and no other instrument could have

comprehensively provided this information. To try to overcome these psychometric problems, the

current study aims to conduct an exploratory factor analysis at the item-level, with the proposal that

the TEIQue could, in fact be transformed into a more statistically valid measurement instrument of the

trait facets, whilst holding as much of its theoretical basis as possible. The current study also aimed to

demonstrate that the TEIQue can be adapted and utilized for individual trait facet clinical teacher

profiling. Due to the large number of items within each facet, there is scope for the TEIQue items to

be reduced to independent factors suitable for statistical analyses. Resolving the ambiguity of the item

pool was also attempted in the current study by trying to extract more interpretable variables from the

TEIQue items using factor analysis. These psychometric issues are addressed in section III (Quantitative Analysis) of this thesis.

The following chapter provides background to other factors that will be investigated in this project, along with their possible relationships with trait EI.

CHAPTER 5 - Teacher Reactions to Student Behaviour

Some links have been established between teachers' emotional experiences and the manner in which they instruct and/or manage misbehaviour. Osher (2007, in Jennings and Greenberg, 2009) reported that if troublesome student behaviours escalate and teachers do not have the emotional resources to manage the emotional challenges in the classroom, "teachers may resort to reactive and excessively punitive responses that do not teach self-regulation and may contribute to a self-sustaining cycle of classroom disruption" (Jennings & Greenberg, 2009, p. 492).

The current chapter reports on some variables relevant to the current study that are considered common human 'reactions'. Reactions are purported to comprise of affective, cognitive and behavioural elements. The first part of the discussion provides a general background of academic theories of affect and its functions. A person's overall affective experience could impact on their behavioural reaction to a situation or another person. Affect is also discussed in relation to its undecided type of relationship with cognition. The current chapter also establishes, through available research, that teachers' EI can predict the way they behave and respond towards students. A teacher's self-efficacy, as another significant 'reactive' variable, will reveal its significant associations with affect, helping behaviour and EI.

5.1 Affective Reactions

5.1.1 Operationalising Affect

There is no single, agreed-upon definition of 'affect', however, it could be broadly defined as a reaction to a situation or event. The Oxford English Dictionary, defines emotion as "a strong feeling deriving from one's circumstances, mood, or relationships with others" or "instinctive or intuitive feeling as distinguished from reasoning or knowledge" (Oxford English Dictionary, 2017). For the purpose of the current study and measurement of the variable, 'Affect', is defined as the feelings or emotions that are directed at someone, oneself or something. 'Affect' is a general and all-encompassing term, used to describe emotions, feelings, and moods; especially as the terminology is commonly used interchangeably in the literature and thus, the current review. One common

conception of emotions includes labelling distinct emotions based on their levels of intensity across a range of individually unique internal experiences (Augusto-Landa et al., 2011; Cooper & Petrides, 2010).

Generic cultural 'labels' of emotions are used in the current study (such as angry, depressed, pity) so that teachers and the study's outcomes share the same common understanding and are measuring the same affective experiences. That is, the researcher assumes that everyone uses the same emotional state 'labels' as they are generally understood in its culture. For the purpose of this study it is important to note that the meaning of "emotion" in academic psychology differs significantly from that in ordinary language, and for that reason, the goals of the current study required fidelity to the everyday usage in the English language. This requires minimal explanation but suggests that this definition and assumption may not be effectively applied or operationalised to suit other cultures.

To elaborate on emotions being 'self-directed' or 'other-directed' as employed for the current study, Parrott (2001) described that for some emotions, the focus is on the person who is responsible for the event. If another person is believed to be responsible for the event, then the emotions towards them may be praiseworthy (admiration) or blameworthy (contempt), for example. If a person believes themselves to be responsible, then they may find their own actions to be praiseworthy (pride) or blameworthy (shame). Some emotions seem to consist of perceptions of responsibility with assessment of the consequences of the events for themselves or others (Parrott, 2001).

5.1.2 Functions of Affect

Parrott (2001) continues to explain that emotions may relate not just to events, but also to our general or natural tendency to like or dislike a person. Some emotions can be biased by a person's motivation. Because events can often be interpreted in so many different ways, people may have a tendency to react to the situation consistent with a way they want it to be.

Emotions may provide information about a person's present situation, such as feeling angry (Schwarz, 1990), or may remind the person of a previous time when they felt that same emotion. Some triggers can access the emotional memories or beliefs that are consistent with that emotion. The length

of time or intensity that an emotional state presents depends on how the situation or feeling is dealt with. A person's attention could be distracted to another issue and end, or the emotional episode could continue until one's thinking of the situation is restructured or re-evaluated (Frijda, Mesquita, Sonnemans, & Van Goozen, 1991). All these factors could impact on a person's overall emotional experience and behavioural reactions to a situation or another person.

5.1.3 Affect and Cognition

The following discussion provides a brief background to some of the academic theories of emotion and its functions and relationship with cognition. This is not an exhaustive review as the relevance may only be marginal to the current study. The Attribution Model regarding affect and cognition provides crucial key perspectives based on the study's hypotheses, as will be established in the next chapter. The following information is useful to acknowledge, however, when trying to understand and interpret the directionality of the hypothesised Attribution Pathway Model in the results section. It will also be illustrated that there is no general agreement on the functions or relationship of cognition and affect.

In the majority of theories, cognition is an important element of emotion. Sometimes it feels as if we are acting primarily on the emotions we are feeling and it may seem as if we are not thinking However, some theorists believe that mental processes are still essential, particularly in the interpretation of events. Several theories purport that cognitions, in the form of judgments, evaluations, or thoughts are entirely necessary for an emotion to occur. Lazarus (1982) argued that emotions must have some cognitive purpose and that the interpretation of an emotional context may be conscious or subconscious. In these theories, emotions usually occur because the situation has been interpreted in a particular way, and the type of emotions experienced depends on the cognition. According to Lazarus, the quality and intensity of emotions are controlled through cognitive processes. Coping strategies in the form of cognitions, for example, help to form the emotional reaction by mediating between the person and the environment.

There is abundant agreement about a person's way of thinking and the emotions that they feel. Much research has been directed at identifying types of cognitive evaluations or judgements that are associated with different emotions (e.g. Ortony, Clore, & Collins, 1988; Smith & Pope, 1992).

Other theories, however, claim that emotion is separate from and can precede cognition. A growing body of literature in Social Psychology has suggested that emotions influence people's judgments regarding events or other people (e.g. Blaney, 1986; Schwarz, 1990). People often consult their emotions as clues to their opinions (Rice & Richardson, 2013). The 'affect-as-information' hypothesis states that individuals are motivated and influenced by emotions and they obtain important information about their environment from their emotional reactions. This information then assists in making decisions regarding action, forming attitudes and creating goals. It indicates whether a person has been impacted positively or negatively by the event. Mood-congruency models propose that affect tends to bias the content of thoughts toward the emotional state being experienced (Mayer, Gaschke, Braverman, & Evans, 1992). For example, negative affect results in negative thoughts that distort decision-making and evaluative processes. We can be emotionally reactive prior to the cognitive evaluation, and we can automatically sense how we feel about something. This then provides an indication as to how the situation is likely to be further analysed. Parrott (2001) states:

> Emotional reactions can involve changes in thinking, behavior, physiology, and expression. The effects of these changes may influence readiness to think and act in certain ways, as well as signal this readiness to others, thereby affecting social interaction and relationships (Parrot, 2001, p. 376).

Research from an evolutionary perspective suggests that affect might be more important than cognition as a determinant of most behaviours (Johnston, 1999). Johnston doesn't reject the importance of cognition but views affect as the motivational power for behaviours and that cognition, more so, increases behaviour flexibility.

Rice and Richardson (2013) examined the mediating role of affect and cognition in the evaluative processes behind judgments. They used surveys to investigate people's perceptions across

four experiments. They found through one experiment that participants relied on affect when evaluating the need for treatment of an individual described with a mental illness. Other experiments showed that when participants were asked to take responsibility for helping, they relied less on their emotional reactions elicited by the target individual, and relied more heavily on their cognitive decision-making skills (Rice & Richardson, 2013). Their cognitive processes associated more with their own ability, knowledge, and willingness to help. Affect seems to be more important in determining some behaviours, whereas cognition seems to be more important for others (Trafimow et al., 2004).

Robert Zajonc (1980), proposes that cognition and emotion should possibly be regarded as two independent systems, often working together, but also capable of being contradictory. Lazarus (1982) identifies numerous issues in proposing a separation between emotion and cognition. Lazarus (1982) and Beck (1976), both view emotion as being linked to cognition and that the way a person thinks about a situation undoubtedly affects how they feel. Parrott and Sabini (1989) suggest that the association is sometimes difficult to identify, however, as not all cognition is conscious, deliberate or verbal.

Affect is also considered to be a separate concept to EI, yet is a product of EI. It has been shown, for example, that an individual higher in EI is able to use their emotions in better and more functional ways, compared with those with lower EI.

5.2 Teacher Emotional Intelligence and their Reactions

There are two recent studies worth noting, which are most closely related to the current study and that establish that teachers' EI can predict the way they behave and respond towards students. A Victorian study conducted by Perry and Ball (2007) demonstrates that EI moderates the way that teachers perceive and react emotionally in classroom situations. Perry and Ball (2007) recruited 239 state and independent primary and secondary school teachers within Melbourne and asked them how they would likely feel and think as a reaction to ten typical teaching situations. Using a mixed method approach, Perry and Ball (2007) drew on the 'Reactions to Teaching Situations' survey (RTS), which

is their own previously developed four-branch model and framework of EI. In practice, they report the RTS to have "theoretically meaningful relationships to the Interpersonal and Intrapersonal Intelligences of the Gardner Model of Multiple Intelligences (Gardner 1983)" (Perry & Ball, 2007, p. 447).

Four reactions (reflecting the four branches: identifying, using, understanding or managing emotions) were provided by the researchers, and teachers were asked on a five point anchor scale to rate the likelihood of that particular emotional reaction being made. Comparison of response frequencies by high and low EI groups was made. A qualitative analysis of the open-ended responses of what teachers would feel and do in a range of situations provided confirmation of these quantitative responses.

Teachers with higher levels of EI responded differently than teachers with lower levels of EI; thus the level of negativity that teachers perceived in a situation was associated with their level of EI. Situations that elicit negative emotions were deemed more problematic for those teachers with low EI as they weren't able to use skills of emotional management as well to transform their emotions into constructive solutions. They also tended to experience more feelings of lack of control, poorer emotional resilience, threats to their effectiveness as a teacher and remained more trapped by their emotional state. Those teachers with higher EI were better able to 'bounce back' from negative emotional experiences and turn their responses into more positive solutions.

In relation to the proposed study's hypotheses, it would be expected from such findings that those teachers lower in EI would perceive the student with EBD more negatively. Perry and Ball's (2007) research was limited to focusing on teacher reactions to general classroom situations. The scenarios presented were directive as to whether teachers should see a situation as positive or negative. As teachers were asked how they would typically deal with particular situations in Perry and Ball's (2007) study, it is likely that it measured the cognitive problem-solving skills of teachers rather than their level of EI. A teacher's inability to problem-solve may account for some of their more negative emotional reactions towards the scenarios. Perry and Ball's teacher reaction measure (RTS), was

based on an EI model of identifying, using, understanding and managing emotions, which are considered to be EI traits in the proposed study, rather than behavioural reactions.

Nizielski, Hallum, Lopes, and Schutz (2012) specifically examined the relationship between teacher EI (and specific dimensions) and student misconduct. Although they could not infer causality, student misconduct in the classroom was linked with poor emotional abilities of teachers (Nizielski et al., 2012).

Nizielski et al.'s (2012) findings were similar to those of Perry and Ball (2007) in that teachers differed in their behaviours towards students depending on their level of EI. Teachers high in EI were found to be more attentive to student needs, which was theorised to affect the way teachers manage student misconduct through conveying concern to students, fostering empathy, effective communication and establishing "an appropriate emotional climate and an atmosphere of caring and collaboration" (p. 322). It was deemed plausible to assume that these emotional factors play an important role in the management of students' disruptive and oppositional behaviours and that these students are less inclined to act out. Nizielski et al. (2012) showed that specific EI factors such as self-emotion appraisal and regulation of emotions was negatively related to student misconduct. This suggested to them that those teachers who were able to monitor their emotional state more effectively, and regulate their emotions, facilitated "the expression and communication of emotions in ways that positively influence encounters with students" (p. 325).

Nizielski et al.'s (2012) investigation was based on the ability model of EI proposed by Mayer and Salovey (1997). They used a retrospective self-report measure to capture teacher perceptions in real-life situations. They wanted to measure teachers' subjective experience of past performance across a variety of regular emotionally arousing interactions. They used the Wong and Law Emotional Intelligence Scale (WLEIS; Wong & Law, 2002) to measure perceived EI, and obtained other teacher ratings using a created exploratory measure based on supportive teacher behaviour and ratings of student misbehaviour using the Pupil Behaviour Patterns (PBP) shortened version (Friedman, 1995). The research was conducted in Syria so it is unclear whether the results could be applied to the

Australian cultural context. Nitzielski et al. (2012) called for further research to be conducted on the relationship between teacher EI and student misbehaviour in different cultures.

Nizielski et al. (2012) tended to focus on only one limited variable to understand the link between EI and student behaviour; namely teacher attention. Pianta, Hamre, Haynes, Mintz, and LaParo (2006) describe effective teachers as those who fulfil a broader range of student needs than this, such as the instructional, behavioural and emotional. This is reflected in teacher-student interactions and relationships that have already been shown to promote achievement, engagement and emotional well-being in students.

While all these studies have similar hypotheses in trying to understand the impact of EI on teacher reactions towards students, they all failed to identify a broad range of reactive variables or processes that can help to explain teacher behaviour. There are also no known studies that focus on stigmatisation and discrimination as a process or outcome of EI.

Another type of cognitive variable which may or may not be conscious, and that influences a teachers' evaluation of their situation, is their self-efficacy. This too has been found to have significant associations with affect, helping behaviour and EI.

5.3 Self-Efficacy

5.3.1 Self-Efficacy and Affective Reactions

Self-efficacy (SE) refers to a person's belief in their ability or competence in tackling difficult or novel tasks and to cope with adversity in specific challenging situations (Bandura, 1997). Self-efficacy, as personal cognitions, organize and produce actions for given purposes (Bandura, 1997; Pajares, 1997). People with high self-efficacy, for example, are reported to engage in more challenging tasks, set higher goals, exert more effort, persist for longer, and remain more committed to their goals despite hindrances, than those who are low in self-efficacy (Luszczynska & Schwarzer, 2005). In the educational context, teachers who have higher SE would still experience job stress, however, they would perceive this to be more of a challenge than a negative threat or loss of control. It

has also been suggested that their higher SE beliefs help them to manage their negative affective experiences (Schwarzer & Greenglass, 1999). Teachers with low self-efficacy may be more likely to experience higher levels of anxiety, worry, and self-doubts, leading to possible psychological distress (Schwarzer & Greenglass, 1999). These examples highlight how self-efficacy is an important personal resource factor that may facilitate teacher coping (Knoll, Rieckmann, & Schwarzer, 2005) and better student outcomes.

5.3.2 Self-Efficacy and Helping

Teacher self-efficacy, or the self-confidence that teachers perceive they have towards situations or tasks, is considered to be a central determinant of teachers' behaviours and actions in the classroom (Bandura, 1997; Tschannen-Moran & Woolfolk Hoy, 2001). It has been suggested that teachers with a resilient sense of self-efficacy are generally more effective in providing the instructional and affective supports that correspond with their students' needs and lead to more positive learning outcomes (Guo et al., 2012, Justice et al., 2008; Leroy et al., 2007).

According to Bandura (1997), the beliefs about one's own capabilities provides the power to cause people to act differently from what the specific contextual forces may prescribe. SE can activate and sustain the skills, motivation, and effort required for desired outcomes to be realised. Within education research, SE has been shown to be an important determinant for teachers' ability in managing and motivating difficult students, as well as their level of effort and persistence in getting such students to study (Almog & Shechtman, 2007; Bandura, 1997; Lambert et al., 2009; Tschannen-Moran & Woolfolk-Hoy, 2001). In a study by Polou and Norwich (2002), teachers' behavioural reactions and their perceptions about their own ability to reach certain outcomes were considered to be significantly related. It makes sense that people attempt to perform a behaviour to the extent that they have confidence in their ability to do so. Therefore, classroom outcomes are very much determined by the teachers' beliefs in their capability to manage problematic or challenging situations.

Self-efficacy can be applied to the extent to which teachers believe that the classroom environment or a student can be controlled and modified. Higher self-efficacy helps teachers to see

their students' misbehaviour as modifiable and believe in their own capability to bring about positive change and act accordingly towards change (Bandura, 1997). Teacher self-efficacy is considered to be related to teachers' decision-making processes (Soodak & Podell, 1993). Teachers higher in self-efficacy adopt more helpful strategies, such as praise and reinforcement and they attribute the student's problem to environmental interactions with the student. Teachers lower in self-efficacy tend to attribute blame towards a student, and prefer more restrictive strategies such as referring the student to somewhere outside the classroom (Brophy & McCaslin, 1992; Jordan et al., 1993). A recent example of helping response styles was demonstrated in Almog and Shechtman's (2007) study. Thirty three teachers, who teach inclusive classes (1st to 3rd grade) in Israel, participated. Their data were collected through classroom observations, teacher interviews and questionnaires. They chose teacher self-efficacy for their study as it had been found to be related to teacher effectiveness in previous studies.

Teacher self-efficacy positively correlated with helpful response styles in regards to real classroom incidents and hypothetical incidents of social rejection, shyness, low achievement and passive-aggressive behaviour. Self-efficacy also related to teachers' reports on the use of appropriate teaching strategies (Wertheim & Leyser, 2002), managing classroom social problems (Rich et al., 1996) and implementing positive classroom management strategies (Emmer & Stough, 2001). The claim that teachers' attitudes and perceptions influence their actual behaviour are supported by the mentioned studies (Pajares, 1992).

One of the most recent, and more specific studies to the context of students with EBDs and teachers' self-efficacy was conducted by Zee, De Jong, and Koomen (2016). They examined teachers' SE in relation to students who displayed a variety of social-emotional behaviours (externalising, internalising and prosocial) in the classroom. Their sample included 526 students (grade 3 to 6) and 69 teachers. Their definition of SE referred to teachers' perceptions of capacity towards specific helping-type behaviours. Multilevel modelling helped Zee, De Jong, and Kooman (2016) examine the students' behaviours as predictors of teacher SE towards the individual students. It also investigated

the potential moderating roles of teachers' level of experience and their perception of the level of student misbehaviour.

Zee, De Jong, and Koomen (2016) found a negative association between students' externalising behaviour and teacher SE for instructional strategies, behaviour management, student engagement and emotional support. Student internalising behaviour was a predictor of lower levels of teacher self-efficacy in relation to instructional strategies and emotional support and higher levels for behaviour management. Higher levels of SE were reported towards students who displayed prosocial behaviours.

As self-efficacy is generally considered a significant predictor of teacher reactions and helping behaviour, it was important to include this variable in the current study. Self-efficacy is defined in the current study as a teacher's cognitive perception of their own level of ability in dealing with a student with an EBD.

Not only does SE relate to teacher behaviour and classroom outcomes, it has also been found to relate to teachers' EI. Therefore, it would be expected that the SE variable would somehow help to form part of the hypothesised process, from teacher EI to resultant helping behaviour. Numerous relationships have been established between SE and EI within educational contexts, and within managing students with EBDs.

5.3.3 Self-Efficacy and EI

Many studies have focused on the relationship between teacher EI and self-efficacy and have generally indicated significant positive relationships between the two (Ignat, 2010; Penrose, Perry, & Ball, 2007; Rastegar & Memarpour, 2009; Şenel, Adilogullari, & Ulucan, 2014). Teacher self-efficacy and well-being appears to be the most established link regarding teachers' EI (Ciarrochi, Deane, & Anderson, 2002). Self-efficacy has also been a dominant factor related to perceived ability in handling difficult behaviours (Almog & Shechtman, 2007; Emmer & Stough, 2001; Ross & Bruce, 2007). Teachers higher in EI tended to have more self-efficacy in their teaching capacity and in managing difficult behaviours than teachers lower in EI. Teachers with higher teacher efficacy in handling

misbehaviour are predicted to be more adaptive and responsive than teachers with lower self-efficacy when faced with student misbehaviour. Teachers with higher EI were better able to understand their students and their own emotions (Chang, 2009a), have greater self-efficacy (Chan, 2004), balance their professional and personal life, and rely on an internal locus of control (Gan, Shang & Zhang, 2007; Jude & Grace, 2011), thus decreasing their risk of burnout and contributing to their teacher effectiveness.

Di Fabio and Palazzeschi (2008) confirmed the construct of EI was related to occupational self-efficacy beliefs among Italian high school teachers. One hundred and sixty-nine teachers from high schools located in Tuscany participated. The Bar-On Emotional Quotient Inventory: Short (Bar-On, 2002) Italian translated version was used. Teacher self-efficacy was assessed using the Ohio State Teacher Efficacy Scale (Tschannen-Moran & Woolfolk-Hoy, 2001). Di Fabio and Palazzeschi's (2008) correlational analysis revealed the presence of a number of significant and positive relationships between EI and teacher self-efficacy, both globally and in its three dimensions (efficacy in instructional strategies, efficacy in classroom management, and efficacy in student engagement). Higher EI was connected to higher teacher self-efficacy in managing the classroom, motivating and involving students, and using appropriate teaching strategies. Adaptability, which relates to having emotional awareness and the capacity of using emotions as efficacious problem-solving strategies, was the dimension of EI that appeared to have the greatest link to the teacher self-efficacy. Teacher efficacy in student engagement had a moderate relationship with the interpersonal EI dimension, which represented teachers' ability to construct effective relationships, based on cooperation, and in understanding the feelings and emotions of their students.

Teachers who possess low self-efficacy have lower EI, according to Chan (2004), who used the Emotional Intelligence Scale (SEIS; Schutte et al., 1998) to measure EI. He purported that general self-efficacy is mainly accounted for by the positive utilization dimension, that refers to positive exploitation of emotions, and the emotional appraisal dimension, that expresses level of awareness of emotional evaluation. Lesser influence was provided by the empathic sensitivity dimension that relates

to the empathy or general sensitivity of the emotional expressions of others, followed by the positive regulation dimension, which is the positive handling of emotions.

Some evidence has also been found to support the idea that self-efficacy beliefs moderate the impact of teacher stressors on mental health outcomes, suggesting that self-efficacy may be an important personal resource in coping (Schwarzer, Boehmer, Luszczynska, Mohamed, & Knoll, 2005). In linking this to EI, Chan's later (2008) study examined teacher self-efficacy and EI (intrapersonal and interpersonal) as personal resources for global and passive coping strategies among 273 Chinese prospective and in-service teachers in Hong Kong. Some evidence suggested that interactive blending of intrapersonal EI and teacher self-efficacy could contribute substantially to prediction of active coping. Specifically, teachers who applied active coping tended to have higher teacher self-efficacy, and higher levels of intrapersonal and interpersonal EI. However, the effect of teacher self-efficacy on coping was not found to be independent of the effects of EI.

Many of these similar international studies can be criticised for their inability to predict causation and their small sample sizes. The generalisability to the Australian culture is also questionable. The current study aimed to determine the directionality of the relationship between EI and SE.

5.4 Chapter Summary

'Affect' is a general and all-encompassing term, used to describe emotions, feelings, and moods. The terminology is commonly used interchangeably in the literature. Some emotional reactions are based on perceptions of responsibility of the cause and consequences of events for themselves or others (Parrott, 2001). Emotions may provide information about a person's current situation (Schwarz, 1990).

There is no general agreement on the functions and relationship of cognition and affect. In a majority of theories, cognition is an important element of emotion. The 'affect-as-information' hypothesis purports that individuals obtain important information about their environment from their emotional reactions. Lazarus (1982) and Beck (1976), however, view emotion as being linked to

cognition in that the way a person thinks about a situation undoubtedly affects how they feel. In the current study, both affect and cognition are hypothesised to influence teachers' behavioural responses.

This chapter demonstrates that EI can predict the way teachers behave and respond towards students. In relation to the current study's hypotheses, from the presented findings it would be expected that those teachers lower in EI would cognitively perceive the EBD student more negatively. EI plays an important role in the management of students' disruptive and oppositional behaviours leading to these students being less inclined to act out as a result (Nizielski et al., 2012).

Self-Efficacy, as a cognitive evaluation of one's own ability to deal with a situation, has been strongly shown to have significant associations with affect, helping behaviour and EI. Teacher SE is considered a central determinant of teachers' behaviours and actions in the classroom (Bandura, 1997; Tschannen-Moran & Woolfolk Hoy, 2001).

Numerous relationships have been established between SE and EI within educational contexts, and within managing students with EBDs (Ignat, 2010; Penrose, Perry, & Ball, 2007; Rastegar & Memarpour, 2009; Şenel, Adilogullari, & Ulucan, 2014). Some evidence has been found to support the idea that self-efficacy beliefs moderate the impact of teacher stressors on mental health outcomes, suggesting that self-efficacy may be an important personal resource in coping (Schwarzer, Boehmer, Luszczynska, Mohamed, & Knoll, 2005).

Teachers' higher in EI tend to have more self-efficacy in their teaching capacity and in managing difficult behaviours than teachers lower in EI. Therefore, in the current study it is expected that teachers with higher EI and self-efficacy will be more supportively helpful than teachers with lower EI and self-efficacy, when faced with student misbehaviour. EI and teacher SE could contribute substantially to the prediction of active coping and reducing teacher burnout as a result of challenging student behaviours. The current study also aims to determine the directionality of the relationship between EI and SE.

The current discussion on affect and cognition provides background and context for the following chapter, which specifically establishes the attribution framework, and the role and placement of the EI, cognitive and affective variables within a proposed Attribution Model.

CHAPTER 6 - Stigmatisation and Discrimination

This chapter commences by exploring definitions of stigmatisation and the contextual location of most relevant studies. Discrimination is also defined using theoretical and practical examples to demonstrate the term's relationship with punitive behaviour. The Helping and Punitive Behaviour of teachers, as variables in the current study, are operationalised. The Attribution Theory, applied as a theoretical framework within the current study helps to understand the more complex processes behind stigmatisation and discrimination, as will be demonstrated. The presented research examines patterns of cognition, emotion, and behaviour, and points out possible limitations of the model. The origins of the Attribution Model, as well as the findings of numerous variables employed within the plethora of attribution studies are reported. Studies that have explored the Attribution Model within educational, helping and behavioural contexts are reported on, as are the research patterns on specific causal attribution factors.

6.1 Introduction to Stigma

One of the most popular definitions of stigma was presented by Goffman (1963) who referred to it as an "attribute that is deeply discrediting" reducing the bearer "from a whole and usual person to a tainted, discounted one" (p. 3). Conceptual models of stigma have mainly appeared in the mental illness or disability research literature and refer to the cognitive (stereotypes), emotional (prejudice), and behavioural (discrimination) components of a stigma process.

Another way to view stigma is as negative attitudes, which are evaluative statements towards another, or as stereotypes, which are collective opinions or generalisations about a larger group of people (such as those with mental illnesses). The negative attitudes and stereotypes about discredited subgroups leads to prejudice and discrimination toward such groups (Corrigan, 2000; Corrigan & Watson, 2002). Prejudice relates to the negative emotional response toward the stereotyped group (Eagly & Chaiken, 1993). In other words, the cognitive and affective response leads to the behavioural reaction of discrimination (Crocker, Major, & Steele, 1998). This may include avoidant behaviour,

overprotection, increased social distance (Corrigan, 2002), hostile behaviour (Weiner, 1995), pity, rejection (Goddard & Jordan, 1998) and withholding help (Corrigan, 2000). Therefore, stigma can be seen as a behavioural process that commences with a stigmatising trigger or mark and progresses through a cognitive-affective structure to result in discrimination (Lam, Tsang, Chan, & Corrigan, 2006).

6.1.1 Discrimination

Another definition of discrimination offered by Crocker et al. (1998) is the action of either withholding opportunities from a stigmatised person, or reacting punitively towards them solely because they are a member of a stigmatised outgroup. Withholding opportunities corresponds to the refusal of helping behaviour in Weiner's (1980) model. The current research highlights the importance of the perceptions that teachers have towards children with EBDs and the consequences of such perceptions. A teacher's lack of willingness to support or help a student may be one example of a discriminatory consequence for a student as a result of their teacher's perception.

Sutherland et al. (2008) report that students with EBDs often receive differential rates of help by teachers. He describes a process whereby a student with EBD's lack of motivation, frequent disruptions, and/or aggressive behaviour are likely to overwhelm a teacher and make it difficult for appropriate instruction to occur. This happens even more so where several students present with various academic and behavioural needs within the one classroom. A negative pattern of interaction can develop between the teacher and the student displaying the high rates of problem behaviour. The impact of this is a low rate of instructional engagement, that further affects the student with EBD's learning and academic progress. The teacher's behaviour, such as not providing the student with opportunities to participate or respond to questions, for example, can have triggers for the student's behaviour, such as whether to continue being troublesome. This demonstrates the influence of the student-teacher interaction patterns on students with EBDs in classrooms.

Another teacher perception raised by Sutherland et al. (2008) is that mainstream classrooms are inappropriate placements for students with EBDs (Schumm & Vaughn, 1992). As a result of this

view, general education teachers may make limited accommodations for the student or are resistant to changes in modifying tasks (Lago-Delello, 1998). Teacher perceptions of students' academic skills and behaviour are considered by Good and Brophy (1972) to be a significant classroom variable. Therefore, students who do not meet teacher expectations are at greater risk of academic failure (Lane, Wehby, & Cooley, 2006), peer rejection, and perceived as having less ideal student characteristics (Lago-Delello, 1998).

The above ideas demonstrate Sutherland's (2008) statement that students with EBDs receive differential rates of teacher instructional variables over time. This is influenced by the ongoing negative and reciprocal student-teacher relationships (Sutherland & Oswald, 2005), that unintentionally form a pattern of discrimination.

6.1.2 Helping versus Punitive Behaviour

As in the current study's notion of helping versus punitive behaviour in the context of student behavioural problems, Cunningham and Sugawara (1989) suggested that intervention methods used by teachers can be sorted into two coping styles: helpful and restrictive styles. They refer to a helpful style as the methods that emphasize active and empathic involvement with the student. Helping style refers to the teachers' goal to bring about long-term change through the use of strategies such as helping the student to acquire skills and alternative behaviours, setting aside time for a personal talk with the student or changing the instructional method. Restrictive strategies, are equivalent to punitive strategies in that they are intended to bring about the immediate cessation of the difficult behaviour through the use of authority. Restrictive strategies can include transferring a student to another class, making threats, preaching, punishments and withholding privileges (Cunningham & Sugawara, 1989).

Teachers prefer the use of helpful approaches, according to a number of teacher self-report studies (Cole, 1998; Sugai & Horner, 2002). However, Almog, and Shechtman (2007) found, contrary to many other studies, that in reality, teachers adopt restrictive responses more often than helpful responses. Such restrictive approaches create distance between teachers and students, limits the

communication and interaction between them and does not contribute to the effective integration of the challenging student into the classroom.

Almog and Shechtman's (2007) research results showed that teachers had sufficient knowledge regarding helpful strategies, but they were unable to apply this knowledge practically in real classroom situations. Their research method included classroom observations, teacher interviews and self-report questionnaires of 33 Israeli teachers. The gap between teachers' theoretical knowledge and actual behaviour was apparent during the researcher's classroom observations of teachers. This study and others, highlight the presence or existence of punitive teacher approaches in classrooms. This can be seen through the way teachers spontaneously respond to challenging behaviours without drawing on different theories or previously acquired knowledge. Why do many teachers seem to experience difficulties in bridging the gap between theory and practice, or in applying their knowledge of effective interventions to real classroom situations? This was one of the questions that initially triggered the researcher to explore the current topic based on her own observations. Almog and Shechtman's (2007) study confirms and supports these informal observations.

Almog and Shechtman (2007) provide some reasons for these findings. They suggest that individual differences among teachers may provide one explanation of teachers' *actual* behaviour in relation to student misbehaviour. The current research aims to investigate these teacher differences that lead to varying behavioural outcomes.

6.1.3 Research of Specific Diagnostic Groups

The collection of studies conducted so far, mainly relate to the stigmatisation of persons with mental illness and intellectual disabilities, but are deemed relevant to the current study in that students with EBDs may already be experiencing mental illness or that the illness is starting to emerge (i.e. in the early stages of development). As has already been defined in the previous chapter on EBDs, those with other developmental disabilities or conditions can also make up some proportion of students with EBDs (e.g., intellectual disabilities, autism spectrum disorder and attention deficit disorder). It is

suggested that there are some consistent behavioural presentations or characteristics across these groups.

As key similarities seem to exist between students with EBDs and individuals with mental illness (MI) and/or disabilities (ID), this suggests that the study of stigmatisation of students with EBDs can be approached and examined in a similar way to those studies involving students with MI and ID. All of these disability groups can experience stigmatisation and discrimination. Attribution Theory can help to understand the process of stigmatisation and discrimination for all these groups.

To date, there are no known studies that have investigated the effect of teachers' EI on the attribution process, however, it has been a dominant theory for understanding the more complex processes behind stigmatisation and discrimination of minority groups. As will be demonstrated, the Attribution Model is a well-established concept that has been used frequently as a methodology within numerous stigmatisation studies involving mental health and some disability groups. The following section demonstrates the attribution process on helping behaviour within a range of contexts. This assists in identifying patterns of cognition, emotion, and behaviour.

6.2 Attribution Theory Origins

Attribution Theory is a popular theory that has been employed for decades (Corrigan et al., 2003; Dooley, 1995; Schmidt & Weiner, 1988; Weiner, 1979, 1985). It refers to the perceptions an individual has regarding the causes of their or another person's behaviour, which predicts a person's emotional and behavioural reaction. I t is based on the assumption that "people seek meaning in their environment in order to stabilise and simplify it and to understand, predict, and control the behaviour of others. These functions are necessary for survival in a social environment" (Crittenden, 1983, p. 438). This theory also forms the basis of the cognitive, emotional, and behavioural (discriminatory) components of the stigma process as previously defined. The following review of the literature helps to conceptualise the Attribution Theory and its relationship to stigma and discrimination. The discriminatory outcome of 'helping behaviour' is most closely related to the current study and thus is the most referred to concept throughout this chapter.

Attribution Theory purports that a person's response is based on the causes that are attributed to the behaviour being observed. Gilbert and Malone (1995) identified four steps that outline the cognitive thought processes that people have about an observed behaviour. First, an individual *perceives* the situation, then they *form expectations* as to how the observed person should respond in the situation. Third, the observed person's behaviour is *interpreted*, and an *inference* as to the cause of the behaviour is made. This inference may be attributing some personal characteristic or environmental factor to the observed person. Causal attributions can also be described as the perceived reasons or judgements as to why someone is behaving the way that they are or why an incident occurs (Weiner, 1972). Gutman (1982) suggests that these inferences are likely to affect that individual's attitude and behaviour towards the observed person.

The concept of examining others and making causal judgements about the reasons for their presentation is not a new concept. Heider's (1958) naïve psychology theory, for example, was developed from the belief that it is natural for humans to observe others and decide on causes for behaviour as a way of understanding the social world. Heider believed that people can either make internal or external attributions about others. Internal attributions are the causes that relate to factors within the observed individual, such as personality or genetics, whereas, external attributions relate more to the environment than the individual (e.g., family, circumstances). Many researchers have tested or expanded upon Heider's theory and have found consistent results (Fielding & Head, 2012; Nasser & Abouchedid, 2006).

Generally, two types of psychological responses have been demonstrated in the literature, which include Casual Attributions (cognitive perceptions) and emotional responses. Researchers report on the factors that people attribute as the cause of a person's behaviour which then influences their emotional responses to that behaviour. Weiner (1979) proposed a relationship between a person's causal attributions of another person and the psychological consequences of those attributions.

6.2.1 Weiner's Attribution Theory

Weiner's 1979 and 1985 theories of motivation have made the most significant contribution to research in this field and have been the most widely tested motivation theories among psychology and education researchers. Weiner's Attribution Theory has been validated by numerous empirical studies (Corrigan et al., 2003; Dooley, 1995; Graham et al., 1997; Mnc & Perry, 1998; Reisenzein, 1986; Rush, 1998; Steins & Weiner, 1999).Weiner's (1979) theory states that a person's reaction, actions or behaviour following a situation or incident are determined by the causes that the person attributes to Steins & Weiner, 1988; recognising the subconscious components of the process. Despite what is unknown, it is established that judgements are formed in this way and do affect the way a person responds to a situation. Weiner's model generally consists of three causal dimensions of behaviour: Locus of Control, Stability and Controllability. Locus of control refers to whether the cause of another person's behaviour is perceived by the onlooker to be internal or external. Did the student fail their test because of low IQ (internal cause) or was it because of lack of effort (external cause)? Weiner's Locus of Control Scale closely relates to Heider's (1958) theory of internal versus external causal judgements.

Stability was defined as the extent to which the cause of another person's behaviour is perceived to be enduring or temporary (Weiner, 1985) or the likelihood that the cause of the behaviour or situation would change. As an example, some teachers may perceive the cause of an EBD student's challenging behaviour to be permanent and stable, as opposed to a rare, one-off triggered, temporary behavioural reaction within the classroom (unstable cause). Whether the cause of the student's behaviour is perceived to be within the student's control or not, refers to the Controllability dimension. A student's parental upbringing may be considered an uncontrollable attribution for a student's presentation, compared with student personality as a more controllable factor.

6.3 Attribution and Helping

Substantial evidence also exists for the Attribution Model, as a measure of discrimination, being applied to various helping behaviours (Corrigan et al., 2003; Dooley, 1995; Reisenzein, 1986; Willner & Smith, 2008).

6.3.1 Corrigan's (2003) Attribution Model of Helping

Corrigan et al. (2003) suggest that "people make attributions about the cause and controllability of a situation or behaviour that leads to inferences about responsibility. These inferences lead to emotional reactions such as anger or pity that affect the likelihood of helping or punishing/rejecting behaviours" (p. 165). Corrigan's theory is a more recent adaptation of Weiner's (1985) original Theory and Model of Attribution. Corrigan et al.'s (2003) model relates more closely to the framework used within the current study due to its more recently dated theoretical and empirical evidence, established model and related statistical framework.

Research generally proposes that the decision to help another person depends on the perceived cause of the need for help. If an individual requires help but has not expended effort to help themselves, then anger is usually triggered and aid is likely to be withheld. Pity and positive social responses are generated if an individual is unable to help themselves because of low ability or factors external to themselves and out of their control (Schmidt & Weiner, 1988). The relationship between causal attributions, mediating anger or pity, and consequent behaviour has been validated in several studies (Dooley, 1995; Graham et al., 1997; Menec & Perry, 1998; Reisenzein, 1986; Rush, 1998; Schmidt & Weiner, 1988; Steins & Weiner, 1999; Weiner et al., 1982; Weiner et al., 1988; Zucker & Weiner, 1993). The current study is theoretically founded on Corrigan's model of helping and has hypothesised effects consistent with the general findings just reported. That is, a teacher's perception of the student (level of student control/responsibility) will influence affect (anger or pity), which leads to helping behaviour.

6.3.2 Cognitive and Affective Factors Related to Helping

Many other studies have supported the idea of helping behaviour being applied to the Attribution Model. In his later model, for example, Weiner (1985) suggested that his 'Controllability' dimension influences the emotional responses (anger and sympathy) that impact helping. Weiner also predicted that the dimension 'Stability' influences 'Optimism' that increases propensity to offer help. Optimism refers to the belief that a person's behaviour can be changed. These variables are worth mentioning due to the possible relevance to the current study in that behaviour of students with EBD's may be perceived, by teachers, as enduring, due to prolonged exposure in the classroom.

In relation to helping, if stability is perceived to be low (temporary behaviour) then helping is considered more likely, as optimism for change is generated. The other likely helping outcome is if controllability is perceived to be low then more sympathy is generated. Studies have provided inconsistent results from full, to partial, to no support of Weiner's model in relation to carer helping responses towards challenging behaviours. Full support for low stability leading to optimism leading to helping has been found in carers of mental health patients (Sharrock et al., 1990). Other researchers have found that optimism predicts helping but that stability is unrelated (Dagnan et al., 1998; Jones & Hastings, 2003). Some studies have not found directional support for the model (Dagnan & Cairns, 2005; Stanley & Standen, 2000). Numerous studies have found support for low perceived control leading to positive affect (or low anger) and helping (Dagnan et al., 1998; Dridan, 2013; Stanley & Standen, 2000).

Contrary to Weiner's (1985) theory, Wanless and Jahoda (2002) found that high levels of control and anger were associated with an increase in likely helping behaviour and that an inverse relationship also existed between control and optimism (Dagnan et al., 1998; Sharrock et al. 1990). Their study measured responses of staff towards people specifically diagnosed with mild to moderate intellectual disabilities who behave aggressively.

In his later work, Weiner (1995) discovered another variable that related to discrimination or punitive helping behaviour. This was his Blame and Intentionality dimension, which resulted in a

further scale that was closely associated with his Controllability dimension. Causal attributions can in fact influence whether a person is considered to be responsible for their presentation, and if they are, then blame is placed. When a student's academic failure is attributed to them not trying (high controllability), for example, it is assumed that it is the student who is responsible for that failure. It is seen as the student's fault and they are blamed. This causes the person making the judgement to feel anger and that punishment is a more justifiable intervention. When student failure is attributed to low IQ, as an example, it is assumed that the student is not responsible and more sympathy and helping are generated.

In one study relating to emotional characteristics, carer staff who were rated high in expressed emotion were more likely to see their client's challenging behaviour as more internal and controllable (Weigel et al., 2006). It was also suggested that the extent to which carer staff are able to manage their emotional responses may be another area to explore in relation to helping outcomes.

6.3.3 Criticisms of Attribution Models of Helping

One criticism of Weiner's (1985) Attribution Model is that it viewed the teacher, for example, as being secluded from the school or classroom environment. Whether the teacher felt limitations from such external factors, or became influenced by social stresses or difficulties was not clearly incorporated into the model. Research purports that, in reality, the teacher would not be driven solely by their personal or internal dispositions, but would still be restricted by their environment such as social norms or standards. Weiner's model would not take into consideration the way the teacher perceives the effect of EBD student presentations on their actions. The teacher is perceived as making choices of action as if they were detached from their social world.

In addition, many Attribution Models, similar to Weiner's, have studied the antecedents of action without considering the probability of intended action. Although reports of a decision to help another have been closely linked with actual behaviour, there can also be discrepancies. Willner and Smith (2008) maintained that future research should address the issues of the limited reliability of the vignette-based methodology commonly associated with attribution studies and the inconsistent

definitions of 'helping' and related measurement inadequacies. In relation to likely helping behaviour, they emphasized that reported plans are not always followed through with as intended, or at all, creating a discrepancy between reported behaviour and actual behaviour.

Poulou and Norwich (2002) also pointed out that even though intentional behaviour is usually very closely linked to actual behaviour, they are not always consistently related. In school settings, the assumption, that a teacher's intention to help is the only factor in teaching decisions, is not accurate. Numerous other factors intervene in the teaching process that may stop a teacher from carrying out their intentions.

Ajzen (1991) explained how a person forms an intention to engage in certain behaviour. Intentions were defined as indicators and motivators as to how hard a person is willing to try and how much effort they are willing to put in, in order to follow through with an action. They supported the position that intentions are closely associated with behaviours and can predict them with a high degree of accuracy. Orbell et al. (1997) also confirmed that the literature demonstrates that measures of intentional behaviour have acceptable predictive ability and account for 20–30% of the variance in future behaviour. This is not to dismiss, however, that time intervals, unpredictable circumstances and other conditions can mediate intentions to perform actual behaviour.

The current researcher has chosen to use the terminology 'likely' helping behaviour to allow for a small probability of a teacher not following through with an intended action. The research suggests that there can sometimes be a discrepancy between what a teacher reports and what they follow through with, but generally 'behaviour intention' is considered a strong and reliable predictor of 'actual' behaviour for the purpose of the current study.

6.4 Attribution in Educational Contexts

An assumption of Weiner's model is that the cognitive-affective-behavioural concept can be applied to any helping behaviour, especially classroom-related thoughts and actions (Weiner, 1979, 1980, 1983). He believed that it is essential to understand teachers' perceptions in order to explain

their helping behaviour, as well as their affective reactions as a consequence of their causal attributions. One important teacher perception relates to why the student needs assistance.

There are many studies that provide empirical support for the thought-affect-behaviour sequence across numerous helping situations within educational contexts (Betancourt, 1990; Covington & Omelich, 1984; Meyer & Mulherin, 1980; Reisenzein, 1986; Schmidt & Weiner, 1988; Struthers et al., 1998; Tollefson & Chen, 1988; Weiner, 1993). In these contexts, the attribution research has mainly focused on teacher expectations of students based on their performance or failures (Weiner, 1986, 1995). Strong empirical evidence also exists for teacher causal attributions of challenging student behaviour and student academic achievement (Fang, 1996; Weiner, 1985).

Many studies suggest that further insight into teacher reactions towards difficult behaviour can be gained through the attributional process (e.g., Hughes et al., 1993; Soodak & Podell, 1994). In a large-scale interview study, Brophy, Rohrkemper, and Ball (1981) discovered that those teachers who attributed the student's academic failure to be out of the student's control, expressed more sympathy and a greater likelihood of wanting to help the student. When the academic failures were perceived to be within the student's control then less sympathy was reported. When this pattern is applied to students with EBDs, it is assumed that the less control that teachers believe the student to have over their presentation, the more likely they are to offer help compared with teachers who perceive the student to be in control.

Teachers' cognitive perceptions of the remedial nature of presentations of students with EBDs, their ability to bring about positive outcomes for students (self-efficacy) and their perception of how much control (personal responsibility) they have over the student presentation, predicted their intended helping behaviour (Poulou & Norwich, 2002). This was consistent with Ashton et al.'s (1982) previous findings in that, teachers' perceived abilities in influencing a student's performance affected their motivation for working with students. Helping intentions were also predicted by teachers' perceptions of control (responsibility) and the remedial nature of the presentations. There was an interesting finding, in Poulou and Norwich's (2002) study, that teachers' own negative (self-

directed) feelings were not associated with a desire to help or not help the child. It was interpreted that teachers' disregard of their personal affective reactions may signify awareness of their teaching role, which requires them to act objectively. Emotional and cognitive responses were found to be important determinants of teachers' inclination to help, mediating between causal perceptions and intentional behaviour.

6.4.1 Age and Helping

Age was another predictor of the stigmatising and discriminatory behaviours of teachers towards students (with learning disabilities), as demonstrated through the attribution process (Dridan, 2013). The older and more experienced teachers tended to report less blame and more sympathy for the hypothetical student as a result of perceiving the student to have low control over his presentation. Younger teachers reported greater anger as a result of perceiving that the student in the scenario was more capable of changing his behaviour, thus the outcome. Dridan (2013) also discovered that the younger teachers were less likely to want to help the student in certain situations; specifically, in their own time or outside of class time. These findings suggest that younger teachers tend to stigmatise and discriminate more against some student presentations.

One idea discussed by Dridan (2013), to explain this variance in teacher age outcomes, was that the more experienced teachers were possibly more accepting or more used to challenging presentations. Bailey et al. (2006) described a similar phenomenon that, when individuals are exposed to regular, frequent behaviours, they tend to habituate to them. The older teachers may have become more complacent over the length of their careers, leading to less generation of thought, or less stressful responsiveness to 'regularly' encountered characteristics. Hastings and Remington (1994) and Grey et al. (2002) similarly discovered that participants' ability to manage their emotional responses was related to their experience, training and their job satisfaction. These are just a few additional variables that have also been considered relevant to the study of teachers and helping behaviour.

Dridan (2013) continued to propose that the more experienced teachers might also have developed more effective coping strategies and ways of dealing with complex presentations. The

younger teachers on the other hand, might have had less experience in working with students with special needs and less understanding of differentiation in the classroom. It was emphasised that it would be interesting to further explore the reactions that younger teachers have in relation to special needs student groups that cause them to become more frustrated, and less helpful, than their more experienced colleagues.

The main limitation of Dridan's (2013) experimental study was her small sample size. In her study with eight causal factors, Dridan neded a sample size of 35 to have statistical power of .80. Her sample was only 34. This could have led to non-significant results when a significant result may have been found with a larger samle. Nevertheless, her findings raise some interesting topics for discussion and highlight areas for further exploration. Female teachers, for example, appeared more likely to want to help the student. They were also more likely to offer help, as well as assist the student outside of class and in their own time.

Presumptions about teacher exposure to special needs students, based on the subjects they taught, were also questioned as to their impact on the results (Dridan, 2013). The academic or behavioural difficulties with which some students present, may not be evident to teachers in the 'hands on' type classes. In fact, students' strengths are sometimes demonstrated in the practical skills subjects. Other teachers, who teach subjects such as physics or chemistry, may only encounter students who are high in academic achievement and therefore are not exposed to students with special needs. In this way, it is questioned whether some of the resultant teacher data can actually be interpreted as discrimination and stigmatisation, or merely irrelevant. Further exploration of the differences across teaching subjects could prove to be helpful.

6.5 Specific Causal Attribution Factors

According to Dridan (2013) "there seems to be little research outside of mental illness studies, which has taken into account the central role that *specific* causal attribution factors play in people's reactions to stigmatised groups" (p. 5). Generally, research exploring specific causal factors has found that "some part of the rejection of out-groups can be traced to the influence of causal attributions"

(Martin et al., 2000, p. 219). Research on causation generally posits that if the cause of a situation is attributed to factors within the individual's control, such as "a lack of willpower or effort or some other moral failing" (Coleman et al., 2009, p.950), research generally suggests that the person is likely to be negatively judged as responsible and the cause of their condition or behaviour. Alternatively, if the situation is attributed to factors outside of the individual's control, such as biological, genetics or head injury, for example, they are viewed more favourably and less responsible (Coleman et al. 2009; Martin et al., 2000). The majority of research findings suggest that teachers attribute child or family factors to students with behavioural difficulties. Some studies recognise the importance of teaching factors as primary contributors to the problematic behaviour, however, the majority of studies attributed factors external to the teachers themselves.

Coleman et al. (2009) identifies some common causal factors from the literature to use for their stigmatisation study, which they considered to be "well-studied and theoretically meaningful" (p. 951). Their factors included parenting, substance abuse, lack of effort, genetics, brain differences, God's will and stress. They found that brain differences and genetics were not related to discrimination. Brain differences, however, did have a small correlation with the moralistic or blaming causal factors such as parenting, substance abuse and low effort. Participants in Martin et al.'s (2000) study similarly reported chemical imbalance in the brain to be the main factor associated with perceiving a person to have a mental illness. This had a strong link to discrimination.

Stress is a causal factor that has been associated with mixed outcomes in the research. Coleman et al. (2009) attempted to interpret their results of the stress factor, but found it too challenging due to the complexity of meanings within such causal factors and the mixed outcomes. Some of their participants perceived stress to be an uncontrollable factor that led to empathy, whereas other participants blamed the person for their own inability to cope with stressful circumstances.

Specifically related to students with EBDs in educational contexts, Poulou and Norwich (2002) reported on causal attributions as predictors of teachers' cognitive and emotional responses. They found that those teachers who attributed 'teacher factors' (such as their personality, manner, and

teaching style) as the cause of the student's presentation, also perceived the nature of EBD to be remedial. They also felt that they had more control over the cause of EBDs and were able to treat it. This led to increased responsibility in teachers finding an effective solution for the student. Attributing teacher factors to the cause of EBDs was considered to result in more optimistic outcomes.

Attributing 'child factors', however, was considered less positive. Perceiving child factors (such as 'the child wants to attract attention', 'child's innate personality' or 'inability to cope with school demands') resulted in more negative feelings of stress, offence and helplessness for the teachers, especially for student conduct and mixed behaviour type presentations (Poulou & Norwich, 2002). As 'child' causal factors were not associated with how teachers' felt towards the student, this suggests that the general assumptions surrounding causal ascriptions were not confirmed by the study's data in relation to child causations and student-directed emotions.

Teachers feelings of 'anxiety/stress', 'helplessness' and 'offence' were also associated with attributing 'school' causal factors (such as 'lack of services', 'bad school experiences' or 'irrelevant curricula') (Poulou & Norwich, 2002). It appeared that the child and school causal factors were not seen as controllable by teachers, which generated negative feelings. It is likely that it is the perceived lack of controllability over the causes of EBD presentations that induces teachers' feelings of helplessness. Family factors did not relate to any of the predicted variables.

Unexpectedly, Poulou and Norwich (2002) conclude from their study that teachers attributed multiple causes for EBD presentations and not a single causal factor as in their (and others') hypothesised pattern of predictive relationships. Teacher, school and child factors were all equally perceived to be causations. They also found that these causal attributions "did not exercise a powerful influence" on teacher responses when faced with the challenge of students with EBDs (Poulou & Norwich, 2002, p. 127).

Teacher attributions of student misbehaviour have been reported in the literature to a small extent. Researchers have found links between teachers' causal attributions and discipline-related

practices for different student behaviours (Arbuckle & Little, 2004; Kulinna, 2008; Poulou & Norwich, 2002; Soodak & Podell, 1994).

6.6 Chapter Summary

Conceptual models of stigma have mainly appeared in mental illness or disability research, but are deemed relevant to the current study in that students with mental health disorders, developmental disabilities or conditions also make up some proportion of EBD student groups. Stigmatisation can be seen as a process that commences with a trigger (such as a student's behaviour) and progresses through a cognitive-affective reactive process resulting in discrimination (Lam, Tsang, Chan, & Corrigan, 2006). The current research highlights the importance of the perceptions that teachers have of children with EBDs and the consequences of such perceptions. Sutherland reports that EBD students often receive differential rates of help by teachers (Sutherland et al., 2008).

Substantial evidence exists for the Attribution Model, as a measure of discrimination, being applied to various helping behaviours (Corrigan et al., 2003; Dooley, 1995; Reisenzein, 1986; Willner & Smith, 2008). As the current study is theoretically grounded in Corrigan's (2003) Attribution Model and framework of helping, it has hypothesised effects consistent with the general findings, that a teacher's perception of the student (level of student control/responsibility) will influence affect (e.g. anger or pity), which leads to helping behaviour. The relationship between causal attributions, mediating affect, and consequent behaviour has been validated in several studies (Menec & Perry, 1998; Rush, 1998; Steins & Weiner, 1999; Weiner et al., 1982). These include helping behaviour, (Weiner, 1979, 1980a, 1983), challenging student behaviour (Hughes et al., 1993; Soodak & Podell, 1994) and student academic achievement (Fang, 1996; Weiner, 1985).

Martin et al. (2000) report that "some part of the rejection of out-groups can be traced to the influence of causal attributions" (p. 219). Some research findings (Poulou & Norwich, 2002) suggest that child or family factors are attributed to students with behavioural difficulties by teachers. Some studies recognised the importance of teaching factors as primary contributors to the problematic behaviour, however, the majority of studies attributed factors external to the teachers themselves.

Research on causation generally posits whether a person will be judged negatively or favourably, depending on whether they are viewed as responsible and causing their condition or behaviour (Coleman et al., 2009, p. 950; Martin et al., 2000).

Attribution Theory will help to understand teacher cognitions, emotions, and behaviour as part of a stigmatisation process. The following chapter discusses additional factors related to a stigmatised person, that may explain variations found in teacher reactions and helping behaviour.

CHAPTER 7 – Student Behaviour and Stigmatisation

In the current chapter, it is established that there are different levels of stigmatisation or "blame" across various special needs groups. It is explored as to where students with EBDs may be positioned in relation to these other conditions or disabilities and reasons are provided for this.

The following theoretical and empirical studies also help to explore additional factors, related to the stigmatised person that may account for variations in helping behaviour. Some attribution studies provide possible explanations for 'exceptions' to the usual patterns of helping behaviour that were not reported in previous chapters. Some of these factors have been employed as variables in the current study.

The theories and perspectives reported below centre more on the stigmatised person's presentation or behaviour as being the primary source of stigmatisation. The current study aims to shift the focus and 'blame' away from special needs children, by considering other factors, such as EI, that contribute to stigmatisation and discrimination. In order to challenge this student-focused behavioural perspective, the opposing stigmatisation theories need to be explored and understood.

7.1 Stigma Groups and Attribution Factors

There seem to be differences in the extent to which specific disabilities are stigmatised. This can be referred to as the 'hierarchy of preference' toward disability (Thomas, 2000). Within this hierarchy, for example, it is suggested that people with mental illness and intellectual disabilities are consistently the most highly stigmatised groups (Hernandez et al., 2000; Thomas, 2000; Yuker, 1988). The level of stigmatisation for students with EBDs, compared with other minority groups, is yet to be explored.

Across various stigmatised groups, there are different levels of attribution or 'blame'. Attribution factors appear to contribute to people's attitudes and the formation of the different stigma. People with mental illness, for example, are perceived to be responsible for their condition, unlike people with physical disabilities (Weiner, Perry, & Magnusson, 1988). Corrigan et al. (2000), found

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that students with intellectual disabilities were more stigmatised in terms of the stability of their condition (e.g. permanence of their disability), compared with mental illness that was associated with a higher degree of controllability (i.e., responsible for their disabilities). Despite both attributions leading to stigma, the perceived causes significantly differed. Panek and Jungers (2008) provide further evidence for this in their study. They suggest that even within the subgroup of individuals with intellectual disabilities (ID), affective responses tended to be more positive when the cause of the disability was perceived as "uncontrollable" (e.g. Down's syndrome) as compared with "controllable" (characterized as a self-inflicted ID by drinking toxic chemical at an early age).

A number of relevant stigma 'dimensions' can be found in the social psychology literature indicating how stigmatised individuals are perceived and treated. After Jones and colleagues (1984) reviewed the literature, they proposed six dimensions: concealability, course, disruptiveness, aesthetic qualities, origin, and peril. Visibility and controllability were considered the most important determinants of reactions to the stigmatised by Crocker et al. (1998), while many studies have added perceived danger (Deaux, Reid, Mizrahi, & Ethier, 1995).

Crandall and Moriarty (1995) found two factors that predicted social rejection: perceived dangerousness and perceived responsibility. While their study relates to health-related stigmas, Stanger and Crandall (2000) believed these factors could be applied to other stigma groups. They also agreed that stigma results vary in relation to perceived threat, whether real or believed.

7.2 Exceptions to General Patterns of Helping Behaviour

Some of the past and recent attribution studies provide possible explanations for 'exceptions' to the usual patterns of helping behaviour found in the research, and consider additional causes for discrimination. There are at least two established factors identified in the literature that interfere with a person's decision to help, which are considered to be exceptions to the predictable pattern of helping behaviour. That is, individuals tend to habituate to a behaviour when they are regularly and frequently exposed to that behaviour (Bailey et al., 2006) and when there is a perceived risk associated with

helping another person. Therefore, depending on the context and frequency of exposure to a behaviour, predictability of helping behaviour can sometimes vary.

Observable behavioural characteristics, such as risky or unpredictable presentations, have also been reported to contribute to negative perceptions (Corrigan, 2000; Kokkinos, 2005), so it is difficult to predict whether a direct link does, in fact, exist between causal factors and stigmatisation in these situations. The following studies are useful in understanding inconsistent outcomes of the Attribution Model process, depending on the circumstances.

7.2.1 Frequent Exposure to Challenging Behaviour and Helping

Attribution Theory has been applied to the context of helping behaviour of care staff towards clients who show challenging behaviour, such as those with intellectual disabilities (Willner & Smith, 2008). Willner and Smith's study results were inconsistent with the literature on Attribution Theory as applied to challenging behaviours. One of the reasons that they provided for the lack of success of the Attribution Theory in their context was the difference in behaviour. Attribution Theory was intended to be used with low frequency behaviours and may not be able to be applied to more regular and frequent behaviours. This is possibly because care staff habituate to them (Bailey et al., 2006).

Habitual behaviour can be defined as a form of automatic and routine behaviour. It is behaviour that people may repeat, because the behaviour is easy, comfortable or rewarding for them. The intrinsic advantages of a person's actions can often outweigh the possible disadvantages. Habitual behaviour can be automatically generated by a cue or trigger in the situation. It is efficient to do something by habit, and to not constantly reason with oneself about what is the best thing to do. There is no constant weighing of pros and cons. This perspective would suggest that the cognitive component of the Attribution Model would not necessarily be a relevant part of the process if this is the case.

7.2.2 Perceived Risk

Some common cognitions about a person with a mental illness or intellectual disability, for example, may be that they are dangerous (Link et al., 1999). Attributing a person's behaviour as dangerous leads to fear, according to Johnson-Dalzine et al. (1996), and most people respond to violent threats of any kind with hesitation. Many mental illness studies have found relationships between perceiving someone as dangerous and fearing them (Angermeyer & Matschinger, 1996; Levey & Howells, 1995; Link & Cullen, 1986; Wolff et al., 1996), and fear about a person's dangerousness, leads to avoidant behaviours. Weiner (1995) believes that an emotional response like fear produces a behavioural outcome, such as avoidance, without necessarily requiring a mediating attribution.

Corrigan et al. (2000) report that attitudes about dangerousness are important to the way in which the public understands and responds to mental illness, however, previous research is unclear as to whether dangerousness relates to the controllability argument. People with mental illness may be perceived as violent, but this association may be independent of their assessment of controllability. Corrigan et al. (2002) suggest that it may depend on the circumstances at the time of the situation as to the evaluation. Automatic danger or fear responses may dominate when there is little time or motivation to cognitively reflect, whereas a causal search may precede assessment of danger in less pressured situations.

Corrigan (2002) examined the stigmatising attitude that persons with serious mental illness are dangerous. The results clearly support a path between dangerousness, fear, and social avoidance. The most notable finding from Corrigan's study was the almost perfect correlation between dangerousness and fear. Research by Blascovich et al. (2000, 2001) also found that stigmatising labels are highly related with perceptions of threat. They explained that these cognitive perceptions of threat are accompanied by psychophysiological markers of reactivity and arousal (indicators of fear). They believe that even when there is limited conscious awareness of feeling fearful, this kind of

physiological reaction still occurs. Therefore, fear seems to be considered an automatic (not necessarily cognitively mediated) response to dangerousness that leads to discriminatory behaviour.

As a limitation to these studies, the reported findings are based on what participants say they would think and behave. Corrigan et al. (2002) recommend that future research needs to include more observable indicators that represent actual behaviour. Future research also needs to investigate other methods in which avoidance can be demonstrated, as the available examples are limited.

7.2.3 Student Presentation

According to Conway (1996, in Bartak & Fry, 2006), a teacher's willingness to help a student also depends on the presenting characteristics of the student's condition. Students with emotional or behavioural disorders were less likely to be assisted by teachers than those with physical or intellectual disabilities. There are other theories that suggest some students' presentations or conditions are more stigmatising than others (Gillman et al., 2000). Dridan (2013) concluded that the least appealing student behaviours or presentations may lead to more psychological detriment in students as a result of their teachers' reactions. In addition, the less challenging presentations would be more likely to assist the student to positively adjust via the influential teacher processes. Hastings (1995) also found other variables related to perceived attributions such as the student's behavioural features and their perceived functions. Earlier studies, such as Safran and Safran (1984), found that teachers have less tolerance for student behaviours which are considered more disruptive and out-directed than behaviours classified as self or teacher-directed.

The current study contributes to and challenges the recent bulk of research that strongly indicates that it is the presentation or severity level of challenging behaviour of a student that leads to stigmatisation. A previous study of stigmatisation by the current researcher (Dridan, 2013) made a similar conclusion with a recommendation that this claim be further investigated. Therefore, the current study will be investigating additional factors related to student presentations that have not been considered in earlier studies. The literature cannot present specific information on EBDs (due to the

inconsistent operationalisation of the term/disorder) but explores conditions that could be categorised within the current study's operational definition of students with EBDs.

7.2.3.1 Visible versus Concealed Presentations

Erving Goffman (1963) proposed a relevant framework as a way of thinking about and studying stigma. His notion remains a popular theoretical foundation for examining stigmatisation today (Farrugia, 2009). He defined stigma as a social phenomenon in which members of a particular subgroup possess a 'disgraceful attribute' that makes them different from the rest of society. Goffman's (1963) concept similarly differentiates between discredited and discreditable stigma. He describes discredited stigma as occurring when people outside of a subgroup readily recognise a disorder or stigmatising quality in an individual without much background knowledge of that person (Goffman, 1963). Discredited stigma refers to the overt signs such as a person's skin colour, gender, or a disorder like Down's syndrome. These characteristics are visually evident and do not require further evaluation of a person to determine their stigmatising quality.

Discreditable stigma, however, occurs when people outside of a subgroup are unaware of an individual's stigma and this stigma is not immediately obvious at face value (Goffman, 1963). People with discreditable stigma have no obvious or readily visible characteristic that identifies them as part of a stigmatised group (Corrigan, 2000). As an example, discreditable stigma may include a person's sexual orientation, mental illness, epilepsy, or autism disorder because their characteristics are not accompanied by a distinct physical sign.

Gray (2002a) provided an example in the case of autism, especially high functioning autism, where the disability was not evident to outsiders. He argued that children with autism, as well as their families, are discreditable rather than discredited due to them being initially perceived as 'normal' due to the lack of physical symptoms (Gray, 1993). One mother reported in this study that people perceived her child to have nothing wrong with him and so assumed that he was just being disobedient and that she was just unable to control her child. This is because the normal physical appearance of children with autism is contradicted by their unusual social behaviours (Chambres, Auxiette,

Vansingle, & Gil, 2008). This leads to greater stigmatisation towards the children as well as their parents (Gray, 1993). Schumacher et al. (2003) also referred to mental illness as a discreditable stigma that can be inferred from a variety of social cues, similar to the above example. It could be expected then, that a student with an EBD would have discreditable stigma because the disorder is also, more often than not, not marked by any overt physical characteristics.

7.2.3.2 Standard of Behaviour 'Norm'

Similar to Goffman's (1963) concept is the idea of a "standard of comparison in impression formation" (Chambres et al., 2008, p.1321). In other words, in forming an impression of a target (the stigmatised individual), observers tend to compare the target's behaviour with some standard. To demonstrate this theory, children with autism are often compared with a 'normal' behaviour standard or presentation because of their 'normal' physical appearance. Their behaviours should, however, be compared with a standard of behaviour exhibited by a child with autism. Although, even then it is difficult to compare the differing presentations along the autism spectrum. The atypical behaviours characteristic of autism, have been found to influence stigmatisation towards these children and their parents (Butler & Gillis, 2011).

Chambres et al. (2008) also found that when children produced behaviours that failed to conform to social norms, they were perceived negatively. It could be assumed then, that the further a person's behaviour deviates from the perceived social norm the more stigmatised they would be. This supports the idea that the more challenging behaviour of a student with EBD is, the more they would be stigmatised or discriminated against. The externalizing and norm-violating behaviors in individuals with Attention Deficit Hyperactivity Disorder (ADHD) provides an example of this (Fuermaier et al., 2012). Undergraduate students in Canu et al.'s (2008) study rated a person diagnosed with ADHD as more socially-negative compared with a person with a medical problem (e.g., asthma) or a person with an ambiguous weakness (e.g., heightened level of perfectionism).

Adults were less willing to have social contact with children and adolescents with ADHD, according to Martin et al. (2007). Respondents in their study attributed 'incapacity of discipline' and

'bad character', as causes of the ADHD presentation, that significantly correlated with social distance. Similarly, ADHD students were avoided more often, judged negatively by their peers, perceived as more violent and more antisocial, compared with non-ADHD students (Canu et al., 2008; Walker et al., 2008). Children with ADHD were blamed for their condition due to the causal factor 'low effort' (Coleman et al., 2009).

7.2.3.3 Labels and Stigmatisation

A child is also believed to be more harshly assessed if people are not informed of a diagnosis (Chambres et al., 2008). It has been found in some cases that if behaviour is attributed to some disorder or given a label, it can lead to a decrease in stigmatisation. Although, Dridan (2013) argues that this can still depend on what the label is. According to one of Riddick's (2000) participants in her study on labelling, the same problem and symptoms still existed whether or not they were formally labelled (Riddick, 2000).

There was also a hierarchy of stigmatised identities noted by Gillman et al. (2000). They report that individual behaviour can be misunderstood by others and can lead to censure and disapproval of persons (Gillman et al., 2000). In their study, parent participants expressed ambivalence about having to explain and rationalise their child's behaviour to strangers. A diagnostic label seemed like a better preference than community members drawing their own conclusions that their child had a 'drug problem' or a 'mental illness' label, which seemed much worse in the hierarchy of stigmatised conditions. The belief that some presentations are more stigmatising than others often leads people to search for an alternative, such as a label that is considered to be less stigmatising (Gillman et al., 2000). As an example, the need for a formal diagnosis seemed most imperative for parents whose child's Learning Disability was not immediately visible. This is consistent with Goffman's (1963) notion of discreditable stigma and Chambre et al.'s (2008) standard of comparison in impression formation.

In relation to children with EBDs, they are often not provided with a formal diagnosis or label due to the lack of specific definition, diagnostic criteria and agreement on what constitutes an EBD.

Again, this could place them at greater risk for stigmatisation. EBDs also have no clear-cut standard 'norm' for their condition by which to compare their behaviours, and they have no overt signs of a disability or condition, on which others can base more accurate conclusions. If the observer is unaware of a child's diagnosis or underlying issues, they may assume the child is 'normally developing' and judge them accordingly (Chambres et al., 2008). As with autism, children with EBDs should not be held accountable for their problematic behaviours because of their psychological state.

Dridan (2013) concluded from her Australian experimental quantitative study of high school teachers, that in the absence of a label of Learning Disability, the teachers tended to focus more on the behavioural and mental health aspect of the hypothetical student's presentation rather than the academic difficulties described in a vignette. The opposite was true when teachers were provided with a diagnostic label for the student. The absence of diagnostic information for one group of teachers was associated with a higher level of student 'blame', as a result of their perceived causal factors. These findings were consistent with those of Riddick (2000) and Taylor et al. (2010), in that it is more the observed nature of the child's presentation that leads to stigmatising judgements, which may vary depending on the extent of the students' perceived problematic behaviours. It was also discussed by Dridan (2013) that if a teacher becomes too angry at a disobedient student, the learning disability might still be overlooked, despite the teacher having knowledge of what a learning disability is. This suggests that a learning disabled child with no behavioural problems, may be more likely to be assisted by a teacher, than another learning disabled child who had severe behaviour problems. So then, despite the demonstrated effects that a teacher's level of knowledge of a student's background or diagnosis can influence the level of stigma, teacher helping can also vary within labels, based on the level of their challenging presentation. Dridan (2013) highlighted the need for more studies that focus on teacher responses to the nature and specific presenting characteristics seen within students and labels.

7.3 Severity of Behaviour and Teacher Reactions

As in the current study, Poulou and Norwich (2000) wanted to determine whether teacher reactions differed depending on the severity of student behaviour. They distributed their attribution inventory to 60 elementary public schools in urban Athens where they recruited 391 teacher participants. They designed their survey in six versions to depict different types of EBD student-type behaviours. These included mild conduct, severe conduct, mild emotional, severe emotional, mild conduct and emotional and severe conduct and emotional. Poulou and Norwich's (2000) vignettes were developed, based on data gathered from a Behaviour Inventory administered to 170 Greek primary school teachers and data from semi-structured interviews with 20 teachers, and validated prior to the administration of their study. Poulou and Norwich's (2000) results indicated that in relation to teachers' negative affective states, feelings of irritation and frustration were rated higher for all the behaviour type scenario presentations. Feelings of anger were rated more highly than feelings of indifference for the mild and severe conduct problems and the mild mixed behaviour types. Despite these differences in affective states across some vignettes, all the teacher ratings were still considered quite low on the scale. In relation to teachers' coping behaviours, interestingly it was reported that teachers were more likely to supportively engage, involve the student and support the student, despite their level of behaviour severity.

Poulou and Norwich (2000) found that there were similar teacher responses to the student with EBD across all of the vignettes, which questions whether their descriptions of the behaviour types in the vignettes were distinct enough for teachers to differentiate between the levels of severity. They sounded caution in comparing teachers' responses across vignettes, suggesting their differences in severity variables were not controlled for. These are a few of the methodological limitations that the current study aims to overcome.

7.4 Severity of Behaviour and Teacher Characteristics

The study of Kokkinos, Panayiotou, and Davazoglou (2005) is considered significant as it ties together many of the concepts already explored in previous chapters and relates closely to the current

study's investigation. The relationships between student behaviour severity, teacher personality factors, burnout, cognitive perceptions, and stigmatisation within an educational context are examined. The existing literature combining all these variables is limited, yet the functions of these variables need to be further understood in relation to their stigmatising effects on students with EBDs.

In their quantitative experimentally designed study, Kokkinos et al. (2005) compared different types of student behaviours based on teacher perceived behaviour severity levels. Teachers' perception of behaviour severity was also compared by student gender. Kokkinos et al. (2005) also investigated how teacher characteristics, such as burnout and personality traits, influenced their perception of student behaviour severity. Their measures included a Greek translation of the personality NEO–Five Factor Inventory (NEO–FFI; Costa & McCrae, 1992) and the Maslach Burnout Inventory–Educators Survey (MBI–ES; Maslach, Jackson, & Leiter, 1996). The 24 behaviour severity rating scales referred to undesirable student behaviours which were broadly categorised as antisocial, oppositional/defiant, interpersonal sensitivity, inattention/restlessness, negative affectivity, and inattention/carelessness. Four hundred and sixty five experienced teachers and 141 undergraduate teachers in primary education programs were asked to rate each behaviour twice; firstly relating their ratings to a boy and then a girl.

Kokkinos et al.'s (2005) results indicate that, overt antisocial behaviours were perceived as more severe by teachers compared with internalizing behaviours and emotionally natured conditions. This is no surprise considering the current literature that has already been presented. Extreme externalising behaviours were perceived by teachers to be more serious for boys. Milder forms of externalising behaviours (such as inattention/carelessness) were perceived as more severe for girls, as well as internalising type presentations. This suggests that gender may have an impact on stigmatising perceptions. When teacher factors were incorporated into the findings, Kokkinos et al. (2005) discovered that burnout negatively 'inflated' perceptions of antisocial and oppositional/defiant student behaviours. The higher the teacher's stress levels, the less tolerant they became of challenging and undesirable student behaviours. This prediction was also supported by teachers' severity behaviour ratings that correlated with the personality dimensions of Conscientiousness and Neuroticism. Highly

conscientious teachers perceived student behaviours to be more severe, in terms of their antisocial and oppositional presentations. Even the more subtle negative affectivity was perceived as serious to the conscientious teachers. Therefore, personality factors and level of burnout appear to be important in how teachers perceive and attend to EBD student behaviours. Petrides' trait EI measure used in the current study correlates with these Big Five personality factors, as assessed by Kokkinos et al. (2005).

Kokkinos et al. (2005) also proposed that even though the research on personality and EBDs is scarce, it could be assumed that traits related to Neuroticism (such as anxiety, social anxiety and depression) may make aggressive and challenging behaviours appear more threatening, as higher neurotics already tend to view life events as more difficult and uncontrollable (Barlow, 1988). Teachers high in Neuroticism may also feel incompetent at managing difficult student behaviours. Another interpretation was that teachers high in Conscientiousness may view mild behaviours as more serious than what they are in efforts to perform more effectively. Siegling, Furnham, and Petrides (2015) found Neuroticism to highly correlate with many of Petrides' (2009) EI trait facets, suggesting similar findings could be expected for these related EI traits in the current study.

Burnout (as will be shown in the next chapter), appears to relate to how teachers perceive the severity of student problematic behaviours, thus leading to stigmatisation and discrimination. Burntout teachers have been found to interact with students less frequently, and provide less information, praise and acceptance (Beer & Beer, 1992). It is documented that teacher perceptions of a student's mental health declines as their burnout levels increase (Cremerius, 1992 in Kokkinos, Panayiotou, & Davazoglou, 2005). It was also found by Zager (1982) that teachers who had shy, suspicious, tense and anxious personalities, were not only more vulnerable to burnout, but perceived their students more negatively.

In summary, severity of student behaviour, teacher personality factors, burnout, cognitive and affective variables have all been found to significantly relate to the way a student with EBDs is perceived and treated by teachers.

7.5 Chapter Summary

There seems to be differences in the extent to which specific disabilities are stigmatised and the level of stigmatisation for students with EBDs was explored. The theories or perspectives presented within the current chapter centre on the stigmatised person's presentation or behaviour as being the primary source of stigmatisation. The current study aims to challenge these claims.

Across various stigmatised groups, there are different levels of attribution or "blame". As has already been shown in a previous chapter, attribution factors can contribute to people's attitudes and the formation of stigma. It is also important to understand the inconsistent outcomes of the Attribution Model process, as it can vary depending on the circumstances. Some past and recent attribution studies provide possible explanations for 'exceptions' to the usual patterns of helping behaviour reported in the research, and consider additional causes for discrimination.

At least two established factors identified in the literature, that interfere with a person's decision to help, are considered exceptions to the predictable pattern of helping behaviour. That is, individuals tend to habituate to a behaviour when they are regularly and frequently exposed to that behaviour (Bailey et al., 2006) and when there is a perceived risk associated with helping another person. Therefore, depending on the context and frequency of exposure to a behaviour, the predictability of helping behaviour can sometimes vary. Visibility and controllability have also been considered important determinants of reactions to the stigmatised (Crocker, et al., 1998).

Observable behavioural characteristics, such as risky or unpredictable presentations, have been reported to contribute to negative perceptions. According to Conway (1996, in Bartak & Fry, 2006), a teacher's willingness to help a student depends on the presenting characteristics of the student's condition. Students with emotional or behavioural disorders were reportedly less likely to be assisted by teachers than those with physical or intellectual disabilities.

Goffman's (1963) concept differentiates between discredited and discreditable stigma. This suggested that as EBD presentations are generally not marked by any overt physical characteristics which can lead to greater stigmatisation. Individual behaviour can be misunderstood by others and can

lead to censure and disapproval of persons (Gillman et al., 2000). This also fits with the idea that a child is more harshly assessed if people are not informed of a diagnosis (Chambres et al., 2008). It has been found in some cases that if behaviour is attributed to some disorder or given a label, it can lead to a decrease in stigmatisation (Dridan, 2013).

A "standard of comparison in impression formation" (Chambres et al., 2008, p. 1321), suggests that, in forming an impression of a target (the stigmatised individual), observers tend to compare the target's behaviour with some standard. Similarly, when children produce behaviours that fail to conform to social norms, they are perceived negatively (Chambres et al., 2008). It could be assumed then, that the further a person's behaviour deviates from the perceived social norm the more stigmatised they would be. This supports the idea that the more challenging an EBD student's behaviour, the more they would be stigmatised or discriminated against.

Children with EBDs are often not provided with a formal diagnoses or label due to the lack of specific definition, diagnostic criteria and agreement on what constitutes an EBD. Again, this could place them at greater risk for stigmatisation. EBDs also have no clear-cut standard 'norm' for their condition with which to compare their behaviours, and they have no overt signs of a disability or condition, on which others can base more accurate conclusions. If the observer is unaware of a child's diagnosis or underlying issues, they may assume the child is 'normally developing' and judge them accordingly (Chambres et al., 2008). Taylor et al. (2010) purport that it is more the observed nature of the child's presentation that leads to stigmatising judgements and may vary depending on the extent of the student's perceived problematic behaviours.

The current study aims to challenge the bulk of research that strongly indicates that it is the presentation or severity level of challenging behaviour of a student that leads to stigmatisation and discrimination. The relationships between student behaviour severity, teacher personality factors, burnout, cognitive perceptions, affective reactions and stigmatisation are also examined as a starting point in understanding other factors that may relate to helping outcomes for students with EBDs.

CHAPTER 8 – Teacher Stress, Burnout and Psychological Distress

It can be assumed that many teachers are frequently exposed to students with EBDs who have been placed within their regular classes. Based on the current researcher's (Dridan, 2013) previous stigmatisation study results, it was suggested that it could also be "productive to understand how stress, teacher coping, and burnout influence teacher helping, as a result of working frequently with students who display challenging behaviours" (p. 66). Willner and Smith (2008) also suggested that it would be useful to understand how levels of stress and burnout affect the propensity to help, or the ways in which carers characteristically cope with stress. The act of disciplining students has been found to be associated with teacher emotional exhaustion (Chan, 2006; Evers et al., 2004; Friedman, 1995; Sutton & Wheatley, 2003) causing distress, negative attitudes and feelings of helplessness, hopelessness and embarrassment (Friedman, 2006).

The following review of available literature presents the different types of theoretical 'stresses' and symptoms, potentially related to teaching challenging students, and their prevalence. The purpose of including teacher stress factors in the current study was not to identify or quantitatively measure those teachers who may be burnt out or exhausted, as specific validated tools were not used. Rather, the intention was to understand the different ways that teachers can react to students with EBDs' challenging behaviours and/or their personal backgrounds, and the resultant consequences of this. Teacher stress factors (such as burnout and compassion stress), as will be demonstrated, are considered to be relevant to the stigmatisation process. Due to different reasons than those previously discussed, such stress factors can still lead to discriminatory behaviours. Beyond the Attribution Model, teachers may also no longer be able to remain in the teaching field as a consequence of stress or burnout. Patterns are identified in the research as to why, under similar environmental circumstances, some teachers experience psychological distress and others do not. This can possibly be explained by the established link between psychological stresses (e.g., burnout and emotional exhaustion) and EI.

8.1 Problems of Teacher Stress

Occupational stress, experienced as a negative affective state, is related to absenteeism, job turnover, and lack of motivation (Bridger, Day, & Morton, 2013). For teachers, it also results in lower levels of teacher engagement in the classroom (Chang, 2009b), more student behavioural problems (Collie, Shapka, & Perry, 2012), leaving teachers feeling incapable (Collie, Shapka, & Perry, 2012), health issues (Adeniyi et al., 2010), and high rates of teacher turnover and teacher shortages due to attrition (Billingsley, 2010; Johnson, 2010). It is universally agreed that teaching is a highly stressful occupation compared with other professions. Kinman, Wray, and Strange (2011) report that "teachers are more vulnerable to work-related stress, psychological distress and burnout than many other occupational groups" (p. 843).

Some teachers may develop psychological stress symptoms of varying severity, ranging from frustration, irritability and anxiety to psychological distress, sleeping disorders, psychosomatic disorders, clinical depression, bipolar disorder, emotional exhaustion and burnout (Ahola et al., 2014; Ganster & Rosen, 2013; Russ et al., 2012).

Chang (2009b) reports that approximately 25 to 33 percent of all teachers suffer significantly from stress, however, teaching students with EBDs has been found to be even more stressful compared with other teaching situations (Adeniyi et al., 2010; Billingsley, 2010; Chang, 2009b; Florian, 2010; Johnson, 2010; Lhospital & Gregory 2009; Oliver & Reschly, 2010). To support these figures, new special education teachers who teach students with EBD have been found to leave the profession at a rate of two and a half times more than that of regular classroom teachers (Billingsley, 2010). It is believed that stress and burnout are also responsible for causing 25 percent of kindergarten to Year 12 teachers in the United States' public education system to leave teaching before the end of their third year, and 40 percent to leave before the end of five years (Chang, 2009b; Gliebe, 2014).

Goddard and Goddard's (2006) Queensland research on the beginning teacher population provided support that the burnout construct is significantly associated with early career turnover intention in teachers. They speculated that it is "a combination of high work demands and lack of

either inner and/or outer resources that determines whether a beginning teacher will seriously consider leaving their job… after an average of only 7 months or so of teaching" (p. 72). Goddard and Goddard (2006) reported they are unable to infer causation and had a limited sample size, but reinforced the very real phenomenon of early career attrition rates and encouraged researchers to explore further on a national level.

Research suggests that some teachers can handle stress more effectively and others, when placed under frequent and prolonged periods of stress, can experience feelings of emotional exhaustion, a reduction in personal achievement, a sense of professional failure, and a tendency to deprive the student of assistance (Schaufeli & Buunk, 2003). Burnout has generally been described as being at the more extreme negative end of stress.

Stress is a multifaceted reaction that affects an individual's physiology, behaviour, emotions and thinking (American Psychological Association, 2015). It affects the way people think, sometimes creating a self-amplification loop (American Psychological Association, 2015). Research has generally found stress to be a product of personality, cognitive, social and environmental factors (Hausser et al., 2010). This suggests that, even under similar circumstances, teachers experience stress in different ways and intensities.

8.1.1 Variance in Teacher Reactions to Stress

Diverse factors have been identified as sources of teacher stress across numerous contexts. These include student misbehaviour, discipline problems, students' low motivation, substantial workloads, time pressures, role ambiguity, staff relationships, and pressure and criticisms from parents (Dunham, 1992; Travers & Cooper, 1996). The most interesting finding from these studies is that, whilst these stress factors are considered to be common across most teacher settings, teachers do not uniformly react to them (Milstein & Farkas, 1988). If stress and burnout were related purely to the teaching profession and environment, then teacher reactions would not differ. This suggests that variability in teacher reaction must lie within the individual teacher.

Many studies reported that teachers' stress and negative perceptions are generated from working consistently with challenging students, while other studies captured the fulfilment that teachers experience in teaching students with EBDs (Nelson, Maculan, Roberts, & Ohlund, 2001). These findings emphasize the contradictions often seen in the field of stress and burnout.

The current study should help to uncover some of the possible risk factors, as to why some teachers are more vulnerable than others to experiencing higher levels of negative emotional states (such as stress), leading to burnout and/or poorer mental health. The main explanations are expected to be embedded within the concept of trait EI, and implicitly through its established connections with other personality measures. There is much evidence to suggest that internal teacher factors, already canvassed in previous chapters, such as personality characteristics (Kokinnos, 2007), self-efficacy (Skaalvik & Skaalvik, 2007), and EI (Chan, 2006), are related to teacher stress and burnout.

8.2 Attribution, Burnout and Discrimination

When measuring stigmatisation, the Attribution Model could also be useful in assessing the cognitive and emotive processes behind burnout or emotional exhaustion, resulting in discriminatory behaviours. In Kokkinos' (2007) theory, she suggests that burnout is associated with teacher perceptions of misbehaviour (cognitive response) and that teachers also develop negative feelings (affective response) such as becoming discouraged about their ability to manage and instruct their students. Kokkinos proposed two processes that are important to identify from the link between perceptions of student misbehaviour and emotional exhaustion. The first includes teachers' self-efficacy in dealing with challenging behaviour. The second relates to the affective reaction of a teacher in being able to emotionally regulate themselves when dealing with misbehaviour of students. Emotion regulation is measured by exploring the level of control that teachers have over their emotional reactions to students with EBDs, such as, at what point they should use them and how they should experience or express those emotions (Gross, 1998a, 1998b; Gross & John, 2003). As Petrides (2009) and the current study consider emotion regulation to be an EI trait, then it would be reasonable to investigate the factors underlying burnout and emotional exhaustion through the proposed

framework of EI and the Attribution Model. These ideas have already been presented in previous chapters.

In relating the study of burnout to stigmatisation, Kokkinos (2007) found that burnout is associated with student misbehaviour in that teachers become emotionally exhausted from trying to deal with challenging students. This can lead to discriminatory behaviours, as operationalised in the current study, as teachers no longer have the emotional capacity or self-perceived ability to meet the needs of their students. This translates into avoidance behaviours or more punitive or 'quick fix' approaches to avoid the source of the stress or their internal negative affective states. The students miss out on quality teaching, whether intentional or not. Moore-Johnson (2006) clarifies that the quality of education suffers when teachers choose to stay, despite being burnt out.

Burnout describes a chronic state of physical, emotional, and mental exhaustion (Goddard, R., O'Brian, & Goddard, M., 2006). Burnout comprises of emotional exhaustion, depersonalization, and reduced personal accomplishment (Goddard et al., 2006). Emotional exhaustion in some studies is considered a core element of burnout as people suffering from emotional exhaustion are no longer able to give themselves to others at an emotional or psychological level. Emotional exhaustion can refer to feelings of being emotionally drained as a result of intense or challenging interactions, leading to depersonalisation and reduced self-efficacy. A burnt-out teacher could view students negatively and cynically, and start to disregard them. This would also be evident in their negative, indifferent or uncompassionate attitudes towards students. This would be another example of a stigmatising attitude and discriminatory behaviour as a result of burnout and the EBD student's intense and challenging behaviour. These factors highlight the possibly complicated interactions of teachers with their environments underlying discrimination. Friedman (2000) believes that when a teacher experiences burnout, it does not go unnoticed by the students. They are on the receiving end of teachers' impatience and lack of support, cynicism, inflexibility, negativity, overly tough attitude, lowered expectations of students, and lack of involvement and concern for their students (Gaitan, 2009; Hughes, 2001).

Another example of discrimination, provided by Fengler (2000), refers to depersonalization as a kind of defence mechanism that involves avoiding the source of stress. In the context of this study, this would mean avoidance of the student with an EBD. This is seen as an effective self-preservation method as it emotionally separates the teacher from the student, however, it can have negative longer term consequences. It is suggested that teachers with higher EI would tend to not depersonalise as they are able to cope with their emotions more effectively. A link has started to become established between EI and these psychological consequences, which will be expanded upon later in this section.

8.3 Psychological Distress

As has been shown, the emotional nature of interpersonal relations is one factor that is considered in the research to be a significant contributor to psychological distress (Ashfort et.al., 1993; Hochschild, 1979). The frequency of engaging with students, other teachers and parents, and the intensity of emotional expressions, for example, can contribute to the emotional overload and exhaustion. Another perspective is that it is the employee's perceptions of their work challenges, their perceived self-efficacy, their level of perceived control over these challenges, as well as their personal expression of emotions that may be more predictive of burnout. So then, it is debated whether it is the emotional demands of the job, or the perception of the demands that are more stressful. Either way, distress is caused, but this is one query that the attribution process may be able to attempt to address in the current study.

Strong evidence already exists in the research for the relationships between the cognitive and severity of negative affective experiences, and the constructs burnout, emotional exhaustion and mental health problems. As already mentioned, the current study will not measure these psychological constructs directly, rather, they are already considered established ideas in relation to the theoretical cognitive-affective-behavioural processes that underlie these terms. It is assumed, however, based on these conceptual links that, if a teacher reports low levels of self-efficacy and high negative affective states, the more at-risk they are of experiencing or developing psychological distress that effects their actions towards students. In the current study, the level of severity of these identified variables, the

more likely a teacher is to be experiencing or developing the consequences of psychological distress. Psychological distress relates to the research terms, and the severe emotional symptoms of teacher burnout, emotion exhaustion and/or other mental health problems. These terms will be used interchangeably as they occur in the research literature and are not important to specifically conceptualise as they are not directly and explicitly measured herein using validated tools. This component of the current study suggests that all these phenomena can fall under the broad operational definition of Psychological Distress, as a reaction to one's workplace environment. They can all relate to a teacher discriminating against a student or leaving the profession.

Given the strong relationships found between the cognitive and affective attribution factors behind burnout, emotional exhaustion and stress, it can reasonably be assumed that a teacher's probability of helping a student with an EBD can depend on their level of 'psychological distress'. Their risk of psychological distress levels could possibly be predicted from their level of negative affective experience and their cognitive evaluations, (such as self-efficacy and low perceived control) and their resultant actions.

8.4 Demographics of Burnout

Numerous other factors identified as relating to more rapid rates of burnout, include personality, attitude, working environment, teacher roles, age, year levels taught, and behaviour management. It was revealed by Blake and Monahan (2007) that the youngest and oldest teachers were the most likely to leave teaching because they tended to feel the least connected to their school culture. Studies conducted by Gold et al. (1991) and Gold (1996) in California found that 30% of the teacher dropout rate, due to burnout, consisted of teachers who were within the first 3 years of their teaching careers. A study relating to burnout and teacher experience found that teachers early in their careers had the same rate of burnout as the more experienced teachers (Goddard, et al., 2006).

In comparing teacher burnout rates between year levels taught (intermediate and secondary teachers), the research suggests that middle school teachers suffer from increased stress and have a

higher chance of burnout (Feifer, 2009, in Prince, 2011; Horwitz et al., 1998), attributed to the evidentially higher rates of violence in middle schools in America.

Allen (2005) reviewed 91 studies on teacher attrition to determine who is likely to leave the profession. He only reviewed quantitative experimental, quasi-experimental and correlational studies that used advanced statistical approaches such as regression analysis. He found limited evidence to suggest that teachers with higher cognitive intelligence or teachers with higher qualifications were less likely to leave. There was, however, strong evidence that the rate of teachers leaving the profession was greater among middle school and high school teachers than among elementary school teachers (Elementary in America is the Australian equivalent of Preparatory to Year five, middle school is Year six to eight, and high school is Year nine to twelve). Due to the demands of the job that come with secondary education, there seems to be an increased chance of teacher burnout. Teachers working with students with EBDs in the secondary/middle year level range may be more susceptible to burnout, due to the additional demands at this level. Allen (2005) also found moderate evidence to indicate that science and mathematics teachers were more likely to leave their jobs than teachers of other subjects. Teacher attrition was found to be most severe among beginning teachers but the likelihood of a teacher leaving declined significantly after they had been in the classroom for four to five years. Attrition rates seemed to markedly increase again after the teacher had been in the profession for 25-30 years.

Australian statistics (2015) show that close to 40% of early career teachers are exiting from the profession within the first year of their teaching career. This number has reportedly tripled in the last 6 years (Lumsden, October 8 2015, news.com.au).

Goddard and Goddard (2006) conducted an Australian study with a sample of 100 Queensland first year teachers. They believe that pre-service education might be a predictor of burnout. The participants' emotional exhaustion and depersonalization scores were measured using the Maslach Burnout Inventory (MBI), and the lower scores (indicating burnout) were found to relate to teachers who completed less than four years of pre-service teacher education. Similarly, those novice teachers who reported their undergraduate education training to have been inadequate in meeting their

instructional demands, also reported discouragement, feelings of inadequacy, and eventually, burnout (Taris, LeBlanc, Schaufeli, & Schreurs, 2005).

In relation to gender, female teachers tended to report more satisfaction with teaching than males, and again, primary school teachers reported less stress than secondary teachers (Black, 2001). The highest attrition rate has been found amongst special education teachers in an Australian study (Ashiedu & Scott-Ladd, 2012).

Sutton and Wheatley (2003) concluded, as a result of their review of literature on teacher emotions, that student discipline and teacher emotions are two contexts that should unite to explain the teacher burnout phenomenon. More systematic research is needed as a way of examining how emotion regulation relates to the experience of emotional exhaustion, especially when dealing with student misbehaviour.

8.5 Compassion Fatigue

Figley (1995) defined compassion fatigue as "a feeling of deep sympathy and sorrow for another who is stricken by suffering or misfortune, accompanied by a strong desire to alleviate their pain and remove its cause" (p. 14-15). Psychological distress can also develop as a result of caring too much, over-engaging in a career, or over-engaging with a student in this case. Whilst compassion fatigue and burnout both result in some kind of psychological distress, the differentiation between the two is that compassion fatigue is developed as a result of a teacher's interaction with a student's personal suffering or even trauma (e.g. family violence at home), and burnout is related to the work environment (such as student challenging behaviour) (Collins & Long, 2003a; Maslach, 1982; Pryce et al., 2007). This distinction is an important one to make as 'Compassion' is an independent variable in the current study and provides a different theoretical pathway and possible 'stress point' within the Attribution Model.

8.5.1 Compassionate Caring

According to LaRowe (2005), compassionate caring may produce feelings of sympathy and sorrow over another person's suffering. No matter how well-intentioned the compassionate interaction, there are still some risks to the caregiver and the recipient. Franza, Del Buono, and Pellegrino stated that "the characteristics that bring people into the caring professions are the very factors that make them vulnerable to vicarious trauma [compassion fatigue]" (2015, p. 325).

Compassionate caring, as the chosen term, is "a feeling of deep sympathy and sorrow for another who is stricken by misfortune, accompanied by a strong desire to alleviate the suffering" (Dictionary.com, 2017), and it is believed to be an essential component of the helping relationship (Figley & Nelson, 1989; Herman, 1997). Figley (1995) describes this compassionate engagement as allowing an individual to share the emotional pain of others, which then motivates their desire to help. This would be seen as a positive variable in the current study as it suggestibly leads to helping behaviour, however, it is the consequences of this more extreme caring that can lead teachers to experience psychological distress. Cerney (1995) believed that some people may lose their ability to maintain appropriate boundaries with the people they help by taking on higher responsibility for the person. Especially without a suitable work-life balance, this often results in psychological distress. Even though the research is scarce on teacher compassion fatigue, Figley (1995) theorized that any individual who is engaged in an empathic, supportive relationship with a suffering individual is at risk of developing compassion fatigue.

8.5.2 Compassion Stress Reactions

Figley (1995) believes compassion fatigue to be "a state of exhaustion and dysfunction - biologically, psychologically and socially" (p. 253). It can occur as a result of prolonged exposure to compassion stress, suggesting that the helpers' sense of caring and responsibility for the victim develops over a period of time. Figley (1995) also purports that prolonged exposure is associated with a lack of relief from the burdens of responsibility, and the inability to decrease compassion stress. This highlights the role that a teacher's perceived personal responsibility is likely to play in compassion

stress. Figley (1995) also described the powerful emotions, such as fear, anger, and sadness that people can vicariously experience as a result and the negative impact on an individual's psychological and physiological health. This emphasises two important variables in the current study that appear to relate to compassion stress, that is, teacher levels of Perceived Personal Responsibility and Negative Affect.

In the nursing literature, in which compassion fatigue is well researched, compassion stress refers to a state of detachment and isolation experienced by healthcare professionals who engaged with patients in distress (Joinson, 1992). It is also these types of consequences that begin to constitute cause for discriminatory behaviours.

8.6 Trait EI Factors and Occupational Well-being

As has already been shown through studies relating to Petrides' Trait EI Theory, Emotional Intelligence is related to higher well-being and coping. EI also links to better adjustment and accomplishment across personal, social, academic and occupational settings. High EI is associated with effectiveness in coping with difficult problems and challenges (Mikolajczak & Luminet, 2008) and lower levels of anxiety, depression (Bastian et al., 2005) and occupational stress (Bar-on et al., 2000; Slaski & Cartwright, 2002). Occupational attainment is linked to several EI dimensions such as empathy, optimism and conflict resolution (Zeidner et al., 2004). Research has clearly established that dimensions of trait EI play an important role in the work-related and personal well-being of teachers.

8.6.1 EI and Burnout

Various factors have been considered as sources of burnout, one being personality. Kokkinos (2007) found Neuroticism is a predictor of burnout. Zellars et al. (2000) found that Extraversion and Agreeableness predict depersonalisation. Trait EI has been acknowledged as a necessary personality trait for general psychological well-being (Youssef & Luthans, 2007) and one that affects the experience of teacher burnout (Chan, 2004, 2006).

That individuals differ in their abilities of exerting effective control over their emotional lives is no longer a new concept. Individuals are not assumed to be equally skilled in perceiving, and utilising emotional information (Salovey, Bedell, Detweiler, & Mayer, 2000). This view has already been presented in previous sections to conceptualise the individual differences in EI traits. It has also already been established in this thesis that the concept of EI provides a useful framework for identifying the individual characteristics or traits that can help to explain a person's emotional experiences (refer to chapter 4 in this thesis).

EI is important to the study of burnout or emotional exhaustion as it explores the teacher characteristics that are less vulnerable to this resultant psychological distress, thus understanding the factors that could reduce discriminatory actions and prevalence of poor teacher mental health. It is theorised that teachers higher in trait EI would be less vulnerable to burnout because they are better able to regulate their emotions, as an example, and use their emotional competencies to guide more adaptive action (Greenberg, 2002). Przybylska (2014) suggests that teachers higher in EI would be better at balancing emotional costs in challenging environments as well as managing emotions as a way of preserving well-being.

Those who deal with stress more constructively are more immune to the effects of emotional exhaustion, depersonalisation and loss of job satisfaction. EI facilitates the personal and professional capacity to cope with emotion-eliciting situations. EI was positively related to stress management among college students, according to Gohm, Corser, and Dalsky (2005) as they were able to attend to their emotions or intellectualise their feelings.

Empirical research has reported links between trait EI and specifically teacher burnout (Chan, 2006). According to Chan (2006), certain components of EI, such as emotional appraisal and positive regulation of emotions, can help to prevent emotional exhaustion and its resultant depersonalization and a low sense of personal accomplishment. In one of his earlier studies, Chan (2004) found that positive regulation of emotions, as a factor of EI, was also a significant predictor of teachers' perceived self-efficacy in relation to helping others. Brackett, Palomera, Mojsa-Kaja, Reyes, and

Salovey (2010) also found that teachers with higher emotion regulation (ER) reported lower burnout. They found a direct and negative correlation with teacher burnout and believed that the resultant predictive variance can meaningfully be explained by ER. ER was believed to predict lower emotional exhaustion, higher positive emotions and higher teacher job satisfaction.

According to Brackett et al. (2010) emotion regulation should theoretically influence how teachers express their emotions, manage their stress, and interact with others. Therefore, they considered ER to have the most relevance to teacher burnout and job satisfaction. Brackett et al. (2010) extended their research on emotion regulation (using performance EI measures), to include teacher effectiveness, burnout, and job satisfaction. They also sought to understand how these variables related to positive and negative affect. One hundred and twenty three teachers from across three secondary schools in Kent, England, participated in the study. Emotion regulation was measured by employing the MSCEIT (version 2.0, 2002). Their hypotheses were developed from studies that demonstrated greater job satisfaction in teachers who experienced more positive affect while educating students (Weiss & Weiss,1999) as well as reporting lower levels of burnout (Rudow, 1999). It is suggested that positive affect assists people in defending against negative emotions, increasing well-being and resilience, and building more robust personal resources (Fredrickson, 1998, 2001).

Brackett et al.'s (2010) study was not without its limitations and the researchers reflected that their set of assessment tools was limited. The ER tool, for example, captured emotional knowledge, but did not consider the frequency with which teachers needed to regulate their emotions to meet job demands. The positive and negative affective experiences of teachers were also only assessed at one point in time. They suggested that the use of experience-sampling methods would have provided more reliability and qualitative information in regards to teachers' daily affect over time. Their sample size was small and geographically represented a limited generalisable sample.

Platsidou (2010) commenced her study by first factor analysing the Emotional Intelligence Scale (EIS) developed by Schutte et al. (1998). This was pertinent as various research studies that have used this tool have shown that there is no stable factor solution. Each factor analysis has produced

varying factor solution results. The studies do share common factors, however, none are able to fit the data of another study. This seriously questions the construct validity of the EIS.

Platsidou's (2010) study aimed to further clarify some of the already established associations regarding EI and burnout, but within the context of special education. One hundred and twenty three Greek special education teachers from urban primary schools participated. Teachers completed self-report questionnaires, which included the Emotional Intelligence Scale (EIS), the Maslach Burnout Inventory (MBI) and the Employee Satisfaction Inventory (ESI). A moderate but significantly correlated relationship was found with dimensions of burnout and a job satisfaction subscale. In relation to the EI factors, Optimism/Mood Regulation was found to have the highest correlation, making this the most relevant factor for alleviating burnout, followed by Managing Self-Relevant Information (Platsidou, 2010). Despite the differing research methodologies used, emotion regulation as a factor or EI, has consistently shown to be important in the reduction of burnout and teacher coping.

These findings support and strengthen the results obtained by Chan (2006) and Brackett et al. (2010) and numerous others (e.g. Bar-on et al., 2000; Slaski & Cartwright, 2002). All these studies suggest that higher emotionally intelligent teachers experience less psychological distress, burnout and more job satisfaction, compared with those teachers lower in EI (Bar-on, 1997; Nikolaou & Tsaousis, 2002). During times of stressful events, those higher in trait EI, perceive themselves to have greater-self-efficacy (Slaski & Cartwright, 2002) and feel challenged rather than threatened (Mikolajczak & Luminet, 2008).

To reiterate, the current study refers to the term, psychological distress, rather than burnout, emotional exhaustion or stress, as it has not specifically measured these theoretical concepts using validated tools. The objective does not involve clinically assessing teachers for burnout or compassion fatigue. The patterns from the findings explored thus far, have been used to locate the collection of variables of resilience for teachers developing psychological distress leading to punitive behaviour. The information discussed in the current chapter has enabled the researcher to incorporate into the

current study many of the variables that were found to be related to psychological distress. Many of these variables can already be found within the Attribution Model and form part of the process to stigmatising and discriminatory behaviour of students. This occurs through its multifaceted reaction that impacts teachers' perceptions, emotions and behaviour (American Psychological Association, 2015).

The variables of greater resilience (to psychological distress) that are related to the current study have been hypothesised to include higher EI, lower levels of Negative Affect, higher Self-Efficacy and higher levels of Perceived Personal Responsibility/Control. If these identified factors demonstrate one or more pathway interactions within the current study's Attribution Model, then it could be suggested that those teachers who are more resilient to psychological distress will report greater likely helping behaviour, and those teachers who experience more psychological distress will report higher likely punitive behaviour. Similarly, the presence of compassion stress would involve the same identified variables that relate to psychological distress but include the additional variable of Compassion. It would be expected that if a teacher felt an extremely high level of Compassion for the student, but conflictingly also reported high Negative Affective states and high Perception of Personal Responsibility, it may suggest the presence of compassion stress towards students with EBDs.

8.7 Chapter Summary

Teachers are frequently exposed to students with EBDs within regular mainstream classes. It could be "productive to understand how stress, teacher coping, and burnout influence teacher helping, as a result of working frequently with students who display challenging behaviours" (Dridan, 2013, p. 66). Therefore, the intention of the current chapter is to understand the different ways that teachers can react to challenging behaviours of students with EBD and/or their personal backgrounds and the resultant psychological distress and consequences of this.

Teachers become emotionally exhausted from trying to deal with challenging students which can lead to discriminatory behaviours such as avoidance or 'quick fixes', to avoid the source of the stress or their internal negative affective states. Students miss out on quality teaching, whether

intentional or not. Moore-Johnson (2006) clarified that the quality of education suffers when teachers choose to stay, despite being burnt out.

The most interesting finding from studies on teacher stress is that whilst certain stress factors are considered to be common across most teacher settings, teachers do not react to them uniformly (Milstein & Farkas, 1988). Therefore, variability in teacher reaction must lie within the individual teacher. The current study helps to uncover some of the possible risk factors, as to why some teachers are more vulnerable than others to experiencing higher levels of negative emotional states (such as stress), leading to burnout and/or poorer mental health. The main explanations are expected to be embedded within the concept of trait EI, and implicitly through its established connections with other personality measures.

Trait EI has been recognized as a crucial factor related to psychological well-being (Youssef & Luthans, 2007) and the experience of teacher burnout (Chan, 2004 & 2006). EI, within the study of burnout and compassion stress, explores teacher characteristics that are less vulnerable to psychological distress and discriminatory actions. Teachers higher in trait EI would be less vulnerable to psychological distress because they are better able to regulate their emotions, and use their emotional competencies to guide more adaptive action (Greenberg, 2002). Variables of greatest resilience identified in the current literature review, and that relate to the current study, include higher EI, lower levels of Negative Affect, higher Self-Efficacy and higher levels of Perceived Personal Responsibility/Control.

A teacher's probability of helping a student with an EBD will depend on their level of psychological distress, which could possibly be predicted from their level of negative affective experiences, their cognitive evaluations (such as Self-Efficacy and low Perceived Personal Responsibility) and their resultant actions. Psychological distress, can also develop as a result of caring too much, over-engaging in a career, or over-engaging with a student in this case. Therefore, 'Compassion' can also provide a different theoretical pathway and possible 'stress point' within the Attribution Model. Teacher stress factors (such as burnout and compassion stress), are claimed by the

current study to be present within the stigmatisation process and the Attribution Model could be useful

in measuring these cognitive and emotive processes leading to discriminatory behaviours.

CHAPTER 9 - Emotionally Intelligent Teacher Selection

The current study emphasises the need for highly emotionally intelligent teachers within Australian Classrooms. Whilst this study focuses on the benefits and positive effects of having a highly EI teacher for the extremely challenging student groups, it also demonstrates the importance of particular teacher traits for learning and academic and emotional outcomes for any student. It is not just students with EBDs who have the right to the 'universally effective' teacher, as all Australian children are entitled to this same essential quality. The current study promotes and encourages the implementation of requisite criteria for teachers to be selected on the basis of their level of EI, as well as their experience, education and performance.

9.1 Rationale for Development of Teacher Requisite Trait EI Profiles

Emotions are used on a daily basis in the teaching profession; but to what level and what does this entail? These are some of the EI variables to be determined in this study that differentiates one teacher from another. This does not suggest that one teacher's EI profile is psychologically 'abnormal' compared with another. In this study, the intention is not to classify teachers as having good or bad emotional personality traits, but rather whether there are individual teacher traits that are advantageous to working with students, as well as those with EBDs, within the educational context. The results of this study will assist with the development of an assessment tool that will enable schools to profile individual teachers in relation to whether they have the developed 'qualities' preferred to effectively teach students in general and those with special needs in particular.

Psychologists are often employed by organisations to assess and recruit employees who may have the requisite personality traits to manage the specific demands that will be placed upon them in a way that the organisation deems to be most 'effective'. So then it seems appropriate for teachers to be considered in such a process, especially when they are one of the most significant influences on the future development of Australian children and their emotional capabilities and well-being.

Teacher selection is currently a hot topic in Initial Teacher Education (ITE) in Australia. The Australian Institute for Teaching and School Leadership (AITSL) is advocating for such a selection approach, and state teacher registration bodies are currently requiring all ITE programs to indicate how they will select students in the future.

Therefore, this study has an additional aim, to specifically determine the requisite traits for a teacher to supportively manage and engage with a student or student with EBD in their classroom. Teaching students with special needs, especially those with EBD can involve regular conflict or challenging interactions. These interactions can elicit negative emotion or anger in teachers. It is socially inappropriate and unprofessional for teachers to display their anger openly, so they are forced to try to react more adaptively. More importantly, teachers are role models for their students, and so have responsibility to ensure that they display effective coping behaviours themselves (Nizielski et al., 2012). What is even more important than this is ensuring that teachers possess these emotional capabilities. There is an *expectancy* that teachers working in education already possess these important emotional capabilities, however, there is no evidence to suggest that they do; other than that they may have knowledge and interest in the area and have volunteered themselves to that specialty. It is one thing to identify and care about students, but it is a different competency to be able to gain accurate insight and understanding into a student and be able to practically apply this 'care' in emotionally appropriate ways.

There is much evidence to suggest that EI is related to job performance. Some professions require greater expression of emotion as a result of informed social interaction. Different personalities may be suited to different types of roles that demand high levels of emotional labour. It would be beneficial to understand how specific emotional capabilities of teachers impact on students, especially those with EBDs. By specifically studying students with EBDs, it helps to clearly demonstrate, in a more measurable, exaggerated, and black-and-white way, the impact that a teacher's EI traits can have on students; especially those more emotionally vulnerable students.

It is expected that some common EI traits will be revealed that relate to a teacher's likelihood of providing students with the emotional support from which they would greatly benefit. In this study, the 'less helpful' traits will also be identified and highlighted by their relationship with likely discriminatory or punitive behavioural outcomes for teachers. In this literature, punitive actions are deemed most detrimental to students with EBD as they can be more likely to escalate or trigger difficult behaviours or cause a student to withdraw further into themselves. During emotionally charged situations, EI can help to promote an adaptive reaction (Nizielski et. al, 2012).

9.2 Australian Context for Teacher Selection

In August 2016, Victorian Education Minister James Merlino, released a discussion paper called "Working together to shape teacher education in Victoria". One of the key areas of focus, as supported by global research and evidence, is "Raising the quality of teaching and the status of the profession through a robust approach to selection into initial teacher education" (Merlino, 2016, p. 4). One of the key principles underpinning the suggested framework was related to raising educational standards and the teaching profession in Victoria. An optimum state-wide framework for entry into teacher training courses in Victoria was considered to be based on the knowledge, skills and attributes associated with effective teaching. The general argument in Australian Government Departments and schools at the current time is that entry standards into teaching courses should reflect more than just academic capability. Other mechanisms are being investigated to assess the suitability of individuals to the teaching profession. These comments were based on the extensive body of literature on teacher effectiveness and the impact of teachers on student learning and outcomes. Some of these characteristics and qualities of effective teachers, or the likelihood of developing them, could be assessed at the teaching course admission stage.

The discussion paper also claimed that the selection process needs to be "sophisticated and broad-based" (p. 6) to capture the personal attributes that research deems to be most effective in teachers. This means that from 2017, universities will need to include the effective, non-academic attributes and capabilities in their selection approaches. Some of the approaches outlined, which

directly or indirectly relate to the psychological characteristics explored in the current study, include motivation, interpersonal communication skills, resilience, self-efficacy and conscientiousness.

9.2.1 Teacher Selection Approaches

As a result of the discussion paper from Merlino (2016), it was suggested that Victoria could develop a system-wide suitability selection approach for teacher training, however, little is known about the criteria for informing capability and suitability for teaching other than Australian Tertiary Admission Rank (ATAR) pathways.

In June 2015, the Australian Secondary Principals' Association (ASPA) developed a paper on behalf of the four peak national principal associations, including The Association of Heads of Independent Schools Australia (AHISA), the Australian Primary Principals Association (APPA) and the Catholic Secondary Principals Association (CaSPA). Their paper drew on submissions to the Teacher Education Ministerial Advisory Group (TEMAG), a TEMAG report (released on 13th February 2015), the Government's response to the TEMAG, the experience of principals and school leaders, association workshops and the findings of an ASPA survey of Australian Principals. The peak associations identified key recommendations from a new Australian review, one that related to the selection criteria for teacher education candidates and the characteristics and attributes of effective graduate teachers.

Recent developments in education are also reflected in feedback that calls for beginning teachers to:

- Rate highly in both IQ and EI (Emotional Intelligence), who exhibit compassion, empathy and generosity

- Be good communicators, with skills in listening as well as speaking, able to communicate effectively with parents as well as students.

- Be able to collaborate with colleagues

- Be willing and able to share their practice

- Have a knowledge of how learning occurs

▪ Be able to analyse student data to better focus in individual support and achievement. (*AHISA Submission to TEMAG in ASPA, 2015, p. 2*).

The AITSL (2015) *Guidelines for selection of entrants into teacher education* highlighted the importance of non-academic capability. It reported that there is a range of attributes and motivations common to effective teachers in the research, and therefore, providers should use evidence-based selection methods to determine whether candidates possess these. The report also acknowledged that the personal attributes related to teacher effectiveness "have not yet been definitively determined and as such this is an area that would benefit from further research. However, a number of studies do exist that demonstrate broad similarities in their findings" (ASPA, p. 5).

Desirable teacher attributes identified from within the existing evidence base consisted of traits that buffered against adversity, such as optimistic explanatory style, grit, and life satisfaction. The evidence also pointed towards self-efficacy, perseverance, conscientiousness, a tendency to be social, warm and empathetic, the capacity for self-regulation and resilience. These factors were considered to influence both teacher effectiveness and teacher retention.

As a response to the results of Australian school leaders (across all systems and sectors), who were surveyed in relation to teacher attributes, it was recommended by ASPA that:

▪ Initial Teacher Training Institutions should consider the inclusion of Emotional Intelligence test such as the Myer-Salovey-Caruso Emotional Intelligence Test (MSCEIT) as part of their selection process.

▪ Research should be conducted to unpack what specific attributes really mean and how they are determined in initial teacher education candidates (p. 9).

As there seems to be a reduction in the quality of graduate teachers, possibly due to the lowering of university entrance scores, it is important that Australia addresses the issue of teacher selection and quality (Department of Education, Employment and Workplace Relations, 2011; Dinham, 2013). James Merlino (Victorian Education Minister) quoted in the Age newspaper (Cook & Jacks, 2016) "Sadly, the status of the teaching profession has declined alongside falling entry

requirements, and students have variable experiences in courses and in their early years in the profession." There have already been international attempts to create ideal teacher training program selection processes (for a recent international review see Hobson, Ashby, McIntyre, & Malderez, 2010). Many teacher selection methods have included measuring cognitive ability, grade averages, personality, personal skills, written tests, and attending interviews (Bore, Munro, & Powis, 2009; Casey & Childs, 2017). Selecting teachers on these grounds can be common when entering into other disciplines or professional training programs.

9.2.2 Effective Teacher Attributes

Similar to the current study, an Australian study by Sautelle et al. (2015), aimed to identify the best predictors of effective and successful future teachers to contribute to the development of the processes in Australia that aim to select individuals into university teaching programs and identify those who are also most likely to succeed. They used a social judgement model that investigated teachers' and non-teachers' views on which psychological constructs were most important when selecting teachers.

Based on previous supportive evidence of construct effectiveness on student outcomes, Sautelle et al. (2015) presented six selection constructs of teachers, which consisted of Extraversion, Agreeableness, Conscientiousness, Resilience, Self-Regulation and Cognitive Ability. Many of these constructs were taken from the Five Factor Model of personality, as developed by Costa and McCrae (McCrae & Costa, 1987). Expert teachers and non-teachers were asked to judge a set of hypothetical teacher training applicants, based on their different presenting scores on the six psychological constructs. A model, which identified the qualities that were most significant for both these groups, was developed. It was assumed that teachers would have different ideas about what makes an effective or potentially better teacher compared with the non-practising teachers.

Sautelle et al. (2015) considered their study to differ from previous research, that explore perceptions of teacher effectiveness, as their study presented to teachers evidence-based qualities, whereas other studies required participants to generate their own descriptions of effective teachers.

Other studies may have missed factors that are less able to be observed in the classroom, such as cognitive ability and self-regulation, and may therefore be less likely to be identified. Previous research tends to reflect visible characteristics such as empathy, building strong relationships, having enthusiasm and energy, whereas Sautelle et al.'s study encouraged participants to consider other variables where there is limited research. There is evidence linking these less overt characteristics directly to high quality teaching and student outcomes (Corno & Kanfer, 1993; Smith et al., 2008).

The current study argues that it is not the differences or similarities in teacher opinions as to what constitutes important or effective characteristics in a recruitment processes, but rather which of these characteristics impact the most significantly on the classroom and how these processes can be assessed during the selection process. The majority of non-teachers could already possess many of these identified characteristics, thus making it impossible to clearly differentiate or measure the variance across the individual traits of teachers from which to select. More reliable and objective psychometric measures are required as part of the teacher selection processes than just relying on the judgement of the entrant evaluator. After all, it is unknown as to what the EI of an individual evaluator is and how this in itself could impact on their judgment of a pre-service teacher and what they value as important in selection.

As Sautelle et al. (2015) suggest, a more effective method to inform selection procedures or predict future success could employ a longitudinal design. Future teachers could be followed from pre-service education courses to practice, to determine if the highlighted teacher views on the constructs are even significant in practice. Self-reported ratings of the six constructs could also be analysed. Sautelle et al. also suggested that the Early Childhood, Primary and Secondary sectors should be considered separately as these groups have different demands and pathways.

Sautelle et al.'s (2015) results supported the current argument, however, that "relying on only cognitive ability in the selection process may not be sufficient in identifying the various types of people required to work in the various roles in teaching settings" (Sautelle et al., 2015, p. 66).

Therefore, a teacher's personality, or more specifically their EI traits, should be essentially considered as part of the Victorian teacher selection process.

9.3 Teacher Effectiveness and Personality

In previous chapters, a theoretical and significant statistical link has been established between personality traits and EI traits. To recall a few, Petrides' trait EI factors were positioned within the specific personality factors found within the Five Factor Model of Personality. While the research on trait EI and teacher effectiveness has not yet been fully substantiated, due to its infancy, trait EI is still associated with the extensively explored claims of personality factors affecting job performance and other teaching outcomes. Those specific personality factors found within the Five Factor Model of Personality, as developed by Costa and McCrae (McCrae & Costa, 1987), for example, have shown moderate to strong positive relationships with job performance across many different professions. These have included the traits of Conscientiousness (Barrick & Mount, 1991; Hurtz & Donovan, 2000; Mount, Barrick, & Stewart, 1998; Salgado, 1997; Tett, Jackson, & Rothstein, 1991), Extraversion and Agreeableness (Barrick & Mount, 1991).

Agreeableness was deemed to be a good predictor where the job required helping or cooperating with and nurturing others (Barrick, Stewart, Neubert, & Mount, 1998; Mount, Barrick, & Stewart, 1998). The Agreeableness trait describes teachers who relate well with students, are approachable and empathetic. Conscientiousness refers to those organised and well-planned teachers and Extraversion describes those teachers who present as warm, have a sense of humour and are enthusiastic. Sautelle et al. (2015) reported the personality factors of Neuroticism and Openness to Experience to be less conclusive. Teacher personality is regarded as important for teacher selection criteria (Klassen & Tze, 2014; Rimm Kaufman & Hamre, 2010; Rushton, Morgan, & Richard, 2007).

9.4 Emotion-Related Attributes

Two previously mentioned studies, Nizielski et al. (2012), and Perry and Ball (2007) highlight that the personal attributes or emotion-related traits of the teacher and the resultant behaviour they

display can define each teacher's effectiveness. There has been a number of emotion-related traits identified in the literature that were found to be linked to 'teacher effectiveness' within a classroom. Many of the emotional traits discussed below can relate to the EI facets that also underlie Petrides' (2001) theoretical Model of Trait EI, which is the theoretical framework of the current study.

Many studies have asked students, teachers and pre-service teachers what they think constitutes a highly effective teacher. Psychological variables seem to dominate their descriptions (Stronge, 2007). Some psychological constructs have included personality (Barrick & Mount, 1991; Tett, Jackson, & Rothstein, 1991), resilience (Avey, Reichard, Luthans, & Mhatre, 2011) and self-regulation (Beeftink, Van Eerde, Rutte, & Bertrand, 2012). These factors have been demonstrated to strongly relate to job performance across various professions. Bowles, Hattie, Dinham, Scull, and Clinton, (2014) regarded personality, resilience and self-regulation as their key indicators for teacher effectiveness.

9.4.1 Teacher Emotion Regulation

The bulk of emotion-related research seems to involve theories regarding emotional regulation (Ashford & Tsui, 1991; Beeftink et al., 2012; Lord et al., 2010). Regulation of emotions has been linked to teacher effectiveness (Sutton, 2004) and difficulty with regulating emotions can interfere with quality of teaching (Garner, 2010). Self-regulation describes the ability of an individual to set and achieve adaptive goals through their deliberate generation of thoughts, feelings and actions (Bowles, 2006; Carver, 2004). It involves the process of adjusting and improving one's coping or emotional state through effectively seeking and using feedback. A recent study saw students rating their mathematics teachers, which was then compared with their teachers' level of self-regulation. Those teachers higher in self-regulation were rated more favourably and their students reported feeling more competent and autonomous in class (Klusmann et al., 2008).

According to many other theories, emotion regulation is the result of the underlying psychological process of EI. Emotion regulation is a predictor of job performance (Newman Joseph & MacCann, 2010) and is relevant to whole classroom behaviour management, defusing emotionally

charged situations (Coplan et al., 2011; Lopes, Nezlek, Extremera, Hertel, Fernandez-Berrocal, Schutz, & Salovey, 2011) and student behavioural outcomes (Nizielski et al., 2012). Teachers' difficulty with emotional regulation has been found to affect teacher-student relationships (Jennings & Greenberg, 2009) and handling persistent emotionally provocative situations (Coplan et al., 2011). One way to explain these findings is that teachers with better self-regulation abilities may have a larger range of approaches to help reduce unwanted emotions in themselves and others (Sutton & Harper, 2009). Teachers with higher EI appear to manage negative situations more effectively and seek positive solutions more frequently (Perry & Ball, 2007).

Teacher knowledge of emotion was associated with larger repertoires of emotion regulation strategies, indicating that the ability to have knowledge of emotion can have beneficial effects on emotion regulation (Feldman Barrett, Gross, Christensen, & Benvenuto, 2001).

9.4.2 Psychological Resilience

The capacity to bounce back from adversity and cope with challenging situations explains the significance of resilience (Beltman, Mansfield, & Price, 2011). Level of resilience is strongly related to job performance and satisfaction in a number of professions (Avey et al., 2011). As discussed in the previous chapter, resilience can also protect a teacher against stress and burnout (Mansfield, Beltman, Price, & McConney, 2012) and improve their capacity to persist longer-term (Chen & Miller, 2012). Resilience is an important factor in teacher success as it reduces the chance of stress and burnout in the challenges inherent in teaching (Robertson, & Dunsmuir, 2013; Tang, Leka, & MacLennan, 2013). It would be advantageous if those characteristics found within teachers that could reduce discriminatory actions towards students and reduce the prevalence of poor teacher mental health, teacher attrition, stress, burnout, compassion stress and general psychological distress were included when determining an effective teacher. The previous chapter on 'Stress, Burnout and Psychological Distress' provided the argument for the importance of particular EI traits and factors in producing more effectively functioning teachers and effective outcomes.

Psychologically resilient people are described as emotionally intelligent (Salovey et al., 1999). Psychological resilience is the ability to use positive emotion to bounce back from negative emotional experiences and flexibly adapt to the changing demands of stressful experiences (Block & Kremen, 1996; Tugade & Fredrickson 2004). "A convergence across several research methodologies indicates that resilient individuals have optimistic, zestful and energetic approaches to life, are curious and open to new experiences, and are characterised by high positive emotionality" (Block & Kremen, 1996, p. 320).

9.4.3 Teacher Emotional Self-Awareness

Teacher emotional self-awareness, which is an important factor of EI, has substantial implications for teaching effectiveness (Sutton & Wheatley, 2003; Zembylas, 2007). Self-awareness enables a more accurate interpretation of emotional stimuli helping teachers be able to adapt their behaviour more appropriately according to the classroom situation (Cherniss & Goleman, 2001).

9.5 Emotional Intelligence and Teacher Effectiveness

Some international studies have attempted to specifically investigate the relationship between teacher EI and teacher effectiveness using self-report measures and student rating measures. At present, there is limited previous research that has sought to examine comparable variables to those of the present study in terms of methodology, theory and instruments used. Contemporary research does highlight, however, consistency in generic EI effects and outcomes across the different methodologies, and emphasises the areas in which the methodology of such studies needs to be revised and improved. Most EI research on teacher effectiveness has tended to use subjective, self-report measures, despite their known theoretical and methodological incompatibility with ability and mixed EI models. The way that teacher 'effectiveness' or 'outcomes' are operationalised have tended to vary from study to study. In this way, it is questioned how closely many of these studies can be compared. In the current study, 'effectiveness' is defined and measured as teachers' levels of Likely Helping outcomes. The EI traits and variables that are found to be related to the positive helping outcomes are the 'effectiveness' traits and characteristics.

Ghanizadeh and Moafian (2010) investigated the relationship between EI and teacher effectiveness in a population of Iranian teachers of English as a foreign language in which 89 teachers completed BarOn's EQ-i and 826 students completed the Characteristics of Effective English Language Teachers rating scale to measure these same teachers' effectiveness. A strong, positive relationship was found between overall teacher EI and teacher rated effectiveness, as well as 12 of the 15 subscales of the EQ-i. From their results, Ghanizadeh and Moafian (2010) reported that teacher EI can predict 15% of teacher effectiveness. They also reported a significant and positive relationship between teacher EI and teacher age and teacher experience. The validity of measurement instruments was questioned, as previously mentioned in the discussion of limitations of mixed method approaches in this thesis (section 3.2.2.1). The structural validity of the EQ-i has also been brought into question. For example, the rating scale employed, which measured student perceptions of teacher effectiveness, may not have been a reliably objective measure compared with an increase in students' academic achievement. As that study was conducted in Iran, with teachers who taught English as a second language to students of various ages and educational backgrounds, it is difficult to generalise its findings.

Similarly, Allen, Ploeg, and Kaasalainen (2012) investigated the relationship between teacher EI and teacher effectiveness, using the BarOn EQ-i:S (short version) tool to assess EI and a modified version of the Nursing Clinical Teacher Effectiveness Inventory. Clinical nursing faculty members of an undergraduate nursing program in Canada was the population under investigation. They defined effective clinical teaching as being "associated with enhanced student learning" (p.233). A moderately strong, positive relationship was found between overall EI, its subscales and overall teacher effectiveness. Unlike the previous study mentioned, there were no significant relationships found between EI and age, years of experience, level of education, or employment status.

Another more recent study on EI and teacher effectiveness (Singh & Jha, 2012) had 250 faculty teachers from medical and engineering colleges in India complete the Emotional Intelligence Scale, a self-report survey based on Goldman's theory, and a Teacher Effectiveness Scale. Singh and Jha (2012) were able to control for one methodological limitation found in the two previous studies.

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Students of the participating faculty also completed the Teacher Rating Scale as a way to decrease the threat of response bias from teachers' own ratings. As consistently shown in similar studies, a strong positive relationship emerged between teacher EI and both student and teacher measures of teacher effectiveness. All the EI subscales were significantly and positively related to both measures of teacher effectiveness. The strongest relationships found between the EI subscales and the teacher effectiveness measures were Emotional Stability, Managing Relations, and Self-Motivation. Through regression analyses, Singh and Jha (2012) determined that teacher EI can account for approximately 42% of the variance in self-reported teacher effectiveness and 33% of the variance in student rated teacher effectiveness. However, their operational definition of teacher effectiveness was problematic in that their study appeared to measure teacher processes rather than actual outcomes as claimed.

9.6 Chapter Summary

The current study emphasises the need for highly emotionally intelligent teachers within Australian classrooms so students have the opportunity to access the 'universally effective' or quality teacher. The current study promotes and encourages the implementation of requisite criteria for teachers to be selected on the basis of their level of EI, not just on their experience, education and performance. Trait EI has been shown to be associated with the extensively explored claims of personality factors affecting job performance and other teaching outcomes.

Some of the most effective personal attributes and qualities of effective teachers, or the likelihood of developing them, could be assessed at the teaching course admission stage. It was suggested that Victoria could develop a system-wide suitability selection approach for teacher training, however, little is known about the criteria for informing this effectiveness.

It is beneficial to understand how specific emotional capabilities of teachers impact on students, especially those with EBDs. It is expected that some common EI traits will be revealed from the current study that relate to a teacher's likelihood of providing students with the support that they require. The EI traits and variables that are found to be related to the positive helping outcomes are considered teacher 'effectiveness' traits and characteristics.

Many of the 'effective' emotion-related traits identified in the literature can relate to the EI trait facets that also underlie Petrides' (2001) theoretical Model of Trait EI, which is the theoretical framework of the current study. The handful of studies (Sautelle et al., 2015) which have aimed to identify the best predictors of effective and successful future teachers have reported on teachers' and non-teachers' views and their own suggested qualities. The current study argues that it is not the differences or similarities in teacher opinions as to what constitutes important or effective characteristics in a recruitment processes, but rather which characteristics impact most significantly on the classroom and how these processes can be assessed during the selection process. More reliable and objective psychometric assessment is required as part of the teacher selection processes than just relying on the personal judgement of the entrant evaluator.

There are only a limited number of studies with comparable variables to those of the present study in terms of methodology, theory and instruments used. This gap does highlight, however, consistency in generic EI effects and outcomes across the different methodologies, and emphasises the areas in which the methodology of such studies need to be revised and improved. The exploration into effective teacher traits and the limited variables investigated in previous studies demonstrates the crucial need for identification of effective traits and psychological measurements.

The intention of the current study is to determine whether there are individual teacher traits that are advantageous to working with students, including those with EBDs, within the educational context. The results of this study are expected to assist with the development of an assessment tool that will enable schools to profile individual teachers in relation to whether they have the desirable 'qualities' required to effectively teach students.

SECTION III – QUANTITATIVE ANALYSIS

This section relates to the methodological, psychometric and statistical components of the current research project. The following chapters (chapters 10 – 15) present the study's framework, research methods and approaches, instrument evaluations and redevelopment, statistical procedures and results, which all contribute to testing the study's hypotheses. Based on further statistical analysis, a new Emotional Intelligence Process Model of Stigmatisation (EPS-Model) is proposed.

CHAPTER 10 - Research Approach and Methods

In chapter 10, the conceptual framework is established as a way to understand the perspectives and assumptions that underlie the current study. Substantiated models are presented whose theories, variables and demonstrated statistical measurement properties form the basis of the current study's proposed model, namely, the 'EI Process Model of Stigmatisation'. The methodology section explains the sampling population, research approach, experimental methods and instruments.

10.1 Personality Framework

The ideas developed in this study can be drawn from both traditional dispositional (trait) and social cognitive perspectives from within the personality realm. The following definition seems to broadly capture the relationship between these two perspectives. Personality is "the unique, dynamic organisation of characteristics of a particular person... which influences behaviour and responses to the social and physical environment" (Liebert & Liebert, 1998, p. 5).

In the study of personality there is not yet a single unifying definition or theoretical framework that guides a researcher's work, other than the assumptions that underlie it (Engler, 2008).

- Personality is a permanent and inseparable element that exists in a person
- Personality can predict human reactions to other people, problems and stress.

Some theorists believe personality traits to be internal psychological characteristics that determine and reflect how a person responds to their environment (Hiriyappa, 2009). The researcher does not want to underestimate the effect of environmental stimuli on a person's behaviour, or the ability for a person to have control over their thoughts. This study concurs with some cognitive-behavioural theorists, in that behaviour is generally guided by a cognitive-emotional process as a response to a situation; however, there is a missing element in this idea. A person's thoughts, feelings and behaviours are still largely influenced by those inherent factors (traits) within our personality. In other words, it is our personality that determines or filters *how* we cognitively perceive and interpret the world and situations. The DSM-IV defines personality traits as "enduring patterns of perceiving, relating to, and thinking about the environment and oneself that are exhibited in a wide range of social and personal contexts".

This study is founded on the theoretical assumptions of trait EI (Petrides & Furnham, 2001; Petrides, 2009) and Attribution Theory (Corrigan et al., 2003). Both these perspectives can be found within a personality framework (as explained above). To demonstrate this connection, personality can be viewed as a set of characteristics (or traits) possessed by a person that uniquely influences his or her cognitions, emotions and behaviours in various situations. The model below (Figure 10.1) provides a visual representation of where the trait EI and attribution concepts fit within Personality Theory:
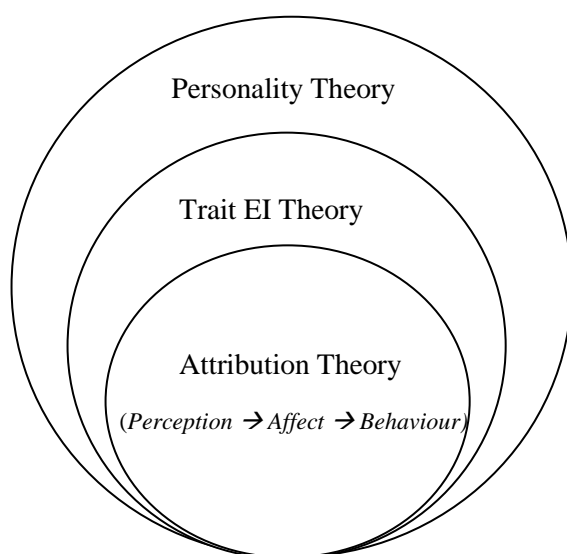
Figure 10.1 Model of Trait EI and Attribution Theory within Personality Theory

10.2 Trait EI Model

Petrides' Model of Trait EI is predicated on the method used to measure the construct rather than the elements that the models are hypothesised to encompass (Perez, Petrides, & Furnham, 2005). Trait EI concerns self-perceptions and behavioural dispositions measured through subjective self-report personality questionnaires that are psychometrically scored and interpreted.

Petrides' (2009) Trait EI Model purports to incorporate and expand on EI-related concepts into a general framework made up of the following 15 trait facets (Table 10.1). In addition, this model categorises individual facets into four broader factors: Well-being, Self-control, Emotionality and Sociability, with two auxiliary factors not being accommodated in the four key factors.

Table 10.1

Petrides' (2009) 15 individual trait facets of the Trait EI Model positioned with reference to their corresponding factor

WELLBEING	SOCIABILITY	EMOTIONALITY	SELF-CONTROL	Auxiliary Factors
Optimism	Emotion Management	Relationships	Stress Management	Self-Motivation
Happiness	(in others)	Emotion Expression	Low Impulsiveness	Adaptability
Self-Esteem	Assertiveness	Emotion Perception	Emotion Regulation	
	Social Awareness	Empathy		

This study first attempted to profile teachers through Petrides' (2009) measure of trait EI, to ascertain whether certain EI traits can be considered as predispositions for stigmatisation and discrimination. This procedure informed the main research questions as to which teacher traits lead to greater stigmatisation and discrimination. It was determined whether there is a direct relationship between teachers' overall level of EI, their trait facets, and teachers' tendency to use helping or punitive (discriminatory) approaches with a student with EBDs.

Personality Theory, which frames this study, would assume teachers' EI profiles to be a significant influencing factor on the attribution process. Using concepts and variables drawn from the Attribution Path Model (Corrigan et al., 2003) and the Model of Decision Making (Poulou & Norwich,

2002), this study attempted to capture the perceptions and likely emotional reactions and resultant supportive or discriminatory behaviour of teachers towards the student with EBDs.

10.3 Attribution Model of Stigmatisation

Corrigan et al. (2003) developed the following Attribution Pathway Model that they applied to mental illness stigma. This model denotes the directional relationship between events, attributions, affect and behavioural reactions. Corrigan et al.'s model was adapted from Weiner's original work (1985, 1988, 1995) (see Figure 10.2). Generally, the research suggests that attributions of perceived uncontrollable events tend to lead to pity and helping behaviour.

Signalling Event	Cognitive Mediators (Perception)	Affective Response	Behavioural Reaction
Person with Mental Illness	Symptoms are Uncontrollable → Not Responsible	→ pity →	Helping Behaviour
	Symptoms are Controllable → Responsible	→ anger →	Punishing Behaviour
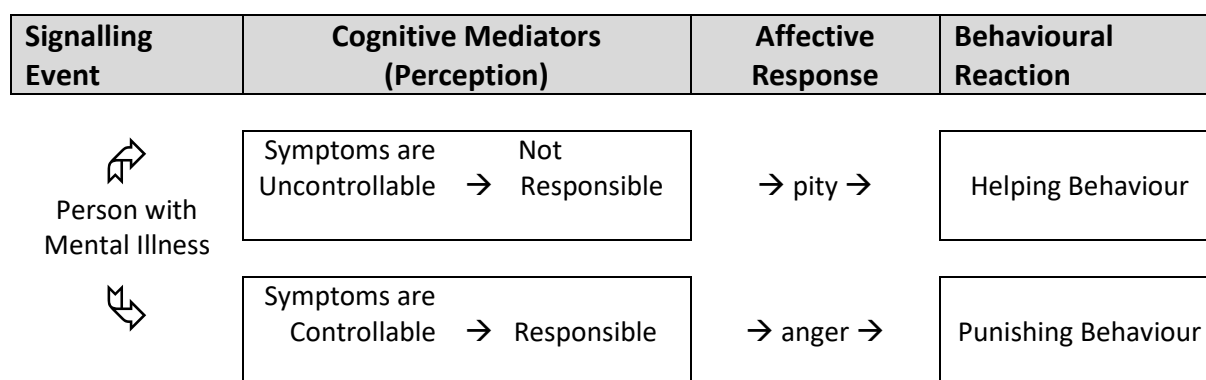
Figure 10.2 Attribution Pathway Model applied to Mental Health Stigma (Corrigan et al., 2003)

10.4 Model of Decision-Making and Stigmatisation

Poulou and Norwich (2002) proposed a similar model to Corrigan et al. (2003) that also aimed to construct a portrayal of teachers' cognitive, emotional and behavioural responses, specifically towards students with EBDs (see Figure 10.3). As in the current study, Poulou and Norwich (2002) asserted that teachers have the greatest influence on student learning outcomes, therefore they explored additional psychological processes behind teachers' reactions and decision-making.
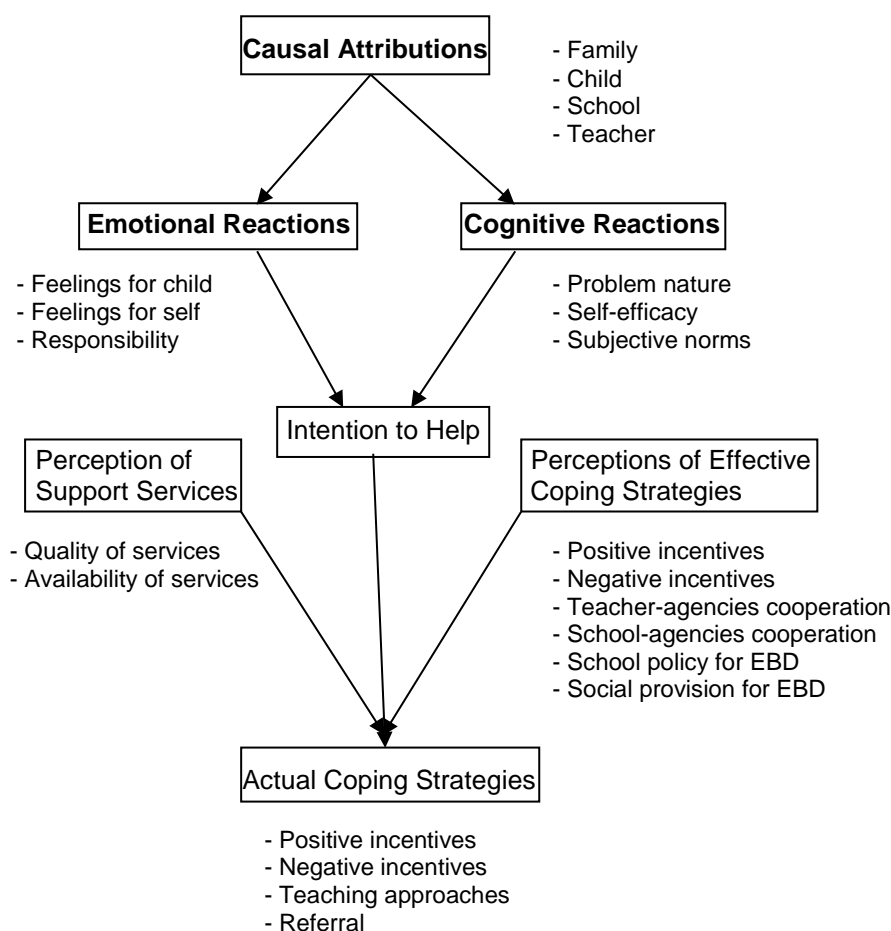
Figure 10.3 Poulou and Norwich (2002) proposed the following model of teachers' causal attributions, emotional and cognitive responses and actions towards children with EBDs:

10.5 Current Proposed Model – 'EI Process Model of Stigmatisation' (EPS-Model)

The original model proposed in this study was influenced by Corrigan et al.'s (2003) Attribution Pathway Model, Poulou and Norwich's (2002) Decision-Making Model and Petrides' (2009) Trait EI Model, as a way to conceptualise and understand the process in which teachers react towards students with EBDs. The current study aimed to investigate statistically predictive relationships between teachers' causal attributions, cognitive, emotional and behavioural reactions towards students with EBDs. It also aimed to determine the influence of teachers' trait EI on these factors and process. Therefore, the current study proposed the 'EI Process Model of Stigmatisation' (EPS-Model) (Figure 10.4):
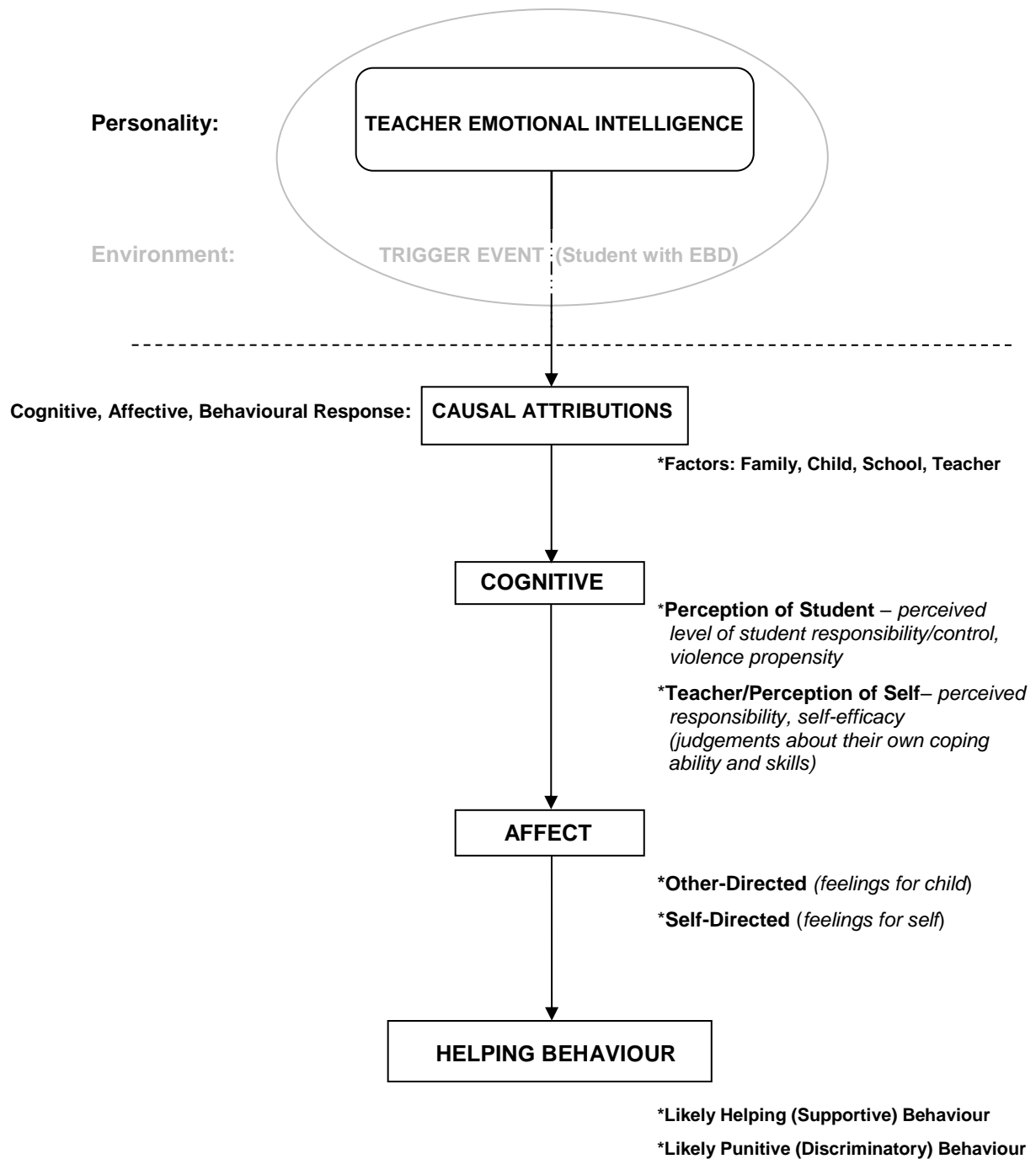
Figure 10.4 A potential model of teachers' trait EI, causal attributions, cognitive, affective and behaviour towards children with EBDs

10.5.1 Stage Descriptors of the Proposed EI Process Model of Stigmatisation

10.5.1.1 Teacher Emotional Intelligence

The first step of the EPS-Model consists of teachers' EI traits in accordance with Petrides' (2009) model. Teachers' EI (regarded as behavioural dispositions), were hypothesised to predict or influence the attribution process leading to likely helping behaviour. Events within teachers' immediate environment (such as the EBD student's behaviour in class) were explored as to its level of influence on helping.

10.5.1.2 Causal Attributions

Four causal attribution factors were proposed as possible causes of the student with EBD's behaviour; namely Child, Family, Teacher and School factors. This ecological perspective by Poulou and Norwich (2002) was incorporated as an attempt to recognise that there are other causal factors that derive from students' immediate and wider environment, not just directly from the students with EBDs themselves.

10.5.1.3 Cognitive

The cognitive component focuses on teachers' perceptions of a student with an EBD as well as their perceptions of themselves in a difficult classroom situation. Teachers' evaluations of the student with an EBD involves the amount of control and responsibility they perceive the student to have over his own behaviour. Teachers' evaluations of themselves include judgements about their own capabilities and skills in coping with students with EBDs (self-efficacy), how much responsibility /control they perceive they have over the EBD student's future behaviour, and how much they believe that it is their responsibility to bring about positive change in the student with EBDs (Poulou & Norwich, 2002).

An additional factor included in the current model was to determine teachers' perceptions of the level of risk of harm/violence to themselves from the student with EBD. Perceived risk of violence

has been found to significantly relate to helping behaviour in stigmatisation studies (Blascovich et al., 2000; Corrigan, 2002; Johnson-Dalzine et al, 1996).

10.5.1.4 Affect

Consistent with Poulou and Norwich's (2002) model, affective teacher responses were divided into two categories: 'other-directed' and 'self-directed'. Similar to Corrigan (2003), 'other-directed' focuses on teachers' emotional responses (anger and sympathy) towards the student with an EBD. Irritation and indifference were also included as emotions in the current study as Poulou and Norwich (2002) claimed that these were found in the research to be common feelings experienced by teachers when dealing with difficult students. 'Self-directed', in the current study, refers to teachers' own feelings of stress/anxiety, helplessness/depression and hurt/offence. Poulou and Norwich (2002) reported on studies that showed consistent correlations between difficult students and occupational stress and burnout of teachers as a result of such emotions.

10.5.1.5 Helping Behaviour

The final outcome of the proposed model consists of teachers' likelihood of helping or punishing the student with EBDs. Teachers' lack of willingness to want to help a student with EBD or consideration of a more punitive or rejective approach are examples of teacher discriminatory behaviours.

10.6 Methodology

10.6.1 Participants and Procedure

Teachers in all State, selected Catholic, and Independent, secondary schools within Victoria were invited to participate in the study. Primary school teachers in Victoria were also invited to join with their secondary school colleagues in participating in this project. The decision to include primary schools in the current study was based on the goal of trying to engage sufficient teachers to reach an optimum sample size of 1500 teachers, which would have captured views from ten participants for each of the ~150 items in Petrides' TEIQue instrument. This sized sample would have yielded a

sampling error of 2.5% at 95% confidence level (de Vaus, 1991, p. 71). However, the sample size obtained of 261 yielded a sampling error of 6.2%, which is acceptable. It also gave the opportunity of comparing teacher responses at primary and secondary school levels. Saturation sampling allowed for greater opportunity for a higher response rate.

Gathering a representative sample of the population was not important in this study as Personality Theory claims that trait EI variables are innately individual to each person and stable or resistant to change across contexts. One thousand seven hundred and fifty two of the primary and secondary schools approached indicated that they were too busy to participate.

Research and ethics applications to conduct research were prepared and approved by the Federation University's Human Research Ethics Committee [Ref: A14-156, 12/02/2015] (Appendix I), Department of Education and Training (DET) [Ref: 2015_002688, 29/06/2015] and Regional Directors of the Catholic Education Office (Ballarat and Sandhurst Dioceses only) [20/04/2015 and 24/04/2015]. Approval for research in Independent schools was sought directly by each school Principal. These approvals are not be presented to maintain anonymity.

A letter was mailed to the Principals of 1,803 Victorian schools (who had been approved to approach) inviting their qualified teaching staff to participate in the study. Principals were then asked to nominate a school representative who would be responsible for the receipt and distribution of the survey emails to teachers. Principals were required to fill in the basic details on the participation and consent form and mail it to the researcher for approval to commence the study.

The school representative was responsible for distributing one of two surveys to teachers via email; whichever of the two surveys they would be completing (e.g., FedUnitrsurvey1 or FedUnitrsurvey2). Each survey was allocated to teachers on a sequential basis (1 first, followed by 2, then 1, etc.). This was for the purpose of ensuring that the two different experimental vignette scenarios within the surveys were randomly and evenly distributed to teachers to satisfy conditions for future statistical comparison.

The survey was completed through an internet survey site that did not identify schools or individuals nor require direct email responding. Teachers were provided with a Plain Language Information Statement letter (Appendix H) outlining participation expectations and requirements, the time commitment, risks involved, consent and confidentiality.

The invitation to teachers stated that, "Participation is fully voluntary and refusal to participate requires no explanation. By completing the online questionnaire and then selecting the 'send' button, you are consenting to participate in this research. Once you have 'sent' your completed questionnaire, it will be too late to withdraw your consent as your information will be unable to be identified and retrieved from that point. You are free to choose not to answer questions on the questionnaire."

There were very minimal foreseeable risks to participants. Some of the questions in the survey may have been emotive and sensitive in nature to some individuals, therefore, phone numbers were provided for Lifeline for access to counsellors, if needed. Further, participants were advised to contact their school counsellor, if necessary.

Teachers were not informed that there were two behavioural comparison groups as the researcher did not want to draw teachers' attention to any pre-judgements or key focus points in the scenarios regarding the severity of student behaviours. Such an indication may plant preconceived ideas in teachers' minds or lead to biased responses. The words 'student presentation' was carefully selected for the questionnaire to eliminate such an effect and avoid pre-labelling the student. Such an indication could also lead teachers to try and 'prove' what an effective teacher they are with difficult or learning disabled students, for example, and answer in what they consider to be a more socially acceptable way; thus distorting the results regarding their EI. Avoiding this type of suggestive description allows the researcher to more tightly control this specific variable for more reliable comparison across groups. As this method could be considered deceptive, research participants were provided with a Debrief letter following completion of the survey, which outlined the full extent and purpose of the project and, once again, included counsellor phone numbers (Appendix H).

10.6.2 Survey

Teachers were administered the Trait Emotional Intelligence Questionnaire (Petrides, 2009) comprising 153 items, taking about 25 minutes to complete. This scientific measurement instrument is based exclusively on Trait EI Theory and reflects teachers' self-perceived abilities and behavioural dispositions. Teachers were also asked to respond to questions relating to the factors within a newly arranged Attribution Model, adapted from Corrigan's (2003) Attribution Questionnaire (AQ) and Poulou and Norwich's (2002) Decision-Making Model.

10.6.3 Vignette Experimental Method

As a way to measure the Attribution Model factors and compare teacher group responses across these factors, a survey experimental method was employed through the use of vignettes. This approach helped to address the hypotheses and descriptive questions related to whether a student's level of difficult or challenging behaviour is a stronger predictor of teacher helping behaviour than EI.

The use of vignettes is considered to be one of the most common methodological approaches employed by researchers relating to Attribution Theory and stigma. They are also used in psychological and educational research as they can propose a combination of expressive and objective ideas and projective methods (Poulou, 2001). Participants are enabled to form their own interpretation of the described situation that then specifically represents the situation under investigation. The construction of hypothetical scenarios should trigger teachers' reactions to real classroom incidents or experiences with students with EBDs, thus creating greater context and depth than just the presented description offers. Therefore, detailed hypothetical scenarios that teachers can already relate to should automatically stimulate and tap into their real thoughts, feelings and reactions (Poulou, 2001).

Consequently, "vignettes allow the researcher to present a more elaborate stimulus to respondents than is afforded in measurement approaches" (Link et al., 2004, p. 527). The use of random assignment is allowed for in the use of vignettes and it can also achieve better external validity than is typical of many lab experiments. Such an experimental method can be used for hypothesis testing.

Teachers were asked to read a hypothetical vignette scenario of a student called Jamie and were asked to imagine that Jamie was a student in their class. The scenario described a student with an Emotional Behaviour Disorder. Respondents then answered a series of questions about Jamie and about themselves.

Teacher respondents were also randomly assigned to one of two hypothetical vignette conditions. The two scenarios varied in their intensity of the student's challenging or difficult behaviour (Low and High Behaviour Severity scenarios). Both vignettes were identically presented except for one varied condition: The first vignette (High Behaviour Severity) included an additional paragraph that described a student with an EBD who had a propensity towards *physical* aggressiveness and violence. The second vignette (Low Behaviour Severity), presented exactly the same information as the first vignette except that the last paragraph was removed. This meant that there was no mention of, or hypothetical exposure to, a physically violent student. The student behaviour presented in scenario two only peaked to a *verbally* aggressive presentation. The presence and absence of the physically aggressive/violent paragraph was the variable that was considered to measure any differences in outcomes between the two teacher experimental groups. Please refer to Appendix F to view the vignette scenario.

Teachers were then asked to answer some questions in relation to the scenario, about their perceptions of the student's presentation as well as their own ability to influence outcomes (Poulou & Norwich, 2002). They were asked about their feelings in relation to those perceptions and the likelihood of them wanting to help the student. This demonstrated the cognitive-emotional process that leads to behaviour, as claimed by the Attribution Model.

10.7 Instruments (Variable Arrangements Prior to Factor Analysis)

10.7.1 Teacher Attribution Model Survey (TAMS)

The 'Teacher Attribution Model Survey' (TAMS) was developed primarily to measure the attribution factor stage within the 'EI Process Model of Stigmatisation' (EPS-Model). The TAMS consisted of a Demographics section, Cognitive scales, Affect scales and Behaviour scales (Appendix

F). It also consisted of Causal Attribution factor scales. The sections with questions (sections C, D & E) that related to teachers' cognitive, affective and behavioural reactions were randomly presented in the online survey so as not to create any type of patterned responses.

10.7.1.1 Section A - Demographics Section

The Demographics section of the TAMS (section A) elicited background information from the participants, including age, gender, highest level of education achieved, years of teaching experience, school type, subjects taught and year levels taught. Demographics were responded to using multiple choice format, where the respondent was instructed to tick the appropriate box.

Sections C, D & E of the TAMS consisted of questions relating to the different attribution stages of the EPS-Model. Teachers were asked to complete this part of the survey in response to the hypothetical vignette that had been presented to them.

10.7.1.2 Section C - Cognitive Scales

The first Cognitive Scale measured the extent to which teachers perceived that Jamie was responsible or in control of his presentation and the extent to which teachers believed themselves to be personally responsible or at fault for Jamie's presentation. The second and third cognitive scales measured teachers' perceived Self-Efficacy and their level of Perceived Risk (regarding the student). These seven point Likert scales asked respondents to indicate the position on the scale that their views would most likely reflect (1 = no, not at all, to 7 = yes, absolutely so). Seven questions/statements made up the Responsibility/Control Scale. Teachers could score between 7 and 49 on this Student scale. An example of a statement is 'I think that the way Jamie is presenting is his own fault'. Four statements made up the Self-Efficacy Scale (e.g., 'I would feel confident in teaching this student'). Teachers could score between 4 and 28 on the Self-Efficacy scale. Only two question/statements made up the Perceived Risk scale (e.g., 'I think Jamie would be a violent risk to me') could score between 2 and 14.

10.7.1.3 Section D - Affect Scales

The Affect component consisted of two separate scales: 'Other-Directed' affect and 'Self-Directed' affect. The 'Other-Directed' scale measured the teacher's emotional reaction towards the student in the scenario, including anger, irritation, frustration, sympathy and indifference. The 'Self-Directed' scale measured the extent to which teachers experienced negative feelings of stress, anxiety, helplessness, depression, fear, hurt, offence, overwhelmingness and burnout. Both these 7 point Likert scales asked respondents to indicate the extent to which they think they would feel the specified emotion (from 1 = not at all, to 7 = very much). Seven anger/sympathy questions/statements made up the Other-Directed scale. An example of a question is, 'How much pity would you feel for Jamie?'. The scores on the Compassion scale were made to be reverse scored (where a score of 1 = 7, and a score of 2 = 6, etc.) Teacher scores could range between 7 and 49. Eight feeling statements made up the Self-Directed scale and teachers could score between 8 and 56. An example of a statement is, 'I would feel stressed'.

10.7.1.4 Section E - Behaviour Scale

The Behaviour Scale was developed by the researcher, for the purpose of the current study, to measure the likelihood of a teacher helping or rejecting/punishing a student (as a likely behavioural response to the scenario). There were eight question/statements specifically related to Likely Helping Behaviour that all described different helping situations and that mainly varied in the amount of time and/or effort that teachers may spend in helping a student. Six questions/statements were developed to specifically relate to Likely Punitive Behaviour. The punitive statements were made to be reverse scored (where a score of 1 = 7, and a score of 2 = 6, etc). The 7 point Likert scale asked respondents to indicate the extent to which they would help or want to punish/avoid the student for each statement. An example of a Likely Helping statement is, 'I am likely to spend a lot of one-on-one time with Jamie during class time'. An example of a Likely Punitive statement is, 'If I were Jamie's teacher I would think that only punishment can stop his behaviour'. Teacher scores could range between 14 and 98 on the Behaviour scale.

10.7.1.5 Stigmatisation and Discrimination Measure

Stigmatisation was measured by the perceptions that teachers had regarding the student's presentation (Cognitive scales). A teacher's level of willingness and likeliness to help the student (Behaviour scale) was the measure used to define discrimination. As suggested by Link and Phelan (2001, p. 365), stigma exists when people experience "discrimination that leads to unequal outcomes".

10.7.1.6 Section F - Causal Attribution Scales

The Causal Attribution section (F) consisted of a list of 19 causal factors that were categorised into four broad areas: Family Environment factors, Student factors, Teacher factors and School factors; many of which were taken from Poulou and Norwich's factor list (2002). Teachers were asked to indicate the extent to which they though each item was likely to be the cause of the student's presentation in the vignette. They were asked to choose only one number on a 1 to 5 Likert scale for each factor/statement, with 1 being a very unlikely cause to 5 being the most likely cause. Five factors/statements contributed to each of the Family factors scale, the Student factors scale and the Teacher factors scale, allowing teachers to score between 5 and 25. Only four factors/statements contributed to the School factors Scale, with scores ranging between 4 and 20. Some of the causal factor statements from each category included, 'Poor parental attachment between parent and child', 'The child is being purposely manipulative', 'Poor classroom management' and 'Lack of resources and services'.

10.7.2 Trait Emotional Intelligence Questionnaire (TEIQue)

Petrides' Trait Emotional Intelligence Questionnaire (TEIQue, 2009) (section B) employs a seven point Likert scale. It is widely accepted that 7-point scales are best psychometrically, for reliability maximization and discriminability (Petrides, 2009, p. 9). The 153 questions presented to teachers relate to the 15 trait facet scales which make up four broader factor scales: Well-being, Self-Control, Emotionality and Sociability. Refer to Table 10.1 for a visual of the individual trait facets positioned with reference to their corresponding factor. Teachers were asked to respond to each

statement by clicking on the number that best reflected their degree of agreement or disagreement with that statement (1 = Completely Disagree to 7 = Completely Agree).

This scientific measurement instrument is based exclusively on Trait EI Theory and reflects teachers' self-perceived abilities and behavioural dispositions. According to Petrides (2009), profile interpretation requires understanding of the tenets of Trait EI Theory. In addition to the quantitative interpretation of the teacher scores that will be made for each EI trait facet, the following descriptions form part of the foundation for the 'correct' qualitative interpretation of the trait profiles.

Details of these TEIQue facets, factors and Global EI developed by Petrides (2009, p. 59-62) are listed in Appendix G (sections 10.7.2.1 to 10.7.2.3).

10.8 Chapter Summary

Personality Theory frames the study, which assumes that personality, as a set of characteristics (or traits) possessed by a person, uniquely influences his or her cognitions, emotions and behaviours in various situations. Petrides' (2009) Model of Trait EI, is claimed to be located within personality space, and concerns self-perceptions and behavioural dispositions measured through subjective self-report personality questionnaires that are psychometrically scored and interpreted.

The current study considers teachers to have the greatest influence on student learning outcomes and thus explored psychological processes behind their reactions. The model used in the current study was influenced by Corrigan et al.'s (2003) Attribution Pathway Model of Stigmatisation, Poulou and Norwich's (2002) Decision-Making Model and Petrides' (2009) Trait EI Model, as a way to conceptualise and understand the process in which teachers react towards students with EBDs.

This study first profiled teachers through Petrides' (2009) measure of trait EI, to ascertain whether certain EI traits could be considered as predispositions for stigmatisation and discrimination. The influence of teachers' trait EI was measured through an Attribution Model process; through teachers' causal attributions, cognitive, emotional and behavioural reactions towards students with EBDs, and their predictive relationships.

Based on theoretical components of Corrigan et al.'s (2003) Attribution Pathway Model and Poulou and Norwich's (2002) Decision-Making Model, the current study proposed the 'EI Process Model of Stigmatisation' (EPS-Model). This procedure informed the main research questions as to which teacher traits lead to greater stigmatisation and discrimination.

One thousand eight hundred and three State, Catholic and Independent primary and secondary schools within Victoria were invited to participate in the study. Surveys were completed by volunteering teachers through a de-identified internet survey site. Three hundred and fifty nine teachers responded to the survey.

Two different experimental vignette scenarios within the surveys were randomly and evenly distributed to teachers to satisfy conditions for future statistical comparison. This approach helped to address the hypotheses and descriptive questions related to whether a student's level of difficult or challenging behaviour is a stronger predictor of teacher helping behaviour than EI.

Teachers were administered the Trait Emotional Intelligence Questionnaire (Petrides, 2001). This scientific measurement instrument is based exclusively on Trait EI Theory and reflects teachers' self-perceived abilities and behavioural dispositions. In addition to the quantitative interpretation of the teacher scores that are made for each EI trait facet, Petrides presents qualitative interpretations.

The 'Teacher Attribution Model Survey' (TAMS) was the instrument developed primarily to measure the attribution factor stage within the 'EI Process Model of Stigmatisation' (EPS-Model). The TAMS consisted of a Demographics section, Cognitive scales, Affect scales and Behaviour scales. It also consisted of Causal Attribution factor scales. Stigmatisation was measured by the cognitive reactions that teachers had regarding the student's presentation. A teacher's willingness to help the student (Behaviour scale) was the measure used to determine level of discrimination.

CHAPTER 11 – Revised Scales Development

This chapter challenges Petrides (2009) belief that the TEIQue cannot be perceived in the statistical sense, by demonstrating that the TEIQue can, in fact, be transformed into a more statistically valid measurement instrument of the trait facets, whilst maintaining as much of its theoretical basis as possible. Exploratory factor analysis was performed to determine the validity of Petrides' TEIQue. Three different methods were explored and presented to also determine the best fit of the TEIQue items and facets to the teacher research data. Reliabilities were calculated and presented for the final chosen method and newly adapted trait facets. The underlying structures of each of the factor scales within the Attribution Model Questionnaire for the current sample were also explored using exploratory factor analysis, employing a principal components analysis technique.

11.1 Exploratory Factor Analyses of TEIQue Instrument

Exploratory factor analysis procedures were used to determine the validity of the TEIQue instrument through evaluating how well the research data fits within each of the instrument's trait factors. The items analysed were subjected to a principal component analysis using SPSS Statistics 23. Stevens (1996, in Pallant, 2005 p. 173) suggests that principal components analysis (PCA) is more psychometrically sound compared with other methods and "it avoids some of the potential problems with 'factor indeterminancy' associated with factor analysis". Tabachnick and Fidell (2001, p. 610-611) suggests that PCA provides good empirical summary of data.

Prior to performing the PCA, the suitability of the data for analysis was assessed by considering the sample size and the strength of the relationship among the items. "There is little agreement among authors concerning how large a sample should be" (Pallant, 2005, p. 173). Tabachnick and Fidell (2001, p. 588) conclude that although 300 cases provide more confidence for factor analysis, a smaller sample size such as 150 cases should be sufficient if the solutions have high loading marking variables of above (.80). There were closer to 300 cases for analysis in this study that increased the factors' validity. An inspection of all correlation matrices showed evidence of many coefficients greater than .3, as recommended by Tabachnick and Fidell (2001). To support the

factorability of the correlation matrix, it was ensured that the Kaiser-Meyer-Olkin values were .6 or above, as recommended by Kaiser (1974), and that Bartlett's Test of Sphericity reached statistical significance (p < 0.05).

11.2. Method 1: All Item Factor Analysis of TEIQue – Full Form Instrument

Firstly, principal components analysis was performed by entering all 153 individual items of the TEIQue to find the component trait factors of these items that are strongly interrelated. The Kaiser-Meyer-Olkin value was .81, which was above the recommended minimum value of .6 (Kaiser, 1974). The Bartlett's Test of Sphericity reached statistical significance (p = .000) supporting the factorability of the correlation matrix.

Principal components analysis produced a fourteen factor solution with eigenvalues exceeding 2.0, accounting for 47 percent of the total variance. These factors were evaluated using Cattell's (1966) scree test that plots the incremental variance accounted for by each successive factor, to determine the point at which the explained variance levels out. The scree test and observation of the number of item loadings within each factor suggested that the first nine factors be considered for further analysis, which accounted for 36.8 percent of the original total variance.

Orthogonal Varimax rotation was performed individually on each of these nine components (trait factors) to assist in interpretation. The first component consisted of 18 items, which accounted for 52.6 percent of the overall variance, and was divided into a further two factors on a theoretical basis. Five items were removed at face value as they appeared to be unrelated content. One item that cross-loaded across factors was also removed. Cross-loading was identified in items that had correlations below .50 and/or had less than .20 variance between them when compared across factors. The final two-factor solution factor explained a total of 59 percent of the total variance.

The trait factors were labelled based on Petrides' theory and descriptions of his proposed EI trait factors. The trait factors were easily identified through visual observation of the individual items within each factor. The first two trait factors that were identified included Happiness (8 items) and Optimism (4 items).

The same process was performed for the 13 items produced within the second statistically strongest component, which was also found to consist of two independent factors (55.3% of the variance). Only two items needed to be removed due to cross-loading that increased the overall variance explained to 57.8%. Both scales consisted of items pertaining to Petrides' Emotion Expression trait factor. The analysis revealed that Emotion Expression only generally described the two independent factors that comprised this scale; which were suitably labelled as Emotion Expression regarding self (7 items) and Emotion Expression regarding others (4 items). The theoretical distinction between these two scales will be described in a later section.

The same procedure was then performed for each of the remaining seven component factors, which each produced only one component. Components 5, 6 and 8 were completely removed as the inter-item content within each component appeared to be unrelated or were not able to be theoretically justified as to how they may 'fit' together. The four remaining components, therefore, were identified as Emotion Regulation (7 items), Empathy (3 items), Emotion Management in others (4 items) and Self Esteem (3 items).

In summary, the factor structure reveled in this projet is statistically sound. It is difficult to comment on previous structures reported by Petrides as data are not fully disclosed in reports published. The residual eight trait component factors, that were identified in the present study, included Happiness, Optimism, Emotion Expression (which was divided into Emotion Expression regarding self and Emotion Expression regarding others), Emotion Regulation, Emotion Management in others and Self-Esteem.

Once this first factor analysis procedure had been performed, it was questioned by the researcher as to whether there was a more effective method of producing trait factors from the TEIQue that were more relevant to the literature and investigation. The current method appeared to have too much reliance on statistical relationships rather than theoretical. The outcome did not appear to be highly conceptually meaningful.

Other analytical methods were explored in order to try and produce as close to Petrides' initially proposed 15 theoretically defined factors as was possible.

11.3. TEIQUE Short Form Factor Analysis

As part of the 'best fit' exploration, factor analysis was performed on Petrides' (2009) TEIQue 30 item short form. The researcher had access to the scoring codes for this instrument (Petrides, 2009). This instrument only derives scores from the four primary trait EI factors of Wellbeing, Sociability, Emotionality, Self-control and global trait EI. The instrument includes two items from each of the 15 trait EI factors from the full TEIQue but does not yield scores on the 15 factors. Petrides (2009) reported that these items were selected primarily on the basis of their correlations with the corresponding total factor scores, which ensured broad coverage of the sampling domain of the construct. The short form was reported by Petrides to have lower internal consistencies than in the full TEIQue instrument (Petrides, 2009).

Again, principal component factor analysis and Varimax rotation was used. Each primary factor was analysed separately using its corresponding items. The data could not be used for further interpretation or analysis as the results suggested that the scales were too broad. For example, the Sociability component extracted three independent factors, and the Emotionality scale two factors. At face value, many items did not relate to other items within factors. Statistically and theoretically, the research data did not fit with the instrument, so the short-form instrument was abandoned.

11.4. Method 2: Face Validity Factor Analysis of TEIQue - Full Form Instrument

A final exploratory investigation was undertaken on the TEIQue instrument. The researcher was not provided with access to the scoring codes to the full TEIQue by its author, Petrides, who did the scoring, so initially, a face validity selection process was used to allocate the 153 items into 15 factors. This process was justified through selecting the items that related to Petrides' (2009) theoretical descriptions of the 15 trait EI factors. It also helped to control for problems identified with Petrides' original scale, such as ambiguity of scale items. Such an approach may potentially create a statistically valid scale that can also be more meaningfully interpreted.

The same statistical procedures were used as explained in Method 1, prior to performing each rotation in the analysis, where the suitability of the data was assessed and the criteria met. The Kaiser-Meyer-Olkin value of above .6 was met and Bartlett's Test of Sphericity reached statistical significance (p = .000) for each group of items explored, supporting the factorability of the correlation matrix. Minimum eigenvalues were set at 1.0.

Factor analyses were performed in two stages. Firstly, all items hypothesised to be theoretically related to each other were analysed as a group to create its individual component trait factor/s as well as producing scales with strong inter-item correlations. Secondly, the items identified as belonging to each newly developed individual component trait factors were cross-examined. This was achieved by placing together all of the items that were theoretically associated with each broad primary scale. The items belonging to the newly developed Optimism, Self-esteem and Empathy trait factors, for example, were all factor analysed together as they make up the primary Well-being factor. The rationale for this procedure was built on the assumption that all the items placed within a primary trait factor would be closely related and have a higher chance of cross-loading; thus reducing the homogeneity of each newly produced scale. Also, if there were items potentially placed into the incorrect trait groups when the face validity method was initially used, they could still be automatically loaded (by the SPSS program) onto another individual trait factor during the analysis process.

Principal components analysis was firstly performed on the items which were purported to make up each of the 15 individual trait factors. Varimax rotation was then used to identify and remove cross-loaded items as well as removing the items that appeared unrelated at face value. The Varimax rotation procedure helped to transform the data into more coherent scales for this project's analysis of results and ensured that again, each factor was independent with strong inter-item correlations. The outcome of each analysis is presented below:

11.4.1 Well-Being Scales

Happiness: Principal components analysis revealed the presence of a simple structure (Thurstone, 1947) for Happiness, with 10 items strongly loading onto only one component. The one-component solution explained a total of 50.87 percent of the variance. One item was removed due to its lower correlation with the other items which increased the factor's variance explained to 54.24 percent.

Optimism: Principal components analysis revealed the presence of a simple structure for Optimism, with all 10 items initially entered loading substantially on only one component. This one-component solution explained a total of 42.76 percent of the variance. One item was removed due to its low correlation with other items which increased the scale variance explained to 45.37 percent.

Self-Esteem: Principal components analysis revealed the presence of two Self-Esteem components after 9 items were entered. The two components were retained for further investigation. The Varimax rotated solution showed that the two components explained 31.99 and 29.52 percent of the variance respectively. One item was removed due to cross-loading which increased the two scales' variance explained to 33.30 and 30.47 percent. Theoretically, the scales appeared to split the positive and negative self-esteem beliefs regarding oneself.

Primary Wellbeing Scale: Once an appropriate number of theorised component trait factors had been produced and proven to be strongly loaded, a final analysis was performed. It was hypothesised that the primary Wellbeing factor would consist of either 3 or 4 independent factors. Twenty-six items were explored.

Firstly, the number of factors to be extracted from the analysis was manually set at 4 in the SPSS statistical program. The KMO was 0.938 and Bartlett's test of Sphericity was significant at $p<.001$. The items accounted for a total variance of 57.7 percent. The items within this four factor model appeared 'messy' due to the number of cross-loaded items and appeared to have lost the conceptual meaning that was first proposed. It was feared that too many items would be lost in developing heterogeneity with the 4 factors, so the four factor model was rejected.

As a result, the number of factors to be extracted from the analysis was manually set at 3 for exploration. After 10 cross-loaded items and unrelated content items were removed, the remaining 16 items accounted for a total variance of 55.9 percent. It was concluded that the Wellbeing scale consisted of three component trait factors.

The nature of the scales unpredictably changed in this latter analysis where the Happiness trait appeared to load into the Optimism trait. Interpretively, this suggests that Happiness is rather, most likely a sub-component of the Optimism trait. In this way, this method still appeared to capture the breadth of trait EI, as argued important by Petrides, but merely arranged the factors differently.

Finally, Self-Esteem only loaded onto one composite factor, as opposed to the two explored earlier in the analysis. The third component factor produced seemed to strongly relate to negative outlook beliefs about one's life in general. This scale appeared to theoretically relate to the general personality trait Pessimism, so it was labelled accordingly. The revised and newly developed Self-Esteem, Optimism and Pessimism trait scales accounted for 19.98, 19.60 and 16.33 percent of the variance respectively. The reliability of each of the three individual component scales, the broad primary trait factor and the number of factor items were also examined as to their statistical effectiveness. Their internal consistencies are presented in Table 11.2.

11.4.2 Sociability Scales

Assertiveness: Principal components analysis revealed the presence of a simple structure (Thurstone, 1947) for Assertiveness, with the 6 items initially hypothesised strongly loading onto only one component. The one-component solution explained a total of 44.91 percent of the variance in this factor.

Social Awareness: Principal components analysis revealed the presence of three Social Awareness components after 10 items were entered. The three-component solution explained a total of 52.2 percent of the variance. The three components were retained for further investigation. An additional four items were removed due to cross-loading, on a step-wise basis to capture changes to the components. The item pool struggled to find two statistically and conceptually perfect

components. When the six residual items were entered, one component was produced which accounted for 50.4 percent of the variance. The items within the Social Awareness scale appeared to be very broad in nature and it was difficult to argue their relationships theoretically. Nonetheless, this scale was retained for further analysis and reliability testing.

Emotion Management: Principal components analysis revealed the presence of three Emotion Management components after 12 items were entered. These items accounted for 54.4 percent of the variance. When three items were removed due to cross-loading, 3 components were still produced. The three components were retained for further investigation.

For the final 9 items that were entered, the Varimax rotated solution showed that the three components explained 63.36 percent of the variance. The first component, consisting of 5 items, appeared to relate to the general notion of Emotion Management in others. The second component consisted of only two items which related to one's belief in being able to influence negative emotional states in others. The third component also consisted of only two items, but they related to the belief in being able to make others feel better. Scales two and three consistently held their own components, which may suggest that the type of emotion may affect someone's belief about their ability to influence or control another's feelings. Despite these components being limited in their number of items, they were strongly inter-correlated, so they were retained for further statistical exploration. The idea of Emotion Management having sub traits may be an underdeveloped theoretical area that requires further exploration and research.

Primary Sociability Scale: Once the individual component trait factors had been produced and proven to be strongly loaded, a final analysis of all these items was performed. It was hypothesised that the primary Sociability factor would consist of between 3 and 5 independent factors. Twenty items were explored.

Firstly, the number of factors to be extracted from the analysis was manually set at 5 in the SPSS statistical program. The KMO was 0.806 and Bartlett's test of Sphericity was significant at $p<.001$. The items accounted for a total variance of 57.69 percent. The number of items was reduced

to 17 through removal of those that cross-loaded. Five components still remained with the variance explained increasing to 60.08 percent.

The two conceptually sound components produced for the primary Sociability factor reflected Assertiveness and Emotion Management (in others). The concern with this five factor model was that three of the components only consisted of two items each; two of which were explained in the previous paragraph. The Social Awareness component had too many-cross loadings with other factors leading to it being reduced to only two items. These two remaining items appeared to represent practical social skills rather than Social Awareness traits. Each scale's internal consistency was determined prior to rejecting these three scales. It was concluded that the primary Sociability factor consisted of at least two of the three component trait factors proposed by Petrides.

The revised and newly developed factors of Assertiveness, Emotion Management (in others), and possibly, negative affect Emotion Management, Social Awareness and positive affect Emotion Management accounted for 16, 15, 11, 9 and 8 percent of the variance respectively. The reliability of each of the 5 individual component scales, the broad primary trait factor and the number of factor items was also examined as to the statistical effectiveness. The scales' internal consistencies are presented in Table 11.2.

11.4.3. Self-Control Scales

Stress Management: Principal components analysis revealed the presence of three Stress Management components after 11 items were entered. The three-component solution explained a total of 56.64 percent of the variance. After four cross-loaded items were removed using a stepwise approach, the seven remaining items produced a highly correlated one factor solution. This solution accounted for 50 percent of the total variance.

Low Impulsiveness: After considering 9 items for principal components analysis, three Low Impulsiveness components were produced. The three-component solution explained a total of 49.7 percent of the variance. A removal of three items reduced the solution to two components, accounting for 51.8 percent of the variance. As each of these factors consisted of only three items, it was difficult

to interpret each as representing a general Impulsiveness factor. The first component's items were associated with the careful planning and organisation (of low impulsiveness) whereas the second component was more related to difficulty in decision-making. It was decided to keep Low Impulsiveness as a two factor solution to see what could be extracted in the next level of analysis.

Emotion Regulation: Principal components analysis revealed the presence of three Emotion Regulation components after 13 items were entered. These items accounted for 52.02 percent of the variance. When five items were removed due to cross-loading, two components were produced which accounted for 50.32 percent of the variance. Each scale consisted of four items and both appeared to conceptually relate to Emotional Regulation. The first component reflected one's belief in being able to emotionally regulate positive affective states, and the latter reflected one's belief in the ability to regulate or control one's own emotions in general. Both scales were retained for further analysis. The findings from this analysis could suggest that the type of emotion may influence people's belief in their ability to regulate themselves. From observation of the initial three component scale, a negative emotion self-regulation theme started to emerge, suggesting that this could also be considered a third and separate trait. There were not enough relevant items to make this third potential scale clear, however. The idea of Emotion Regulation having specific affective state sub-traits may be an underdeveloped theoretical area that requires further exploration and research.

Primary Self-Control Scale: A final analysis was performed on the items chosen for the self-control item analysis. It was hypothesised that the primary Self-Control factor would consist of four independent factors among the 18 items explored. Therefore, the number of factors to be extracted from the analysis was manually set at four in the SPSS statistical program. The KMO was 0.845 and Bartlett's test of Sphericity was significant at $p<.001$. The items accounted for a total variance of 52.9 percent. Two items were removed due to cross-loading which maintained a four factor solution, however, the fourth component consisted of only two items with no real identifiable theme. As a result, the 16 remaining items were entered into a pre-set three factor extraction model. The data appeared to fit this three factor model which accounted for 48.52 percent of the variance.

Two conceptually valid components that appeared to be produced for the primary Self-Control factor were Stress Management and the newly labelled Self-Regulation (of positive affect). The scales internal consistencies are presented in Table 11.2. The general Self-Regulation items tended to disappear across all factors, suggesting that all the items extracted are more likely associated with a broader factor of Emotion Regulation. These items appear to be measuring what is already clearly defined in the research as Emotion Regulation. Using the label Self-Control to explain these constructs may merely highlight the problems with the lack of consistency in operationalising variables across studies.

11.4.4. Emotionality Scales

Empathy: Principal components analysis revealed the presence of three Empathy components after nine items were entered. The three-component solution explained a total of 55.9 percent of the variance. After three cross-loaded items were removed using a stepwise approach, the six remaining items produced a two- factor solution. A final item was removed, due to its low correlation with the other items within its component, which then reduced the model to a single scale solution, namely Empathy, which accounted for 45.1 percent of the total variance.

Emotion Expression: After considering 12 items for principal components analysis, three Emotion Expression components were produced. The three-component solution explained a total of 61.36 percent of the variance. A removal of the two item only component reduced the solution to two components, accounting for 57.97 percent of the variance. Both composites appeared to conceptually relate to the two main elements of Emotion Expression. The first component's items were associated with Emotion Expression (regarding self), whereas the second component consisted of items relating to Emotion Expression (regarding others). The first scale tended to reflect people's belief in being able to emotionally express themselves in relation to their feelings, and the latter reflected people's belief in their ability to emotionally express their feelings about another person. The findings from this analysis may suggest that there is a difference as to whether people are capable of expressing their emotions to others about how they generally feel, or expressing emotions about how they feel towards

another person. The idea of Emotion Expression having specific and independent sub-traits may be an area that requires further exploration and research. These factors were retained and given new labels of Emotion Expression (regarding self) and Emotion Expression (regarding others).

Emotion Perception: Principal components analysis revealed the presence of three Emotion Perception components after 10 items were entered. These items accounted for 54.9 percent of the variance. When two items were removed due to cross-loading, the two components were retained which accounted for 53.3 percent of the variance. Both components appeared to conceptually relate to Emotional Perception. The first component reflected one's belief in being able to perceive emotions within one's self, and the latter reflected one's belief in the ability to perceive emotions in others. The findings from this analysis may suggest that there is a difference as to whether people are capable of perceiving their own or another person's emotions. The idea of Emotion Perception having specific and independent sub-traits may be an area that requires further exploration and research.

Relationships: Ten items were used for principal components analysis, where three Relationship components were extracted. The three-component solution explained a total of 54.74 percent of the variance. A removal of two items reduced the solution to two components, accounting for 50.39 percent of the variance. Both components appeared to conceptually associate with the Relationship trait, however, the items within the second component related more to other people's perceptions of the behaviour and treatment of the survey respondent. Considering other people's perception of the respondent may reduce the subjectiveness of the scale. These type of items, such as 'Those close to me often complain that I don't treat them right' do not necessarily tap into the respondent's subjective or unconscious personality or EI. This may explain why these items were unable to correlate highly with the other general relationship items in component one. As these items were included in Petrides' original TEIQue instrument, both components were retained for the final analysis stage.

Primary Emotionality Scale: The final analysis was performed on the items chosen to represent the Emotionality trait facets. It was hypothesised that the Primary Emotionality factor could

possibly consist of seven independent factors. Thirty items were explored using component factor analysis.

The number of factors to be extracted from the analysis was manually set at seven in the SPSS statistical program. The KMO was 0.892 and Bartlett's test of Sphericity was significant at $p<.001$. The items accounted for a total variance of 58 percent. Five items were removed to result in a six-factor solution which accounted for 58 percent of the variance.

The final components extracted were Emotion Expression (regarding self), Empathy, Emotion Perception (regarding self), Emotion Expression regarding others, Relationships (others' perspectives of behaviour), Relationships (general). These factors accounted for 14.90, 10.40, 9.39, 8.67, 7.80 and 6.85 percent of the total variance respectively. The items previously identified relating to Emotion Perception in others seemed to load strongly onto the Empathy factor, suggesting that Empathy is also a form of Emotion Perception. Emotion Perception of others, therefore, does not appear to be an independent trait but rather a component of Empathy. The internal consistencies of the scales are presented in Table 11.2.

11.4.5 Auxiliary Factors

Self-Motivation: Principal components analysis revealed the presence of three Self-Motivation factors after 10 items were entered. The three-factor solution accounted for 51.2 percent of the variance. After four cross-loaded items were removed using a step-wise approach, the six remaining items produced a two-factor solution. A final item was removed due to its low correlation with other items within the same factor, which caused the model to reduce to a single scale solution, namely Self-Motivation, which accounted for 47.8 percent of the total variance.

Adaptability: Principal components analysis revealed the presence of three Adaptability components after 9 items were entered. The three-component solution accounted for 60.9 percent of the variance. After 1 cross-loaded item was removed, the 8 remaining items produced a two- factor solution. A final item was removed due to its low correlation with the other items in its factor, which

reduced the model to a single scale solution, namely Adaptability, which accounted for 45.8 percent of the total variance. The scales internal consistencies are presented in Table 11.2.

11.5 Reliability of Revised TEIQue

Before using the revised scales for analysis the scales needed to be examined for their reliability. In other words, it needs to be ensured that the items that make up each individual trait facet are measuring the same underlying construct within the current sample. The reliability of a scale can vary depending on the sample. This concerns the scale's internal consistency. One common indicator of a scale's internal consistency is Cronbach's alpha coefficient (see Table 11.1). According to Pallant (2005, p. 90), "ideally, the Cronbach alpha coefficient of a scale should be above 0.7".'

Table 11.1

Internal Consistency Descriptive Table

A commonly accepted rule of thumb for describing internal consistency is as follows (deVaus, 1991, p. 256):

Cronbach's alpha	Internal consistency
$\alpha \geq 0.9$	Excellent
$0.9 > \alpha \geq 0.8$	Good
$0.8 > \alpha \geq 0.7$	Acceptable
$0.7 > \alpha \geq 0.6$	Questionable
$0.6 > \alpha \geq 0.5$	Poor
$0.5 > \alpha$	Unacceptable

Table 11.2 compares the two exploratory factor analytic methods described in the previous section. Whilst there is not much difference in the internal consistency between the two methods, the second method was able to retain more items, suggesting that it has kept more of its original conceptual validity.

Table 11.2

Internal consistency comparisons of the two Revised TEIQue facets

Original TEIQue Factors	Additional scales found within TEIQue	α Method 1	No. of items	α Method 2	No. of items	Reason for rejecting scale
Emotion Expression	*regarding self	.85	7	.85	7	✓
	*regarding others	.81	4	.75	3	✓
Empathy		.63	3	.73	6	✓
Emotion Percep.		-		.77	3	✓
Relationships	*treatment of others?	-		.66	3	Conceptually incomplete
Happiness		.90	8			-
Optimism	*Optimism	.72	4	.77	5	✓
	*Pessimism			.78	5	✓
Self-Esteem		.73	3	.83	6	✓
Emotion Mgmt.	*General EM	.72	4	.76	5	✓
	*EM of negative affect			.80	2	Low no. of items and low correl. with EI.
	*EM of pos. affect			.48	2	Low reliability
Social Aware.		-		-		-
Assertiveness		-		.75	6	✓
Emotion Regulation		.79	7			-
	*ER of positive affect			.73	4	no statistical sig. to study's variables
Stress Mgmt.				.84	7	✓
Impulsiveness				.56	3	Low internal consistency
Self-Motivation				.72	5	✓
Adaptability				.78	7	✓
		8 FACTORS	**40 ITEMS**	**17 FACTORS**	**79 ITEMS**	
Global EI				12 Factors used	65 Items used	

11.6 Internal Consistencies of the Revised (Method 2) TEIQue Primary Factor Variables

There were not enough individual trait facets extracted to form primary factors to determine internal consistency for Method 1. The internal consistencies for Method 2 primary factors are reported in Table 11.3:

Table 11.3

Internal consistencies for Method 2 primary factors

PRIMARY FACTORS	α METHOD 1	α METHOD 2
WELLBEING	-	.88
EMOTIONALITY	-	.88
SOCIABILITY	-	.73
SELF-CONTROL	-	.84
GLOBAL EI		.94

11.7 Correlation Comparisons between Revised TEIQue (Method 2) with Original TEIQue (Petrides)

The mean trait EI scores computed from Petrides' original and full TEIQue were compared with the mean scores from the newly adapted EI trait factors (following FA) using Spearman's correlation coefficient (Spearman's rho). This gave an indication as to whether there are significant relationships between Petrides' original score data and the researcher's revised (Method 2) score data. This helps to explore Petrides' original scale applicability and validity. Correlations are presented in Tables 11.4 to 11.9. The newly developed Optimism and Pessimism facets were both compared to Petrides' Optimism and Happiness facets from which the items originated.

Table 11.4

Correlations of Petrides' original score data and the researcher's revised (Method 2) score data in relation to Wellbeing traits

WELLBEING ↓ *METHOD 2 TRAITS*	OPTIMISM	HAPPINESS	SELF-ESTEEM
OPTIMISM	.85**	.75**	
PESSIMISM	.89**	.80**	
SELF-ESTEEM			.95**

*** Correlation is significant at the 0.01 level (2-tailed)*

Table 11.5

Correlations of Petrides' original score data and the researcher's revised (Method 2) score data in relation to Emotionality traits

EMOTIONALITY ↓ *METHOD 2 TRAITS*	EMPATHY	EMOTIONAL EXPRESSION	EMOTIONAL PERCEPTION	RELATIONSHIPS
EMPATHY	.82**			
EMOTIONAL EXPRESSION RE: SELF		.90**		
EMOTIONAL EXPRESSION RE: OTHERS		.81**		
EMOTION PERCEPTION RE: SELF			.80**	

*** Correlation is significant at the 0.01 level (2-tailed)*

Table 11.6

Correlations of Petrides' original score data and the researcher's revised (Method 2) score data in relation to Sociability traits

SOCIABILITY ↓ *METHOD 2 TRAITS*	EMOTIONAL MANAGEMENT	ASSERTIVENESS	SOCIAL AWARENESS
EMOTION MANAGEMENT (IN OTHERS)	.77**		
ASSERTIVENESS		.96**	

*** Correlation is significant at the 0.01 level (2-tailed)*

Table 11.7

Correlations of Petrides' original score data and the researcher's revised (Method 2) score data in relation to Self-Control traits

SELF-CONTROL ↓ *METHOD 2 TRAITS*	EMOTIONAL REGULATION	IMPULSIVENESS	STRESS MANAGEMENT
STRESS MANAGEMENT			.95**

*** Correlation is significant at the 0.01 level (2-tailed)*

Table 11.8
Correlations of Petrides' original score data and the researcher's revised (Method 2) score data in relation to Auxiliary traits

AUXILLARY ↓ *METHOD 2 TRAITS*	SELF MOTIVATION	ADAPTABILITY
SELF MOTIVATION	.87**	
ADAPTABILITY		.96**

** Correlation is significant at the 0.01 level (2-tailed)

Significant relationships were found between all the original trait facets and the newly adapted trait facets at the p <0.01 level. The traits with the strongest correlations (above 0.8) included Optimism, Pessimism, Self-Esteem, Empathy, Emotional Expression regarding Self, Emotional Expression regarding others, Assertiveness, Stress Management, Self-Motivation and Adaptability. Emotion Perception regarding self and Emotion Management in others had only moderate to strong relationships (just under .80). The results of this comparison suggests that Petrides original 153 item TEIQue has reasonable application but is not consistent due to its lack of discreet factor loading. There is too much cross-loading of items, and at face-value, many items are not relevant to the theorised measure/trait factor. The other 84 items within the original TEIQue, that were not used in the revised TEIQue, seemed to make negligible contribution to the key factors which emerged from factor analysis of this data.

Table 11.9

Correlations of Revised TEIQue (Method 2) and original TEIQue at the Primary factor Level

		Well Being	Sociability	Emotionality	Self-control	Global Trait EI
Well-being Revised	Pearson Correlation	.93**	.50**	.62**	.77**	.90**
Sociability Revised	Pearson Correlation	.33	.91**	.33	.34	.55**
Emotionality Revised	Pearson Correlation	.54**	.47**	.87**	.45**	.74**
Self-Control Revised	Pearson Correlation	.64**	.41**	.41**	.81**	.71**
Global EI Revised	Pearson Correlation	.82**	.69**	.81**	.77**	.97**

While most of the new primary factors highly correlate with Petrides' primary factors, some are only moderately correlated. A new primary factor arrangement would need to be considered. Factor analysis of trait facets suggested a different arrangement of factors that contribute to the broad primary factors (raw exploratory statistical data not provided). However, given the limited relevance and importance of broad factors in the current study, the broad factors were not used.

11.8 Proposed Attribution Model Instrument

The underlying structures of each of the factor scales within the Attribution Model Questionnaire for the current sample were explored using Principal Components Analysis to ensure the items cohered into stable factors as predicted, being being applied in further analyses. Each stage of the analysis followed the previously described factor analysis (FA) steps of data assessment, factor extraction and factor rotation. All the data used, and presented below, were assessed as being suitable for FA. Inspection of the correlation matrix revealed the presence of many coefficients above .3, the Kaiser-Meyer-Olkin values exceeded .6 and Bartlett's Test of Sphericity reached statistical significance, supporting the factorability of components the correlation matrix.

11.8.1 Cognitive Variables

The cognitive component of the Attribution Model is proposed to consist of four underlying factors; namely, Perception of Student (Student Responsibility/Control), Perception of Self (Personal Responsibility/Control), Self-Efficacy and Perceived Risk. It was unclear as to whether Perception of Student and Perception of Self would be related as polar opposites to form one factor which relates to perceived responsibility, control and fault, or whether they would remain independent.

The 12 items which purported to comprise the cognitive component of the Attribution Model were subjected to PCA. The Kaiser-Meyer-Olkin value was .812 and the Bartlett's Test of Sphericity reached statistical significance (p< .001). Principal component analysis revealed the presence of four components as hypothesised, with eigenvalues exceeding 1. This four component solution explained a total of 68.5 percent of the variance. The rotated solution showed strong correlations, with all items

loading within their expected factors, except for one item relating to teacher Perception of Self. The item 'How much control do you think you could have over Jamie's presentation for the future' was removed and the rotation process repeated. This increased the total variance explained to 71.3 percent. Self-Efficacy explained 28.5 percent, Perception of Student 16.4 percent, Perceived Risk 15 percent and Perception of Self 11.5 percent of the variance respectively. The results of this analysis support the use of the four initially proposed cognitive variables, as separate scales.

11.8.2 Affect Variables

The affect component of the Attribution Model is proposed to consist of two underlying factors; namely, Self-Directed and Other-Directed.

The 14 affective state items which purported to make up the affective component of the Attribution Model were subjected to PCA. The Kaiser-Meyer-Olkin value was .903 and the Bartlett's Test of Sphericity reached statistical significance (p <.001). Principal component analysis revealed the presence of three components, with eigenvalues exceeding 1. This three component solution explained 61 percent of the total variance.

The affective state 'Fear' was removed by checking face validity as it suggested independence from the other two scales and the rotation process repeated. The process identified two components as expected, which changed the overall variance explained to 55 per cent.

The rotated solution showed strong intercorrelations, however, the two components did not reflect the 'Other-Directed' and 'Self-Directed' affect variables as initially proposed. Therefore, the two variable 'labels' needed to be changed to reflect their item content. Component 1 seemed to reflect negative emotional states that teachers may experience. The first component, which accounted for 42.9 percent of the variance was labelled 'Negative Affect'. The affective states within this factor included angry, aggravated, irritated, stressed, anxious, helpless, depressed, hurt/offended, overwhelmed and burnt out.

Component 2, which accounted for 12.1 percent of the variance, appeared to measure teachers' level of 'Compassion' towards the student. It consisted of only three items which included concern, pity and indifference. The two scales represented the affective components of the Attribution Model and could be used for further analysis.

11.8.3 Behaviour Variables (Likely Helping and Punitive)

It was proposed that the behaviour component of the Attribution Model (level of Likely Helping or Punitive Behaviour) consists of two underlying factors; namely, Likely Helping Behaviour and Likely Punitive Behaviour. It was unclear as to whether the two scales would be related as polar opposites to form one factor relating to levels of helping behaviour.

The 12 items which purported to make up the behaviour component of the Attribution Model were subjected to PCA. The Kaiser-Meyer-Olkin value was .811 and the Bartlett's Test of Sphericity reached statistical significance (p = .000). Principal component analysis revealed the presence of three components, with eigenvalues exceeding 1. This three component solution explained a total of 55.3 percent of the variance. There was a visual pattern emerging in the three components which were made up of positive statements relating to likely helping and negative statements relating to likely punitive behaviour. The third component was removed due to the scale being considered invalid due to only possessing two items. These items were 'If I were Jamie's teacher I would be willing to know more about his background' and 'If Jamie was a student at my school I would wish that I did not have to teach him'.

Principal component analysis and Varimax rotation processes were repeated to re-determine statistical validity of the variables. Two component solutions were produced with both the positive and negative statements loaded into independent components as expected. This explained a total variance to 49.59 percent. Helping Behaviour explained 26.75 per cent and Punitive Behaviour 22.85 percent of the variance. The results of this analysis supports the use of the two initially proposed behaviour variables as separate scales.

11.9 Chapter Summary

To determine the validity of Petrides' Trait Emotional Intelligence Questionnaire (TEIQue), and to find the best fit of the teacher research data, three different exploratory factor analysis methods were performed. The first two methods appeared to have too much reliance on statistical relationships rather than theoretical, concluding with many important traits being eliminated statistically. These first two methods were rejected as their outcomes did not appear to be highly conceptually meaningful.

A final analytical method was explored to try and produce as close to Petrides' initially proposed 15 theoretically defined factors as possible. This third tool revision method, which was chosen for the current study's investigation, resulted in some eliminated and adapted trait scales, leaving 65 items that comprised 12 trait facets. These newly adapted trait facets showed adequate reliabilities greater than 0.7 using Cronbach alpha coefficient. Significant relationships (most correlations above 0.8) were also found between Petrides' original trait facets and the newly revised trait facets at the $p < 0.01$ level. The results of this comparison suggested that Petrides' original 153 item TEIQue has reasonable application but is not consistent due to its lack of discreet factor loading. There is too much cross-loading of items, and at face-value, many items are not relevant to the theorised measure/trait factor. This chapter challenged Petrides (2009) by demonstrating that the TEIQue can be transformed into a more statistically valid measurement instrument of the trait facets, whilst holding as much of its theoretical basis as possible.

The underlying structure of each of the factor scales within the Attribution Model Questionnaire for the current sample was also explored using factor analysis. Almost all of the original items and scales were retained. As unpredicted, however, the Responsibility/Control scale produced two independent scales – Perception of Student Responsibility/Control and Perception of Self Responsibility. The anger-related items did not load onto the Compassion scale as predicted, but instead formed part of the Negative Affect scale.

CHAPTER 12 - Demographic Background Data

This chapter displays the teacher respondent sample demographic data. It also assesses how well each sample proportionately represents the total population of Victoria in relation to some school and teacher demographics. Comparisons are made for teacher demographics and attribution variables for levels of global EI and specific EI traits. One-way Analysis of Variance (ANOVA) and/or independent t-tests are performed and only the statistically significant results are reported.

12.1 Population Frequency Data

Fifty one primary and secondary schools from around Victoria participated in the current research. Out of these, 42 schools were State Government, five Catholic and four Independent/Private schools. Three hundred and fifty nine teachers responded to the teacher survey. Two hundred and sixty one of these responses could be used for further analysis. Ninety-eight responses could not be used for further data analysis due to incomplete surveys, questions and non-teacher responding. The following information reports on the sample profile in relation to age, gender, qualifications, years of teaching experience and type of school.

12.1.1 Age and Gender

The total teacher population consisted of 205 females and 56 males. The sample collected was made up of 21.5% males and 78.5% females (see Table 12.1).

Table 12.1
Age and gender of teachers who responded to the Teacher Attribution Model Survey (TAMS)

| | | Gender | | |
		Male	Female	Total
Age	20-30	9	47	56
	31-40	16	56	72
	41-50	14	43	57
	51-60	11	48	59
	61+	6	11	17
Total		56	205	261

12.1.2 Highest Level of Education Completed
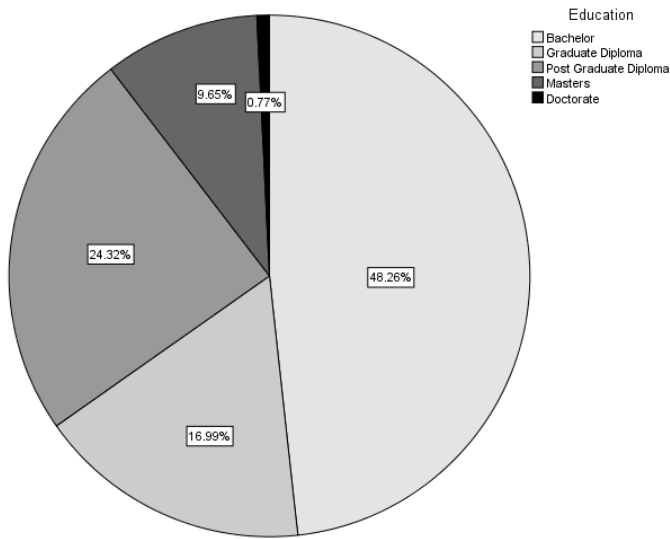
Figure 12.1. Percentages of the Highest Level of Education Achieved by sample respondents.

12.1.3 Years of Teaching Experience
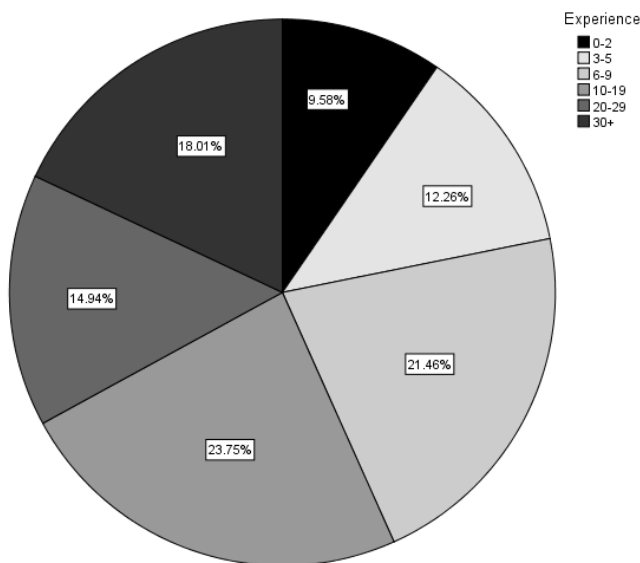
Figure 12.2. Percentages of Years of Teaching Experience by sample respondents

12.1.4 School Type
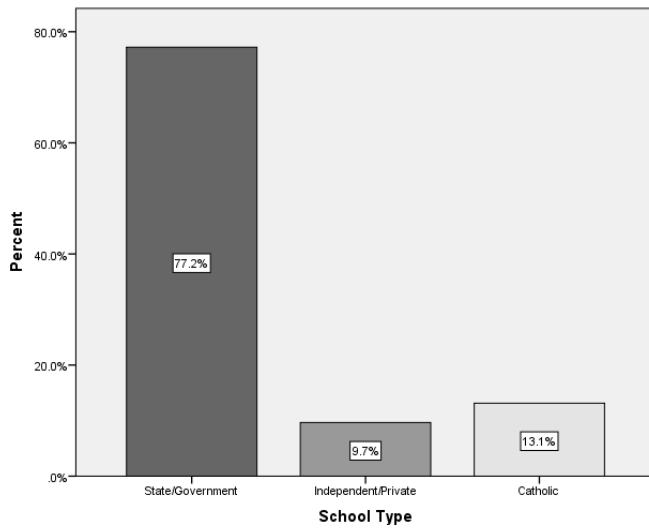
Figure 12.3 Percentage rate of teachers from each School Type who participated in the study

12.1.5 Level of Teaching
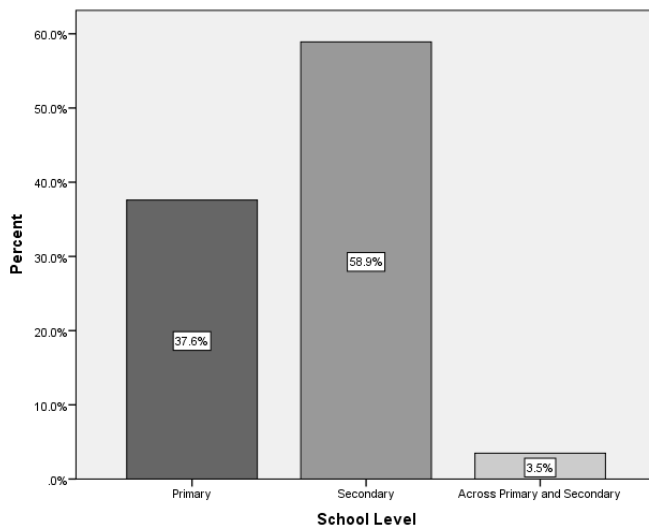
Figure 12.4. Percentage rates of teachers based on Year Levels Taught who participated in the study

12.1.6 School Types across Year Levels Taught
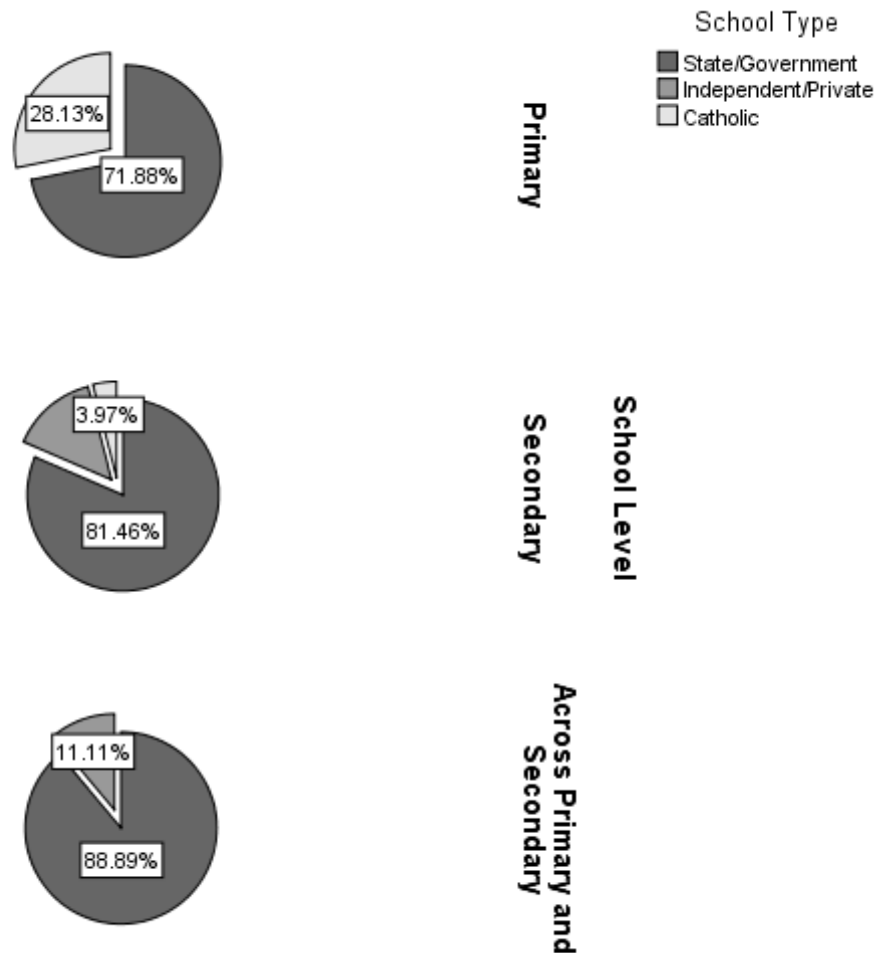
Figure 12.5. Percentage rates of School Types across Year Levels Taught

12.2 Sample and Population Comparisons

A comparison was made between the current study's school and teacher response sample and the total school and teacher population of Victoria, based on the 2015 census data (ABS, 2015). Each sample was assessed as to how well it proportionately represented the total population in relation to some school and teacher demographics.

12.2 1 School Type

12.2.1.1 Total Population and Sample Population School Type Comparisons

Data on types of schools in Victoria are shown in Table 12.2.

Table 12.2
Total population number and percentage of School Types in Victoria 2015 (ABS, 2015).

	No. of Schools	Percentage proportion of each School Type
Government	1,526	68.7%
Catholic	494	22.2%
Independent	203	9.1%
Total	2,223	
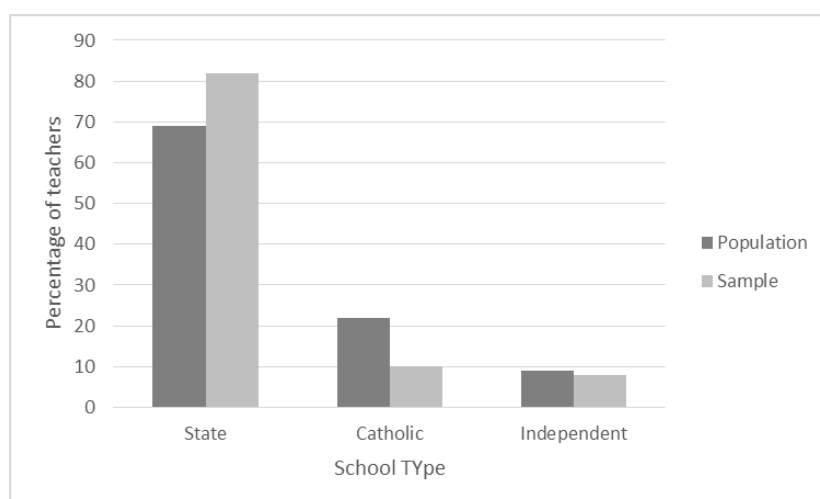
Figure 12.6. Percentage proportions of School Type from Victoria population (ABS, 2015) compared with sample population of schools.

Results shown in Figure 12.6 reveal that the sample of the different school types appeared to be representative in proportion for independent schools and over-representative for state schools. The Catholic sample appeared to be under-representative, but given that only 74 out of the 494 Catholic schools were invited to participate, the response rate is over-representative of this particular ratio. The largest Archdiocese in Victoria was not included in the study, as permission was not granted.

12.2.1.2 Total Population Invited to Participate and Response Sample Population School Type Comparisons

Composition of types of school invited to participate in this study is shown in Table 12.3.

Table 12.3
Number and percentage of School Types invited to participate

	No. of Schools	Percentage Proportion of each School Type
Government	1,526	84.6%
Catholic	*74	4.1%
Independent	203	11.3%
Total	1,803	

*This number only reflects the number of Catholic schools invited to participate in the study (420 schools were not approached due to consent not being provided by some regional Archdioceses).
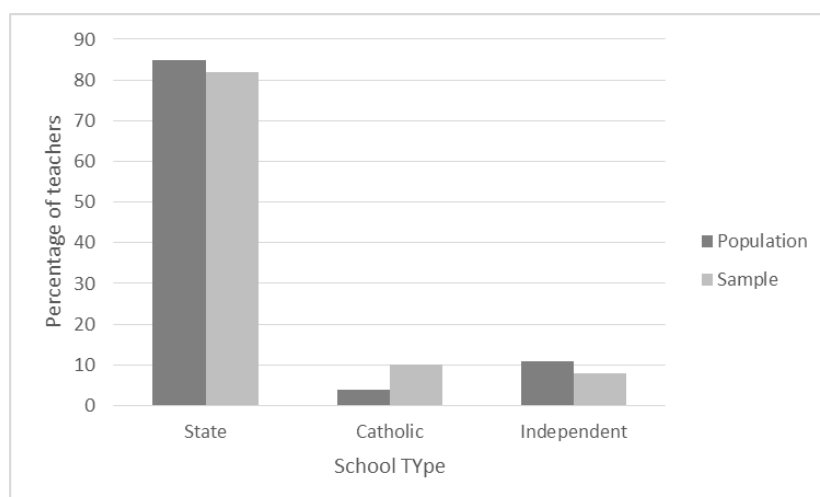
Figure 12.7. Percentage proportions of School Type based on the number of schools invited to participate compared with sample of schools collected.

Based on the number of schools invited to participate in the study, the sample of the different school types appeared to be very closely representative in proportion for state schools and over-representative for Catholic schools. Independent schools were only slightly under-represented.

12.2.2 School Type and Number of Teachers

Number and percentage of teachers from each School Type in Victoria is listed in Table 12.4.

Table 12.4
Number and percentage of teachers from each School Type in Victoria (ABS, 2015)

	Number of Teachers	Percentage of Teachers in population	Number of Teachers in Sample	Percentage of Teachers in sample
Government	**40,853.8**	60.2%	200	77%
Catholic	**14,733.1**	21.7%	25	10%
Independent	**12,267.2**	18.1%	34	13%
Total	67,854.1		259	
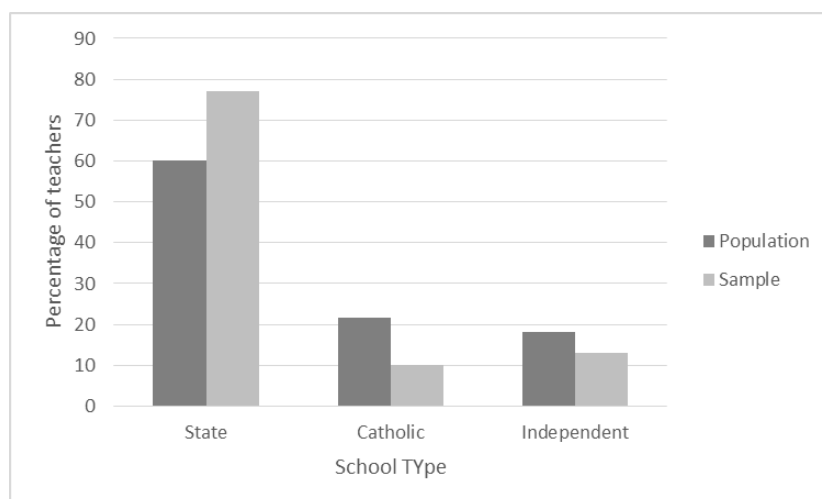
Figure 12.8. Total teacher population of Victoria compared with the sample population in relation to School Type

The sample appeared to be over-representative of the state school population. The Catholic sample appeared to be under-representative, but given that only 74 out of the 494 Catholic schools were invited to participate, the response rate is over-representative of this group. The largest Archdiocese in Victoria was not included in the study, as permission was not granted. The number of teachers within each Catholic diocese was unknown, so could not be specifically compared. The sample of Independent school teachers was slightly under-representative of its population proportion.

12.2.3 Teacher Population and Sample Population Comparisons across School Type, Year Levels Taught and Gender

See Table 12.5 for distribution of Victorian teachers by school type, year levels taught and gender.

Table 12.5

Victorian statistics on number and percentage proportion of teachers within each School Type, across School Levels Taught and Gender (ABS, 2015)

School	School Level		Males	Females	Total N	
Government	Primary	N=	4914.6	17843.2	22,757.8	55.71%
			21.6%	78.4%		
	Secondary	N=	7138.1	10957.9	18,096	44.29%
			39.45%	60.55%		
Total		N=	12,052.7	28,801.1	40,853.8	
			29.5%	70.5%		

Catholic	Primary	N=	1238.9	5948.6	7,187.5	48.78%
			17.24%	82.76%		
	Secondary	N=	3034.9	4510.7	7,545.6	51.22%
			40.22%	59.78%		
Total		N=	4,273.8	10,459.3	14,733.1	
			29%	71%		

Independent	Primary	N=	968.2	3290.3	4258.5	34.71%
			22.74%	77.26%		
	Secondary	N=	3374.7	4634.0	8,008.7	65.29%
			42.14	57.86		
Total		N=	4,342.9	7,924.3	12,267.2	
			35.4%	64.6%		

School	School Level		Males	Females	Total	
All School Types	Total Primary	N=	7,121.7	27,082.1	34,203.8	50.4%
			34.46%	57.40%		
	Secondary	N=	13,547.7	20,102.6	33,650.3	49.6%
			65.54%	42.6%		
Total		N =	20,669.4	47,184.7	67,854.1	
			30.5%	69.5%		

Australian Bureau of Statistics (ABS) (2015). Schools, Australia, 2015, Cat. No. 4221.0, ABS, Canberra.

http://www.abs.gov.au/AUSSTATS/abs@.nsf/DetailsPage/4221.02015?OpenDocument

(ABS NSSC Table 31a, 50a and 51a, 2014)

Total populations of Victorian teachers compared with the sample population are shown by school

level (Figure 12.9).

12.2.3.1 Gender

The total teacher population consisted of 30 percent males and 70 percent females. The sample collected was made up of 22 percent of males and 78 percent of females. This suggests that the sample slightly under-represented males and slightly over-represented females.

12.2.3.2 School Level
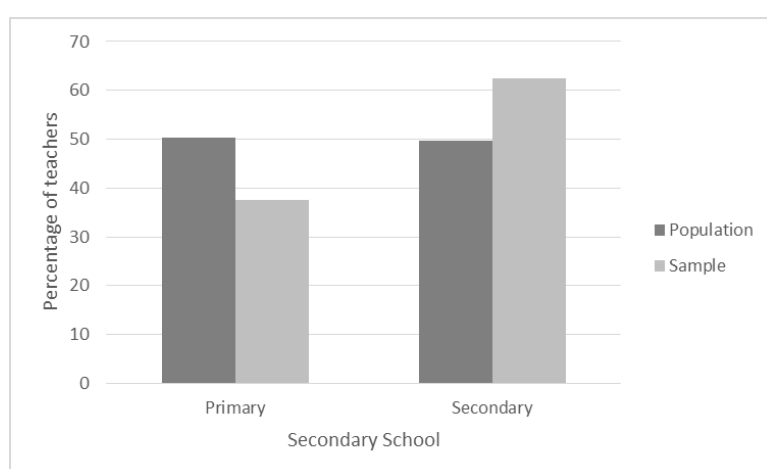
*Figure 12.9.*Total Teacher population proportion compared with sample population in relation to School Level

In Victoria, the population of teachers is spread almost evenly across both primary and secondary schools. The sample collected showed that there were more teachers from secondary schools who responded to the survey. This may be because more secondary than primary schools were invited to participate and the secondary schools which agreed to participate seemed to consist of more staff.

12.2.3.3 School Type and Gender
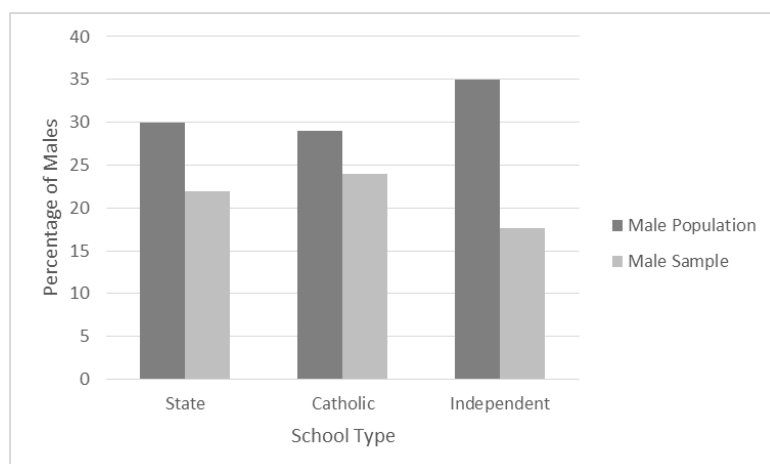
Figure 12.10. Total male teacher population proportion compared with male sample population in relation to School Type
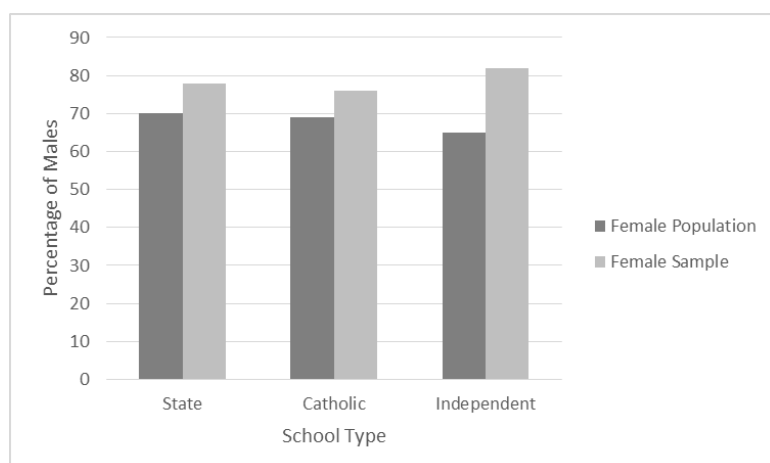
Figure 12.11 Total female teacher population proportion compared with female sample population in relation to School Type

On average, each sample population across school types had a male representative sample of 20 percent and females represented approximately 80 percent of the sample data. Compared with the total population, it revealed that males were under-represented in the study's sample population for all school types, and in the same proportion, females provided an over-representative sample. (See Figures 12.10 to 12.13).

12.2.3.4 School Year Level Taught and Gender
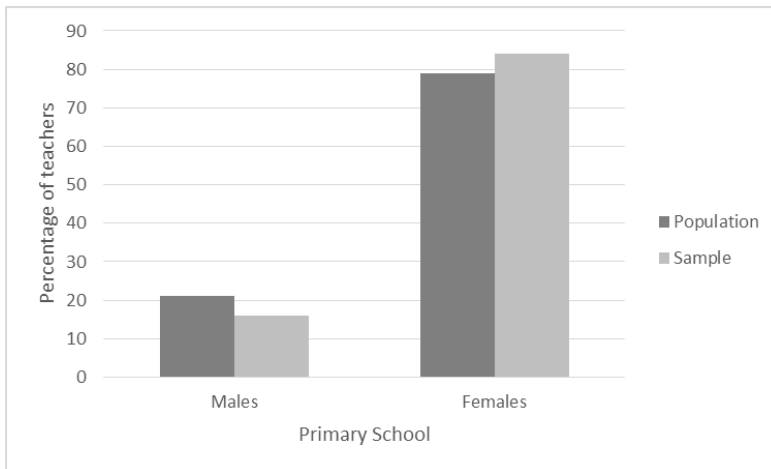
Figure 12.12 Total Primary School teacher population proportion compared with sample population in relation to Gender
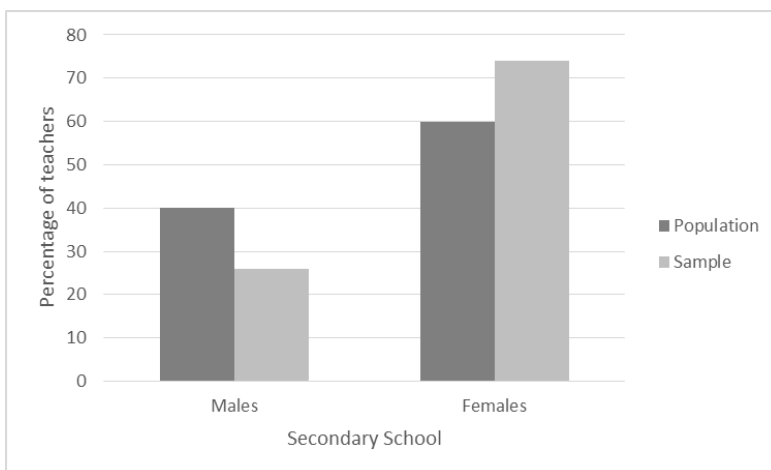
Figure 12.13 Total Secondary School teacher population proportion compared with sample population in relation to Gender

12.3 Teacher Trait EI Profiles (as group data)

Table 12.6

Means and standard deviations of teacher EI traits

	N	Mean	Std. Deviation
SELF ESTEEM	261	5.06	1.07
OPTIMISM	261	5.75	.88
PESSIMISM	261	5.60	1.10
EMOTION EXPRESSION RE SELF	261	5.12	1.16
EMPATHY	261	5.13	.90
EMOTION PERCEPTION	261	5.80	1.11
EMOTION EXPRESSION RE OTHERS	261	5.16	1.31
ASSERTIVENESS	261	4.32	1.10
EMOTION MANAGEMENT IN OTHERS	261	4.70	.98
STRESS MANAGEMENT	261	5.07	1.05
EMOTION REGULATION OF POSITIVE AFFECT	261	4.52	1.17
SELF MOTIVATION	261	5.44	.98
ADAPTABILITY	261	5.22	.91

Figure 12.14 *Boxplot of teacher EI trait levels as group data*
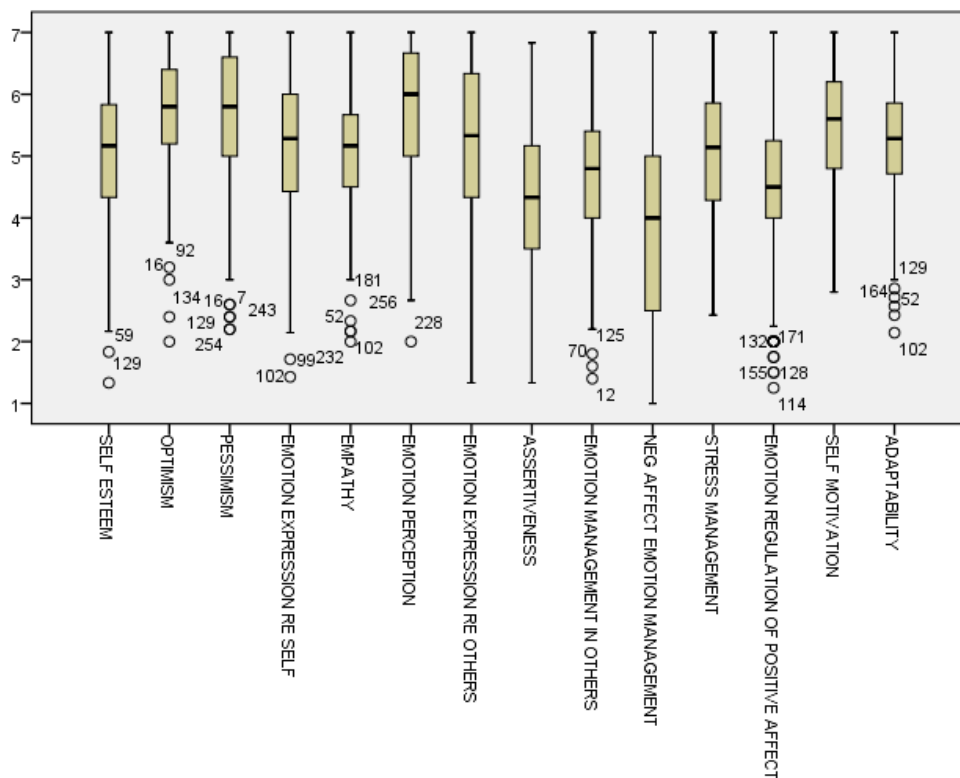
O = Generally represents outliers or extreme cases of scores outside of the general population 'norm', however, in the case of personality, it is expected that teachers will all have differing levels of EI and are not considered outliers in Figure 12.14.

All the statistically significant differences in relation to teacher levels of EI that are reported below, are based on group data mean comparisons using One-way ANOVA and independent t-test results. Comparisons were made for teacher demographics and attribution variables for levels of Global EI and level of specific EI traits, as shown in Table 12.6. Only the statistically significant results are reported and discussed.

12.4: Group Profile Comparisons of Teacher EI across Demographic Factors

One-way Analysis of Variance (ANOVA) was performed to evaluate any differences across demographic groups in relation to the EI traits. Where a difference was detected, independent t-tests were then performed to determine more specifically which of the demographic groups had significant variance between them.

12.4.1 Age and EI

Significant differences were found by age for (Low) Pessimism and Self-Motivation at the $p = <0.05$ confidence level. The EI trait (Low) Pessimism differs significantly across age groups $(F(4,256)=2.62, p<.05)$ as does Self-Motivation $(F(4,256)=3.21, p<0.5)$. Effect sizes were also calculated for both traits using Eta Squared (η^2). This suggested that only 4% of the variation in (Low) Pessimism can be explained by the differences in age. Only 5% of the variation in Self-Motivation could be explained by age (refer to Table 12.7 in Appendix A).

The following t-test comparisons provided insight into EI traits across age groups. Examination of individual traits assisted in determining trait stability and whether some traits possibly develop or mature over the course of a teacher's life. When the specific EI traits were explored in relation to age, it was found that:

The 51-60 age group reported lower levels of Pessimism and higher levels of Self-Motivation compared with the 20-30 age group (t(113)= -2.86, p<.05), (t(106.85)=-3.43, p<.05). The 51-60 age group also showed higher levels of Self-Motivation than the 41-50 age group (t(114)=-2.39, p<.05) and the 31-40 age group (t(129)=-2.06, p<.05). The 61+ age group also reported lower levels of Pessimism than the 20-30 age group (t(71)=-2.34, p<.05) (See Tables 12.8 to 12.11 in Appendix A).

12.4.2 Gender and EI

A significant difference was found in Global EI levels across gender at the p = <0.05 confidence level using independent t-testing. Females were found to have significantly higher Global EI than males (t(259)=-2.08, p<.05) (see Table 12.12 in Appendix A).

12.4.2.1 Male and Female Comparisons of Individual EI traits

When individual EI traits were compared, it told a story of two very different profiles of teachers differentiated by gender. It was found that females reported higher Optimism (t(259)= -2.0, p<.05), lower Pessimism (t(259)= -2.38, p<.05), higher ability in Expression of their own emotions (t(259)= -2.92, p<.05), and others' Emotions (t(259)= -2.51, p<.05) , higher Empathy (t(259)= -2.52, p<.05), higher Emotion Perception (t(259)= -2.56, p<.05), and higher Self-Motivation (t(259)= -2.89, p<.05) (see Table 12.13 in Appendix A).

12.4.3 Gender, Age and EI Traits

12.4.3.1 Self-Motivation Trait and Female Age Groups

One-way ANOVA revealed that males did not vary in Global EI or EI traits across age groups. There was, however, a significant difference detected in female's Self-Motivation EI trait levels across age groups (F(4,200)=2.6, p<0.5) (refer to Table 12.14 in Appendix A).

12.4.3.2 Age, Gender and Trait EI Descriptive Results

It was explored whether any EI traits varied across age groups based on gender. No significant effects were detected for males based on the One-way ANOVA test. When female teacher EI trait levels were compared across age groups it was found that only the 51-60 age group had significantly higher Self-Motivation than the 20-30 age group (t(93) =-3.07), p<.05 (refer to Table 12.15 in Appendix A). No other significant effects were found for gender and age across the EI traits.

12.4.4 Teacher Qualifications and EI

No significant differences were found in teacher's EI trait levels across qualification level using One-way ANOVA. There was no support for EI trait levels changing with level of education.

12.4.5 Teaching Experience and EI Traits

One-way ANOVA detected significant differences between some EI traits and the number of years teaching experience. Significant differences were found in teachers levels of Pessimism (F(5,255)=3.28, p<0.5), Emotion Expression (re: self) (F(5,255)=2.29 p<0.5), Emotion Perception (F(5,255)=2.14, p<0.5) and Self-Motivation (F(5,255)=2.29, p<0.5) Traits across years of teaching experience (refer to Table 12.16 in Appendix A).

A significant difference was found in levels of Pessimism and Self-Motivation between new teachers (0-2 years teaching) and those who had been teaching the longest (30+ years). Those who had been teaching for more than 30 years had lower levels of Pessimism (t(70)= -2.47, p<.05) and higher levels of self-motivation (t(70)= -2.42, p<.05).

A significant difference found in levels of Self-Motivation between teachers (3-5 years teaching) and those who had been teaching longer (10-19 years and 30+ years). Those who had been teaching for 10-19 years had higher levels of Self-Motivation than those teaching for only 3-5 years (t(92)= -2.00, p<.05). Those teachers who had been teaching for 30+ years also had higher levels of Self-Motivation than those only teaching for 3-5 years (t(77)= -2.83, p<.05).

A significant difference was found in levels of Self-Motivation between teachers with 20-29 years of teaching experience and those who had been teaching longer (30+ years). Those who had been teaching for 30+ years had higher levels of Self-Motivation than those only teaching for 20-29 years (t(84)= -1.97, p<.05).

Independent t-tests revealed significant difference between those who had been teaching 6-9 years and those who had been teaching longer (10-19 years) in relation to Pessimism, Emotion Expression (Re: Self) and Emotion Perception. Those who had been teaching for more than 10-19 years had lower levels of Pessimism (t(116)= -2.88, p<.05), higher levels of Emotional Expression regarding themselves (t(116)= -2.72, p<.05) and higher Emotion Perception (t(116)= -3.16, p<.05).

Independent t-tests revealed significant differences between those who had been teaching 6-9 years and those who had been teaching longer (30+ years). Those teachers who had been teaching for more than 30 years had lower levels of Pessimism (t(101)= -3.42, p<.01), higher levels of Emotional Expression regarding themselves (t(101)= -3.07, p<.05) and higher Self-Motivation (t(101)= -2.22, p<.05).

To summarise, the 30+ age group was significantly lower in Pessimism compared with those who hadn't been teaching as long (0-2 years and 6-9 years). Those who had been teaching for 10-19 years also had significantly lower Pessimism than those teaching for only 6-9 years. In relation to Self-Motivation, the teachers who had taught for more than 30 years reported higher levels of Self-Motivation that those who had only been teaching for 0-2, 3-5, 6-9 and 20-29 years (refer to Tables 12.17 to 12.22 in Appendix A).

12.4.6 School Type and EI Traits

One-way ANOVA indicated the presence of significant differences in levels of Adaptability trait across Type of School F(2,256)=3.17, p<0.05. State School teachers had higher Adaptability trait levels than the Independent School teachers (t(223)=2.53, p<.05) (refer to Tables 12.23 and 12.24 in Appendix A).

12.4.7 Year Levels Taught and EI Traits

A significant difference was found in Assertiveness trait levels across Year Levels Taught using independent t-test. Secondary School teachers reported higher levels of the Assertiveness trait than Primary School teachers ($t(247)=-2.29$, $p<.05$) (refer to Table 12.25 in Appendix A).

12.5 Group Profile Mean Comparisons of Attribution Model Variables across Demographic Factors

Independent t-tests were performed to determine differences across demographic groups in relation to the Attribution Model variables. One-way ANOVA tests were used to indicate the presence of differences where there were more than two groups to be compared, such as age groups. Only the significant differences are presented and reported below.

12.5.1 Gender and Perception of Student

A statistically significant difference was found between how the student's level of control/responsibility was perceived by male and female teachers. The results indicated that the male teachers tended to view the student as having more control and responsibility over his presentation than what female teachers did ($t(259) = 2.56$, $p<.05$) (refer to Table 12.26 in Appendix A).

12.5.2 Gender and Perception of Own Personal Responsibility

Females tended to view themselves as having more personal responsibility over the student's presentation than did male teachers ($t(259)=-2.34$, $p<.05$) (refer to Table 12.27 in Appendix A).

12.5.3 Age and Compassion

One-way ANOVA revealed the presence of significant differences between levels of Compassion across age groups ($F(4,252)=3.36$, $p<0.05$). Teachers aged 51-60 reported higher levels of Compassion than those aged 20-30 ($t(109)=-3.463$, $p<.05$). Teachers aged 51-60 reported higher levels of Compassion than those teachers aged 31-40 ($t(127)=-2.81$, $p<.05$). Teachers aged 51-60 reported

significantly higher Compassion than those aged 41-50 (t(112)=-2.25, p<.05) (refer to Tables 12.28 to 12.31 in Appendix A).

12.5.4 Age and Likely Punitive Behaviour

One-way ANOVA indicated significant differences in Likely Punitive Behaviour across age groups F(4,256)=3.79, p<0.05.

Significant differences were found in teachers' levels of Likely Punitive Behaviour across age groups. The 20-30 age group were significantly higher in Likely Punitive Behaviour than the 31-40 age group (t(126)=2.69, p<.05. The 20-30 age group were significantly higher in Likely Punitive Behaviour than the 51-60 age group (t(113)=3.45, p<.05. The 20-30 age group were also significantly higher in Likely Punitive Behaviour than the 61+ age group (t(71)=1.99, p<.05). The 41-50 age group was significantly higher in Likely Punitive Behaviour than the 51-60 age group (t(114)=2.11, p<.05).

In summary, teachers within the 20-30 age bracket reported higher levels of Likely Punitive Behaviour than those within the 31-40, 51-60 and 61+ age brackets. Statistics indicate a large drop in likely punitive behaviour as teachers age (refer to Tables 12.32 to 12.36 in Appendix A).

12.5.5 Years of Teaching Experience and Compassion

One-way ANOVA indicated significant differences in levels of Compassion across Years of Teaching Experience (F(5,251)=2.63, p<0.05). Independent t-test revealed higher Compassion among those who had taught for 20-29 years compared with those who had taught for 6-9 years (t(91)=-2.91, p<.05). Independent t-test revealed higher Compassion levels from those who had taught for 30+ years than those who had taught for 6-9 years (t(99)=-2.84, p<.01) (refer to Tables 12.37 to 12.39 in Appendix A) .

12.5.6 School Type and Perception of Student

Independent t-test revealed that teachers from State schools perceived the student to have higher Responsibility/Control than those from Catholic schools (t(232)=-2.18, p<.05) (refer to Table 12.40 in Appendix A).

12.5.7 School Type and Self-Efficacy

State School teachers perceived themselves to have significantly higher Self-Efficacy than did Independent School teachers (t(223)=-2.03, p<.05) (refer to Table 12.41 in Appendix A).

12.5.8 School Type and Negative Affect

State School teachers reported significantly lower Negative Affective states than did Independent School teachers (t(223)=-2.54, p<.05) (refer to Table 12.42 in Appendix A).

12.5.9 Year Level Taught and Perception of Student Responsibility

Independent t-test showed significant differences between primary and secondary school teachers in relation to their perceived levels of Student Responsibility/Control (t(247)=-2.53, p<.05). Secondary school teachers perceived the student to have higher responsibility and control than did primary school teachers (refer to Table 12.43 in Appendix A).

12.6 Chapter Summary

Fifty one primary and secondary schools from across Victoria participated in the current research. Of these, 42 schools were State Government, five Catholic and four Independent/Private schools. Three hundred and fifty nine teachers responded to the Teacher Survey. Two hundred and sixty one of these responses could be used for further analyses. Teacher respondent sample profiles were presented in relation to age, gender, qualifications, years of teaching experience, type of school and year levels taught.

Each sample also assessed as to how well it proportionately represented the total population of Victoria in relation to selective school and teacher demographics. Based on the number of schools invited to participate in the study, the sample of the different school types and number of teachers generally appeared to be closely representative in proportion for state schools and over-representative for Catholic schools. Independent schools were only slightly under-represented. The sample slightly under-represented males and slightly over-represented females.

One-way Analysis of Variance (ANOVA) and/or independent t-tests were performed and reported to indicate significant differences across demographic groups in relation to EI and EI traits. Gender differences were found, where females had higher Optimism, lower Pessimism, higher ability in Emotion Expression regarding Self and Others, higher Empathy, higher Emotion Perception and higher Self-Motivation compared with males. All traits generally remained stable across age and years of experience. Some significant differences were found, however, between the younger age group and less experienced groups, mainly in the Pessimism and Self-Motivation traits compared with some older and more experienced teacher groups, which will be discussed further in this thesis. State School teachers had higher Adaptability trait levels than the Independent School teachers. Secondary School teachers reported higher levels of the Assertiveness trait than Primary School teachers.

Independent t-tests and One-way ANOVA were performed to determine differences across demographic groups in relation to the Attribution Model variables that assisted with further understanding and interpretation of the study's statistical findings.

Male teachers tended to view the student as having more control and responsibility over his presentation than what female teachers did. Females tended to view themselves as having more personal responsibility over the student's presentation than did male teachers.

Teachers within the 20-30 age bracket reported higher levels of likely Punitive Behaviour than those within the older age brackets. Those teachers aged 51-60 reported significantly higher levels of Compassion than the younger age groups. There was also a significant trough in Compassion levels for those who had 6-9 years of teaching experience.

State school teachers perceived the student to have higher Responsibility/Control than their counterparts from Catholic schools. State school teachers perceived themselves to have significantly higher Self-Efficacy and lower negative emotional states than did Independent school teachers.

Secondary school teachers perceived the student to have higher Responsibility and Control than did Primary school teachers.

This profile data is useful for further discussion in this thesis as it assists with the interpretation and understanding of some of the effects which are revealed in the current study's results.

CHAPTER 13 - Statistical Procedures

This chapter outlines the statistical procedures that were performed which include exploring and understanding the teacher data, relationships between variables, experimental group comparisons and the development of the EI Process Model of Stigmatisation (EPS-Model) and ASET tool.

13.1 Stage 1: Intercorrelations (refer to section 14.1)

Univariate statistics were used to establish the study's sample and their suitability for parametric analysis. One sample Shapiro-Wilk tests were used to determine normal distribution for each EI and Attribution Model variable. These tests indicated that a number of the scaled scores did not approximate a normal distribution. Therefore, non-parametric statistical analyses were used where possible and parametric tests had to be used where there was no feasible non-parametric alternative. Parametric tests were also compared with the non-parametric tests to determine if there were in fact any significant differences between the two methods. As will be demonstrated, the correlational data, regression data and independent t-tests indicated the same significant statistical findings, whether the parametric or non-parametric methods were used. It was proposed by Boneau (1960, in Thomas & Rose, 2010, p. 172), that "the violation of the assumption of normal distribution generally has little effect on the values of parametric tests". This was confirmed to be the case in the current study.

Means and standard deviations were computed for all metric variables that were explored (refer to Table 14.1 in results section). Bivariate analyses were computed using Spearman's correlation coefficient (Spearman's rho) as there are no assumptions about the shape of the underlying distributions. This helped to locate significant relationships between variables. Pearson's Correlation Coefficient (r) was computed as the main correlation measure throughout the study (as there were no differences in significance between the two methods). Only significant correlations higher than .20 were recorded for further analysis (refer to correlation matrix Tables 14.2 & 14.4 in statistical results section). This value is the mid-point (between .10 &.29) for small, yet significant, correlations. Below .2 was considered very weak correlation and too small to be deemed important in this study. The attribution variables, total EI and EI traits were all presented in the correlation matrix. A second table

showed the EI trait correlations and demonstrated the (theoretical) independence and interrelation of each trait facet variable (refer to Tables 14.3 and 14.5 in Results section).

13.2 Stage 2: Attribution Model Interrelationships (refer to sections 14.1 & 14.2)

It needed to be determined whether the Attribution Model was actually measuring the processes that it purported to measure with this sample/context. That is, that likely punitive/helping behaviour is dependent on affect, which is dependent on cognition. Correlational results of the cognitive, affective and behaviour variables enabled a test of hypotheses 5 & 6 that related to the relationships within the Attribution Pathway Model (correlation matrix presented in Table 14.2).

These correlational relationships were explored further using visual pathway diagrams that show significant relationships with reference to specific hypotheses. These diagrams are presented in section 14.7.

Multiple regression statistics are also presented (in section 14.2) to indicate which cognitive variables significantly predict the affect variables, and which affect variables predict helping/punitive behaviours. The variance within each hypothesised relationship were presented (R^2) as well as the Beta and T statistics. Further, pathway analysis extends on these relationships to confirm directionality of the model and the indirect influences on the model stages.

Exploratory regression analyses of the Attribution Model factors were performed to demonstrate possible relationships outside the hypothesised Attribution Model, as has been found in some research. A new direction was tested where cognition is dependent on affect, and likely behaviour (Punitive/Helping) is dependent on cognition (section 14.2.2).

13.3 Stage 3: Experimental Group Intercorrelations (refer to section 14.3)

Means and standard deviations were presented for all metric variables explored for the two behaviour severity experimental groups (refer to section 14.3).

13.4 Stage 4: Experimental Group Comparisons (refer to section 14.4)

As a base comparison rate, differences between the two experimental groups were explored in relation to their levels of global EI and individual EI traits. This was to ensure that EI was a controlled factor and that there were no differences in EI between the two groups that could account for any statistical effects found in the following analyses. Independent sample Mann-Whitney tests (non-parametric substitute) and independent t-tests (Pearson's r) were used to determine if significant differences existed between the two experimental groups (Behaviour Severity – low vs high) on all major constructs.

This mean ranks test (U) helped determine if there were any significant effects that the different vignettes may have elicited between the two groups. Comparisons between mean ranks of high and low severity groups were calculated for teacher's (1) Perception of Student (2) Perception of Self (3) Self-Efficacy (4) Perceived Risk (5) Negative Affect (6) Compassion, and likelihood of (7) Helping and (8) Punitive behaviour. Results of these tests enabled a test of the hypotheses (7 & 8) relating to differences between high and low severity groups. These results related specifically to the descriptive question as to whether a student's level of difficult or challenging behaviour is a stronger predictor of teacher helping behaviour than EI. It was assumed that Behaviour Severity manipulation of the hypothetical student was the influencing factor where significant differences were found between the two experimental groups.

Independent t-tests compared and confirmed any undetected differences in statistical outcomes, depending on method used (parametric vs. non-parametric results) and whether results were consistent with those from the Mann-Whitney (U) tests. The results remained consistent despite the method.

13.5 Stage 5: Causal Attribution Factors (refer to section 14.5)

Mean scores for teachers' causal attribution factors (Student, Teacher, School and Family factors) were compared to determine what teachers perceived to be the main cause of behaviour by the

student with EBD. Causal factors were compared using related (paired) samples t-tests to determine any significant differences between teachers' perceptions of different factors. Mean and standard deviations of teachers' perceived causal attribution factors are presented in Table 14.16.

The mean of each individual (item level) causal factor perceived by teachers was presented in Table 14.18 in ranked order from the highest perceived/rated factor to the lowest. These analyses assisted in gathering descriptive information to respond to the descriptive question about what teachers' attribute caused the student's presentation.

The two teacher experimental groups (Behaviour Severity) were compared by levels of perceived causal factors using independent t-tests to determine any significant differences in the cause of the student's behaviour. This helped to test whether perceived causal attribution factors, as a result of severity of student behaviour, had any significant impact predominantly on teacher cognition (or other Attribution Model variables), influencing the helping outcome.

Intercorrelations were computed for individual causal attribution factors and two cognitive variables – Perception of Student Responsibility/Control and Personal Responsibility. These were the only two Attribution Model variables that significantly correlated with some causal factors (with a statistical relationship greater than .20). This related to the descriptive question of how teachers' causal perceptions related to their perception of the student's level of responsibility and their level of personal responsibility.

13.6 Stage 6: Path Analysis (refer to chapter 15)

To examine the main research question and hypotheses, path analysis models were computed using AMOS (version 23). Path analyses identified factors most strongly associated with outcome measures (Likely Helping and Punitive Behaviour) and the influence of EI on these measures. Directionality of the pathway, as well as other important indirect associations, were considered. This analysis provides assessment of the suitability and accuracy of data to the conceptualised EI model. Processes of path analyses and development of the newly hypothesised conceptual model are presented in chapter 15.

The first step in the process involved arranging the variables, based on the hypothesised 'EI Process Model of Stigmatisation', which purports an EI-cognitive-affective-behavioural directional model. As this hypothesised model did not reach statistical significance, another variable arrangement, based on previously identified correlational relationships was utilised to find 'best fit'.

A maximum likelihood chi-square estimation method was used to test each hypothesised directional pathway. This method calculated causal relationships between variables. Several indices were considered in assessing best fit of data to each model. These included the Chi-square (χ^2) statistic that required a probability of greater than 0.05 (Kline, 1998) and Root Mean Square Error of Approximation (RMSEA). The Tucker-Lewis Index (TLI), Standardised Root Mean Squared Residual (SRMR), Comparative Fit Index (CFI) and Goodness of Fit (GFI) were also used to assess model fit. Each fit index had its own cut-off score for significance, as explained further in chapter 15. Directional pathways in the model were also only retained if they had correlational significance ($p < 0.05$). The proposed 'EI Process Model of Stigmatisation' (EPS-Model) is presented in section 15.4.

Once a new model had been established, its correlational relationships were presented using visual pathway diagrams that showed the significant relationships as well as directionality (see section 15.9).

13.7 Stage 7: Profile Group Development for ASET Tool (refer to chapter 16)

13.7.1 Step 1: Extracted Profile Group Selection

Teachers with 'extreme' and 'least favourable' traits were specifically identified so that profiles could start to be developed for the Assessment Screen for Emotionally Intelligent Teachers tool. The term 'least favourable' refers to those teachers whose scores indicated the most negative consequences or harmful outcomes for either themselves or students. As an example of Profile 1, those teachers who experienced high Negative Affect and High Punitive Behaviour were extracted from the data and classified as one extreme 'clinical' group with specific and distinct characteristics.

Extracted profile groups were identified based on their high or low scores (within the top or bottom 25th percentile of scores) on all the Attribution Model variables within each related pathway previously identified (direct and non-direct). This method helped identify and cluster teachers whose scores on the Attribution Model Pathway were most related to lower helping and higher punitive outcomes. These groups of teachers were referred to as Extracted Profile Groups (EPG), of which there were six, developed from each of the six pathways leading to helping or punitive behaviour.

13.7.2 Step 2: Group Comparisons across Attribution Model Factors

Each EPG was compared with the remaining teacher population group using independent t-tests and non-parametric tests (Mann-Whitney U), to ensure the two groups were statistically distinct and unique across relevant attribution pathway variables; as was the purpose of extraction. Other attribution variable differences between the two groups were explored for supplemental information of effect.

13.7.3 Step 3: Trait EI Comparisons

Once EPG groups were established, their levels of trait EI were compared with the rest of the teacher population using independent t-tests and non-parametric tests (Mann-Whitney U). Significant differences found for some EI traits highlighted the presence and impact of EI on each attribution variable within that particular pathway. EI traits found to vary significantly were used for further analysis that led to the most 'ideal' outcome/profile.

13.8 Stage 8: Creating Cut-off Points in the Population Data (refer to section 16.8)

Once EPG data were removed from the total teacher data, new 'normed' teacher populations were created for each pathway in relation to levels of trait EI. 'Cut-off' points were generated by identifying quartile scores of the newly 'normed' teacher populations. Cut-off scores for the 'ideal' teacher EI trait profile were created from the new normed data, where scores in the top 75th percentile were considered to be within the ideal trait range. Scores at and below the 24th percentile of EI trait levels captured a portion of those teachers whose scores fell into one of the extracted profile groups.

13.9 Stage 9: Practical Testing of the Cut-off Criteria (refer to section 16.10)

Once trait EI cut-off scores were created, hypothesised predictions were tested. The total population of teachers was divided into two groups; those who scored above and below the cut-off scores in relation to EI. Using independent t-tests and Mann-Whitney tests (non-parametric) due to unequal sample sizes, it was determined whether the two teacher groups, who differed in their levels of EI were still able to predict (the originally identified) variance across the Attribution Model variables – affect, cognitive and behaviour. Significant differences between the two groups confirmed the ability of EI to predict helping outcomes (without having to specifically measure a teacher's affective and cognitive processes).

13.10 Stage 10: Development of the Compassion Stress Resilience Indicator Scale (refer to chapter 17)

The statistical processes outlined in Stages 7, 8 and 9 were repeated as means of developing the compassion stress profile/scale in chapter 17. As discussed in the literature review section, this analysis related to a compassion stress assumption that, would be expected to show excessively high compassion scorers, who reported excessively high negative affect and would be less resistant to compassion stress. As this does not appear to occur for all teachers, the goal was to identify 'who' these at-risk teachers/factors may be, and a profile was developed accordingly to assist with measurement of this. The relevant EI traits were identified and a cut-off score profile was developed.

13.11 Stage 11: Development of the Longevity Indicator Scale (refer to section 17.8)

The development of the Longevity Indicator cut-off score was based on exploratory analysis of teacher demographic data. It was proposed that significant differences that had been found in the Self-Motivation trait between younger age groups and those who had been teaching for longer, demonstrated the difference between those who stay in the profession and those who leave within the first 5 years. Some of these younger teachers, who were lower in Self-Motivation, were removed from the data to determine whether the patterns in EI would then become stable across age and experience.

It was unknown what the specific levels of Self-Motivation would be that would distinguish these two possible outcomes and so, using an exploratory method, the bottom 25% of the less experienced scorers were separated to form a potential 'drop-out' group. One-way ANOVA and Independent t-tests were used to indicate a cut-off criterion score for the Longevity Indicator.

The following chapters display the results of the teacher data as sequentially described above, leading to the development of a new EI Model of Stigmatisation (EPS-Model in section 15.4) and ASET tool (Appendix E).

CHAPTER 14 – Statistical and Descriptive Results

This chapter reports the statistical and descriptive results (means and standard deviations) of the teacher data (Table 14.1). As already established in the statistical procedures section, significant variable intercorrelations greater than 0.2, regression analysis statistics, experimental group comparisons and attribution factor comparisons are made. Only significant findings of the One-Way ANOVA and t-tests are reported where applicable.

14.1 Stage 1: Intercorrelations of Total Sample Population of Teachers

Table 14.1

Summary of means, standard deviations and population (N) for each metric variable explored.

Descriptive Statistics

	N	Mean	Std. Deviation
SELF ESTEEM	261	5.06	1.07
OPTIMISM	261	5.75	.88
PESSIMISM	261	5.60	1.10
EMOTION EXPRESSION RE SELF	261	5.12	1.16
EMPATHY	261	5.13	.90
EMOTION PERCEPTION	261	5.80	1.11
EMOTION EXPRESSION RE OTHERS	261	5.16	1.31
ASSERTIVENESS	261	4.32	1.10
EMOTION MANAGEMENT IN OTHERS	261	4.70	.98
STRESS MANAGEMENT	261	5.07	1.05
SELF MOTIVATION	261	5.44	.98
ADAPTABILITY	261	5.22	.91
Global EI	261	66.89	8.34
Perception of Student	257	9.11	3.09
Perception of Self	261	6.70	2.67
Self-Efficacy	257	19.98	5.27
Perceived Risk	257	7.30	2.90
Negative Affect	257	32.37	11.24
Compassion	257	16.33	2.75
Likely Helping Behaviour	257	33.23	5.20
Likely Punitive Behaviour	257	9.07	3.98

Means and standard deviations are presented for all metric variables explored. The data were assessed and appeared suitable to use for further analysis. For the EI traits, the values are toward the higher mid range of scale. Teachers' perceptions of themselves and student, perceived risk and likely punitive behaviour, are at the lower end of the range, with negative affect undecided in the mid range. Self-efficacy, compassion and helping are situated at the higher end of the scale. The SDs are generally low across all variables suggesting that values are clustered together, close to the reported means, with limited variability.

The correlations in Table 14.2 are also displayed as visual pathway diagrams (in Figures 14.6 to 14.22) to show the significant relationships with reference to specific hypotheses.

Table 14.3 displays the EI trait correlations and demonstrates the (theoretical) independence and interrelation of each trait facet variable. The traits are generally low to moderately correlated, suggesting that the facets are independent of each other (measuring different theoretical concepts) yet are also interrelated, as would be necessary for personality scales. The trait facets also generally show (low to high) moderate correlations with Global EI, demonstrating shared dependency and contribution to a person's overall EI. (See Tables 14.4 and 14.5).

Table 14.2:

Significant variable intercorrelations using Pearson's Correlation Coefficient r (only relationship strengths greater than .20 are reported)

	Percept of Student	Percept of Self	Self-Efficacy	Perceiv Risk	Neg. Affect	Compass	Likely Helping Behav.	Likely Punitive Behav.
SELF ESTEEM			.243**		-.291**			-.222**
OPTIMISM			.246**			.290**	.260**	-.276**
PESSIMISM	-.267**		.295**		-.367**	.248**	.251**	-.315**
EMOTION EXPRESSION RE SELF			.200**					
EMPATHY			.255**		-.208**		.241**	-.216**
EMOTION PERCEPTION						.253**	.216**	-.212**
EMOTION EXPRESSION RE OTHERS								
ASSERTIVE			.308**	-.226**	-.431**			
EMOTION MGT IN OTHERS			.253**	-.238**	-.307**			
STRESS MANAGE.			.350**	-.218**	-.460**		.212**	-.230**
SELF MOTIVAT.			.238**		-.268**		.230**	-.205**
ADAPTABILITY			.406**		-.432**		.270**	-.247**
Global EI			.392**	-.247**	-.436**	(.193**)	.276**	-.296**
Perception of Student		*			.243**	-.315**	-.225**	.416**
Perception of Self					.230**			
Self-Efficacy				-.447**	-.678**		.550**	-.289**
Perceived Risk			-.447**		.572**		-.216**	.277**
Negative Affect	.243**	.230**	-.678**	.572**			-.295**	.364**
Compassion	-.315**						.421**	-.391**
Likely Helping Behaviour	-.225**		.550**	-.216**	-.295**	.421**		-.468**
Likely Punitive Behaviour	.416**		-.289**	.277**	.364**	-.391**	-.468**	

** Correlation is significant at the 0.01 level (2-tailed). The correlation value of compassion with EI was less than .2, but included here for comparison with other factors relating to Global EI.

Table 14.3 *Significant EI trait variable intercorrelations using Pearson's Correlation Coefficient r (only relationship strengths greater than .20 are reported)*

OPTIM	PESS	EMOTION EXPRESS RE SELF	EMPAT	EMOTION PERCEPT	EMOTION EXPRESS RE OTHERS	ASSERT	EMOTION MGT IN OTHERS	STRESS MGT	SELF MOTIV	ADAPT	Global EI	
.435**	.492**	.429**		.494**	.264**	.361**		.458**	.395**	.469**	.678**	SELF ESTEEM
	.635**	.280**	.322**	.422**	.273**		.201**	.535**	.350**	.490**	.626**	OPTIMISM
		.398**	.269**	.525**	.290**	.282**	.241**	.597**	.496**	.564**	.751**	PESSIMISM
			.346**	.590**	.531**	.380**	.273**	.293**	.408**	.362**	.695**	EMOTION EXPRESSION RE SELF
				.345**	.219**		.411**	.251**	.260**	.420**	.507**	EMPATHY
					.352**	.216**	.265**	.452**	.471**	.463**	.729**	EMOTION PERCEPTION
									.336**	.302**	.526**	EMOTION EXPRESSION RE OTHERS
							.317**	.304**	.262**	.228**	.482**	ASSERTIVENESS
								.281**		.260**	.463**	EMOTION MANAGEMENT IN OTHERS
									.375**	.596**	.711**	STRESS MANAGEMENT
										.433**	.643**	SELF MOTIVATION
											.734**	ADAPTABILITY

**. Correlation is significant at the 0.01 level (2-tailed)

Table 14.4

Significant variable intercorrelations using Spearman's rho Correlation Coefficient (only relationship strengths greater than .20 are reported)

	Percept of Student	Percept of Self	Self-Efficacy	Perceiv Risk	Neg. Affect	Compas.	Likely Helping Behav.	Likely Punitive Behav.
SELF ESTEEM			.246**		-.290**			-.217**
OPTIMISM			.271**			.310**	.300**	-.318**
PESSIMISM	-.289**		.349**		-.385**	.272**	.287**	-.320**
EMOTION EXP. RE SELF			.232**	-.215**	-.203**			
EMPATHY			.284**	-.234**	-.233**	.206**	.273**	-.234**
EMOTION PERCEPTION					-.224**	.235**	.234**	-.220**
EMOTION EXP. RE OTHERS								
ASSERTIVENESS			.319**	-.231**	-.437**			
EMOTION MGT IN OTHERS			.269**	-.249**	-.339**			
STRESS MANAGEMENT			.389**	-.232**	-.468**		.236**	-.265**
SELF MOTIV.			.278**		-.277**	.203**	.263**	-.216**
ADAPTABILITY		-.202**	.417**		-.430**		.312**	-.285**
Global EI	-.221**		.428**	-.260**	-.474**		.315**	-.304**
Perception of Student					.215**	-.309**	-.218**	.402**
Perception of Self					.258**			
Self-Efficacy				-.433**	-.673**		.572**	-.345**
Perceived Risk			-.433**		.556**		-.219**	.299**
Negative Affect	.215**	.258**	-.673**	.556**			-.309**	.368**
Compassion	-.309**						.421**	-.368**
Likely Helping Behaviour	-.218**		.572**	-.219**	-.309**	.421**		-.490**

** Correlation is significant at the 0.01 level (2-tailed).

Table 14.5 *Significant EI trait variable intercorrelations using Spearman's rho Correlation Coefficient (only relationship strengths greater than .20 are reported)*

	SELF ESTEEM	OPTIM	PESS	EMOTION EXPRES RE SELF	EMPAT	EMOTION PERCEP	EMOTION EXPRESS RE OTHERS	ASSERT	EMOTION MGT IN OTHERS	STRESS MGT	SELF MOTIV	ADAPT
SELF ESTEEM		.420**	.468**	.427**		.487**	.259**	.364**	.207**	.453**	.385**	.467**
OPTIMISM	.420**		.598**	.323**	.357**	.443**	.271**		.227**	.542**	.373**	.495**
PESSIMISM	.468**	.598**		.469**	.312**	.534**	.348**	.272**	.295**	.603**	.554**	.578**
EMOTION EXPRESS RE SELF	.427**	.323**	.469**		.362**	.608**	.539**	.382**	.308**	.346**	.408**	.402**
EMPATHY		.357**	.312**	.362**		.369**	.204**		.465**	.290**	.310**	.392**
EMOTION PERCEPTION	.487**	.443**	.534**	.608**	.369**		.362**		.278**	.464**	.505**	.484**
EMOTION EXPRESS RE OTHERS	.259**	.271**	.348**	.539**	.204**	.362**				.230**	.357**	.332**
ASSERTIVE	.364**		.272**	.382**					.331**	.325**	.226**	.248**
EMOTION MGT IN OTHERS	.207**	.227**	.295**	.308**	.465**	.278**		.331**		.328**		.307**
STRESS MGT	.453**	.542**	.603**	.346**	.290**	.464**	.230**	.325	.328**		.409**	.632**
SELF MOTIVATION	.385**	.373**	.554**	.408**	.310**	.505**	.357**	.226**		.409**		.454**
ADAPTABILIT	.467**	.495**	.578**	.402**	.392**	.484**	.332**	.248**	.307**	.632**	.454**	
Global EI	.650**	.599**	.760**	.710**	.514**	.717**	.515**	.489**	.510**	.740**	.641**	.743**

** Correlation is significant at the 0.01 level (2-tailed).

14.2 - Stage 2: Attribution Model Factor Interrelationships

14.2.1 Multiple Regression Analysis

14.2.1.1 Cognition Predicts Affect

The following analyses relate to hypothesis 5 where Cognition predicts Affect. (See Table 14.6).

Table 14.6

Linear regression analyses of the associations between Cognition and Affect (within the Attribution Model)

Cognitive Measures	Level of Negative Affect $R^2 = .571$			Compassion $R^2 = .132$		
	β	t	Sig.	β	t	Sig.
Perception of Student	.10	2.29	.023*	-.35	-5.77	.000**
Perception of Self	.10	2.3	.023*	.08	1.41	.16
Self-Efficacy	-.50	-10.68	.000**	.01	.01	.99
Perceived Risk	.33	7.02	.000**	.15	2.34	.020*

**. Correlation is significant at the 0.01 level (1-tailed)
*. Correlation is significant at the 0.05 level (1-tailed)

Regression analysis indicated that all the cognitive variables significantly predicted Negative Affect and accounted for 57% of variance in relation to the specific measure. The cognitive contribution to Compassion accounted for 13% of variance with only Perception of Student and Perceived Risk being the significant contributors (see Table 14.6).

14.2.1.2 Affect Predicts Behaviour

The following analyses relate to hypothesis 6 where Affect predicts Behaviour. (Table 14.7).

Table 14.7
Linear regression analyses of the associations between Affect and Behaviour (within the Attribution Model)

Affect Measures	Helping $R^2 = .285$			Punitive $R^2 = .308$		
	β	t	Sig.	β	t	Sig.
Negative Affect	-.33	-6.17	.000**	.40	7.6	.000**
Compassion	.45	8.37	.000**	-.42	-8.0	.000**

**. Correlation is significant at the 0.01 level (1-tailed)
*. Correlation is significant at the 0.05 level (1-tailed)

Regression analysis indicated that all the affect variables significantly predicted Helping

Behaviour and accounted for 29% of variance in relation to the specific measure. The affective

contribution to Punitive Behaviour accounted for 31% of the variance (see Table 14.7)

Table 14.8

Linear regression analyses of the associations between all Attribution Model factors on likely Behaviour
(Punitive/Helping)

	Likely Punitive Behaviour $R^2 = .377$			**Likely Helping Behaviour** $R^2 = .500$		
Attribution Measures	*β*	*t*	*Sig.*	β	t	Sig.
Perception of Student	.24	-4.3	.000**	-.01	-.14	.89
Perception of Self	-.11	-2.2	.030*	.06	1.27	.20
Self-Efficacy	.04	-.56	.58	.62	10.07	.000**
Perceived Risk	.14	2.2	.028*	-.06	-1.14	.26
Negative Affect	.26	3.3	.001**	.12	1.69	.09
Compassion	-.35	-6.4	.000**	.43	8.85	.000**

**. Correlation is significant at the 0.01 level (1-tailed)
*. Correlation is significant at the 0.05 level (1-tailed)

Regression Analysis indicated which factors within the proposed Attribution Model contribute

to likely Punitive Behaviour. The proposed factors accounted for 38% of variance in likely Punitive

Behaviour with Self-Efficacy being the only variable to not significantly contribute to punitive

outcomes (see Table 14.8).

Proposed attribution factors accounted for 50% of the variance on Helping Behaviour, with.

Self-Efficacy and Compassion being the only variables that significantly contributed to helping

outcomes.

The regression analyses presented above helped to further indicate the likely direction of

variable relationships, as previously hypothesised. That is, cognition predicts affect, that predicts

behaviour. This Attribution Model sequence is displayed as a visual pathway diagram (section 14.6 in

section 14.7) to show the significant relationships with reference to hypotheses 5 and 6.

14.2.2 Exploratory Regression Analysis of Attribution Model Factors

Table 14.9

Linear regression analyses where Affect predicts Cognition (contradictory to the Attribution Model pathway)

Affect Measures	Perception of Student $R^2 = .171$			Perception of Self $R^2 = .054$			Self-Efficacy $R^2 = .461$			Perceived Risk $R^2 = .333$		
	β	t	Sig.	β	t	Sig.	β	t	Sig.	β	t	Sig.
Negative Affect	.27	4.68	.000**	.23	3.7	.000**	-.68	14.662	.000**	.57	11.0	.000**
Compassion	-.34	-5.85	.000**	-.04	.68	.500	0.3	.67	.504	.08	1.5	.145

**. Correlation is significant at the 0.01 level (1-tailed)
*. Correlation is significant at the 0.05 level (1-tailed)

Both Negative Affect and Compassion accounted for 17% of variance in Perception of Student. Only Negative Affect significantly contributed to Perception of Self, Self-Efficacy and Perceived Risk, accounting for 5%, 46% and 33% of total variance, respectively (see Table 14.9).

Table 14.10

Linear regression analyses of the associations between all cognitive factors on likely Behaviour (Punitive/Helping)

Cognitive Measures	Likely Punitive Behaviour $R^2 = .254$			Likely Helping Behaviour $R^2 = .334$		
	β	t	Sig.	β	t	Sig.
Perception of Student	.38	6.81	.000**	-.14	-2.7	.007**
Perception of Self	-.12	-2.11	.027*	.11	2.0	.044*
Self-Efficacy	-.17	-2.69	.007**	.56	9.6	.000**
Perceived Risk	.17	2.7	.008**	.04	.70	.48

**. Correlation is significant at the 0.01 level (1-tailed)
*. Correlation is significant at the 0.05 level (1-tailed)

All cognitive factors accounted for 25% of variance in Likely Punitive Behaviour. Cognitive factors accounted for 33% of variance on Helping Behaviour with Perceived Risk being the only cognitive variable to not contribute thereto (see Table 14.10).

14.3 - Stage 3: Experimental Group Intercorrelations for all EI Traits and all Attribution Model Variables

Table 14.11

Summary of means, standard deviations and population (N) for each current study variable in each experimental group.

	Scenario: Behaviour severity	N	Mean	Std. Deviation
SELF ESTEEM	High Behaviour Severity	142	5.10	1.01
	Low Behaviour Severity	119	5.01	1.14
OPTIMISM	High Behaviour Severity	142	5.71	.91
	Low Behaviour Severity	119	5.79	.85
PESSIMISM	High Behaviour Severity	142	5.60	1.16
	Low Behaviour Severity	119	5.59	1.03
EMOTION EXPRESSION RE SELF	High Behaviour Severity	142	5.10	1.16
	Low Behaviour Severity	119	5.14	1.17
EMPATHY	High Behaviour Severity	142	5.09	.87
	Low Behaviour Severity	119	5.17	.93
EMOTION PERCEPTION	High Behaviour Severity	142	5.86	1.10
	Low Behaviour Severity	119	5.72	1.13
EMOTION EXPRESSION RE OTHERS	High Behaviour Severity	142	5.17	1.30
	Low Behaviour Severity	119	5.15	1.33
ASSERTIVENESS	High Behaviour Severity	142	4.29	1.11
	Low Behaviour Severity	119	4.35	1.08
EMOTION MANAGEMENT IN OTHERS	High Behaviour Severity	142	4.67	.96
	Low Behaviour Severity	119	4.73	1.00
STRESS MANAGEMENT	High Behaviour Severity	142	5.06	1.03
	Low Behaviour Severity	119	5.09	1.08
EMOTION REGULATION OF POSITIVE AFFECT	High Behaviour Severity	142	4.51	1.17
	Low Behaviour Severity	119	4.54	1.18
SELF MOTIVATION	High Behaviour Severity	142	5.43	1.00
	Low Behaviour Severity	119	5.46	.95
ADAPTABILITY	High Behaviour Severity	142	5.18	.91
	Low Behaviour Severity	119	5.27	.91
Global EI	High Behaviour Severity	142	66.79	8.21
	Low Behaviour Severity	119	67.01	8.54
Perception of Student	High Behaviour Severity	139	8.93	3.15
	Low Behaviour Severity	118	9.31	3.02
Perception of Self	High Behaviour Severity	142	6.73	2.96
	Low Behaviour Severity	119	6.66	2.29
Self-Efficacy	High Behaviour Severity	139	19.22	5.89
	Low Behaviour Severity	118	20.88	4.28

Perceived Risk	High Behaviour Severity	139	8.01	2.94
	Low Behaviour Severity	118	6.47	2.63
Negative Affect	High Behaviour Severity	139	33.50	11.53
	Low Behaviour Severity	118	31.03	10.78
Compassion	High Behaviour Severity	139	16.89	2.64
	Low Behaviour Severity	118	15.67	2.74
Likely Helping Behaviour	High Behaviour Severity	139	33.18	5.35
	Low Behaviour Severity	118	33.29	5.04
Likely Punitive Behaviour	High Behaviour Severity	139	9.34	3.94
	Low Behaviour Severity	118	8.75	4.02

NB. n>100 is considered a large sample (Stevens, 1996), so the two groups are of suitable size for analyses performed.

14.4 - Stage 4: Experimental Group Comparisons

14.4.1: Experimental Group Comparisons for Emotional Intelligence Traits (Nonparametric Testing)

No significant differences were found when the High and Low Behaviour Severity Experimental Groups were explored using Mann-Whitney (U) tests for each EI trait and Global EI. (see Table 14.12 in Appendix B).

14.4.2 Independent Experimental Group Comparisons for the Attribution Model Variables

Differences between the High and Low Behaviour Severity Experimental Groups were explored using Mann-Whitney (U) tests for each attribution variable. Significant differences were found for Self-Efficacy, Perceived Risk and Compassion (see Table 14.13).

Table 14.13

Experimental group comparisons for Attribution Model factors using nonparametric ranks test (Mann Whitney)

Test Statistics[a]

	Student Respons.	Teacher Respons.	Self-Efficacy	Perceived Risk	Negative Affect	Compass	Likely Helping Behaviour	Likely Punitive Behaviour
Mann-Whitney U	7576.00	8245.50	7028.00	5798.50	7291.50	6178.50	8099.50	7418.00
Wilcoxon W	17306.00	18398.50	16758.00	12819.50	14312.50	13199.50	17829.50	14439.00
Z	-1.06	-.34	-1.98	-4.07	-1.53	-3.43	-.17	-1.32
Asymp. Sig. (2-tailed)	.29	.74	.05	.00	.13	.00	.86	.19

a. Grouping Variable: Scenario: Behaviour severity

Ranks

	Scenario: Behaviour severity	N	Mean Rank	Sum of Ranks
Perception of Student	High Behaviour Severity	139	124.50	17306.00
	Low Behaviour Severity	118	134.30	15847.00
Perception of Self	High Behaviour Severity	142	129.57	18398.50
	Low Behaviour Severity	119	132.71	15792.50
Self-Efficacy	High Behaviour Severity	139	120.56	16758.00
	Low Behaviour Severity	118	138.94	16395.00
Perceived Risk	High Behaviour Severity	139	146.28	20333.50
	Low Behaviour Severity	118	108.64	12819.50
Negative Affect	High Behaviour Severity	139	135.54	18840.50
	Low Behaviour Severity	118	121.29	14312.50
Compassion	High Behaviour Severity	139	143.55	19953.50
	Low Behaviour Severity	118	111.86	13199.50
Likely Helping Behaviour	High Behaviour Severity	139	128.27	17829.50
	Low Behaviour Severity	118	129.86	15323.50
Likely Punitive Behaviour	High Behaviour Severity	139	134.63	18714.00
	Low Behaviour Severity	118	122.36	14439.00

14.4.2.1 Descriptive Results for Group Comparisons

Differences between the High and Low Behaviour Severity experimental groups for each EI trait and Global EI were tested. That no significant differences were found, for any of the traits between behaviour severity groups, suggests that a student's behavioural presentation does not have

any significant effect or influence on a teacher's EI. Therefore, EI can be considered an effectively controlled independent variable.

The EI and Attribution Model experimental group comparisons suggest that EI cannot account for the differences found between experimental groups in relation to some of the Attribution Model variables.

Student behaviour (in the scenario) seems to be the factor that can best explain the significant differences in Self-Efficacy, Perceived Risk and Compassion, across the two teacher groups. Regardless of this finding, no significant differences were found between the two groups in relation to Likely Helping and Punitive Behaviour. So, despite the effect of student behaviour on teachers' cognitions, it still does not affect teachers' behavioural outcomes. This helps to support the notion that EI is still the dominant factor which influences helping outcomes.

14.4.3 Independent Experimental Group Comparisons for EI Traits using T-tests

To confirm the above nonparametric results, independent t-tests were also conducted to compare the two experimental groups in relation to EI traits and attribution variables.

As confirmed using the nonparametric test, there were no statistically significant differences found between the two Experimental Groups in relation to their levels of Global EI and their EI traits using independent t-tests (refer to Table 14.14 in Appendix B).

Differences between the High and Low Behaviour Severity Groups were explored using independent t-tests for each variable in the Attribution Model to confirm whether there were differences in the statistical outcome depending on the statistical method used (non-parametric versus parametric test). The results were consistent with those found from the Mann-Whitney (U) tests. Significant differences were still only found between the two Behaviour Severity Groups in relation to Self-Efficacy ($t(249.36)=-2.62$, $p<0.01$), Perceived Risk ($t(255)=4.37$, $p<0.01$) and Compassion ($t(255)=3.64$, $p<0.01$) (see Table 14.15 in Appendix B).

14.5 Stage 5: Causal Attribution Factors

14.5.1 Teachers' Responses Relating to their Perceived Cause of the Student's Presentation

The mean score for teachers' causal attribution factors (Student, Teacher, School and Family factors) were compared, using related samples t-tests, to determine what teachers perceived to be the main cause of the student's behaviour. The different factors paired for comparison are presented below. All factor combinations are calculated.

Significant differences were found between all the paired attribution factors, except between the Student and Teacher factors (see Table 14.16). These factors were perceived to be of a similar level of causation. Family factors were perceived to be a significantly greater cause for the student's behaviour than Teacher, Student and School factors. School factors were also perceived to be a significantly greater cause for the student's behaviour than Student and Teacher factors, which were perceived to be the least cause of the student's behaviour (see Table 14.17 & Figure 14.1).

Table 14.16
Comparison of teacher causal attribution factors using Paired Samples T-tests

Paired Samples Test

| | | Paired Differences | | | | | | | |
| | | | Std. Deviation | Std. Error Mean | 95% Confidence Interval of the Difference | | | | Sig. (2-tailed) |
		Mean			Lower	Upper	t	df	
Pair 1	Family Factors - Student Factors	.42605	.71326	.04415	.33912	.51299	9.650	260	.000
Pair 2	Family Factors - Teacher Factors	.50230	1.00429	.06216	.37989	.62471	8.080	260	.000
Pair 3	Family Factors - School Factors	.17375	.87279	.05402	.06737	.28014	3.216	260	.001
Pair 4	Student Factors - Teacher Factors	.07625	.94542	.05852	-.03899	.19148	1.303	260	.194
Pair 5	Student Factors - School Factors	-.25230	.88949	.05506	-.36072	-.14388	-4.582	260	.000
Pair 6	Teacher Factors - School Factors	-.32854	.92534	.05728	-.44133	-.21576	-5.736	260	.000

Paired Samples Statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Family Factors	3.4803	261	.86006	.05324
	Student Factors	3.0542	261	.81571	.05049
Pair 2	Family Factors	3.4803	261	.86006	.05324
	Teacher Factors	2.9780	261	.99610	.06166
Pair 3	Family Factors	3.4803	261	.86006	.05324
	School Factors	3.3065	261	.92869	.05748
Pair 4	Student Factors	3.0542	261	.81571	.05049
	Teacher Factors	2.9780	261	.99610	.06166
Pair 5	Student Factors	3.0542	261	.81571	.05049
	School Factors	3.3065	261	.92869	.05748
Pair 6	Teacher Factors	2.9780	261	.99610	.06166
	School Factors	3.3065	261	.92869	.05748

Table 14.17 *Mean scores and standard deviation for each Causal Factor (in descending order).*

Descriptive Statistics

	N	Sum	Mean	Std. Deviation	Variance
Family Factors	261	908.35	3.4803	.86006	.740
School Factors	261	863.00	3.3065	.92869	.862
Student Factors	261	797.15	3.0542	.81571	.665
Teacher Factors	261	777.25	2.9780	.99610	.992
Valid N (listwise)	261				
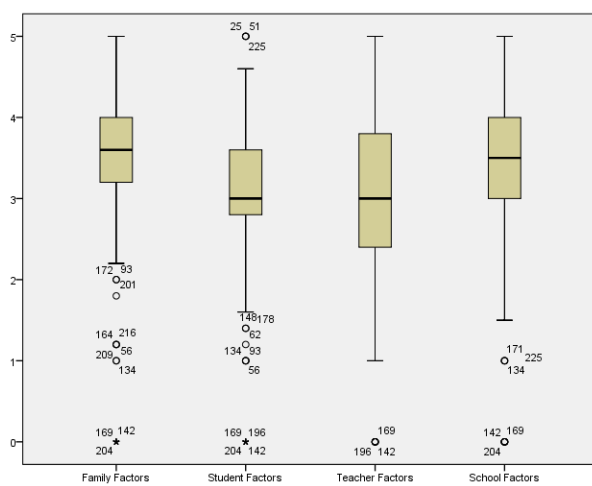
Figure 14.1: Visual boxplot of teachers' perceived causal attribution factors

14.5.2 Individual Causal Factors

Table 14.18 displays the mean (teacher group) scores for each individually perceived causal attribution factor. It is presented in descending order; from the highest perceived/rated factor to the lowest.

Table 14.18

Mean scores and standard deviation for each Individual Causal Factor (in descending order).

	N	Mean	Std. Deviation
Dysfunctional parental unit	254	4.08	.91
Poor attachment between parents and child	255	4.03	.92
Lack of resources and services for children like Jamie in our schools	254	3.82	1.12
Bad school experiences of the child (e.g. rejection by peers)	255	3.70	.93
Lenient parental discipline	254	3.68	1.04
Parents' low socioeconomic background	255	3.44	1.08
Innate personality/temperament	250	3.42	1.05
The student wants to attract others' attention	254	3.39	1.03
The student dislikes school	255	3.31	1.09
Inappropriate manner towards the student of previous teachers	255	3.16	1.08
Teacher's inappropriate manner towards the student (e.g. ignore the student)	255	3.11	1.11
Poor school organisation and management (e.g. poor disciplinary systems)	253	3.05	1.13
Poor classroom management	251	3.00	1.10
Teaching style (e.g. authoritarian, democratic, indifferent)	255	3.00	1.06
Teacher's personality (e.g. distant, friendly)	255	2.96	1.04
Class sizes too large	253	2.96	1.17
Student's low intelligence	253	2.83	1.15
The student is being purposely manipulative	253	2.68	1.03
Excessively strict parental discipline	253	2.58	1.16
Valid N (listwise)	232		

Figures 14.2 to 14.5 show visual boxplots of teachers'perceived causal attribution factors.
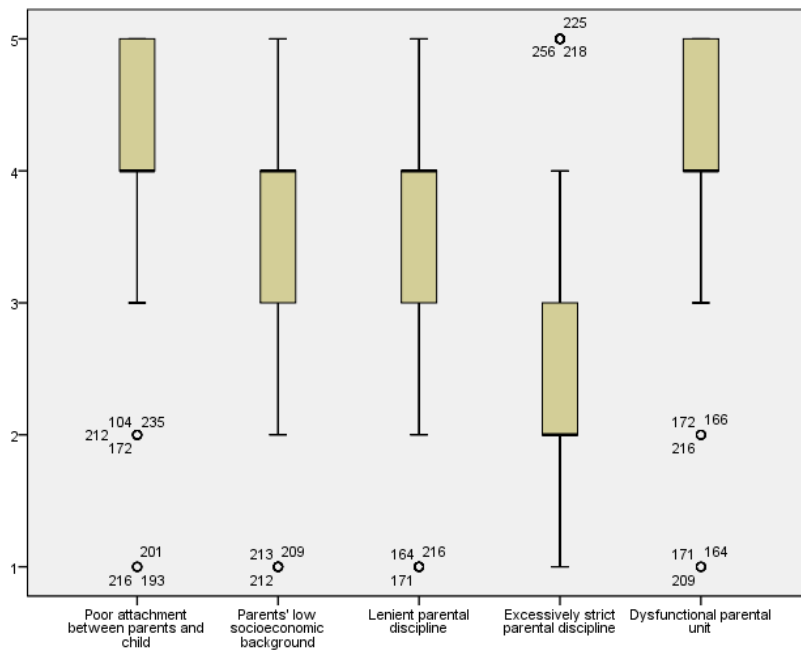
Figure 14.2 Visual boxplot of teachers' perceived causal attribution factors – Family factors
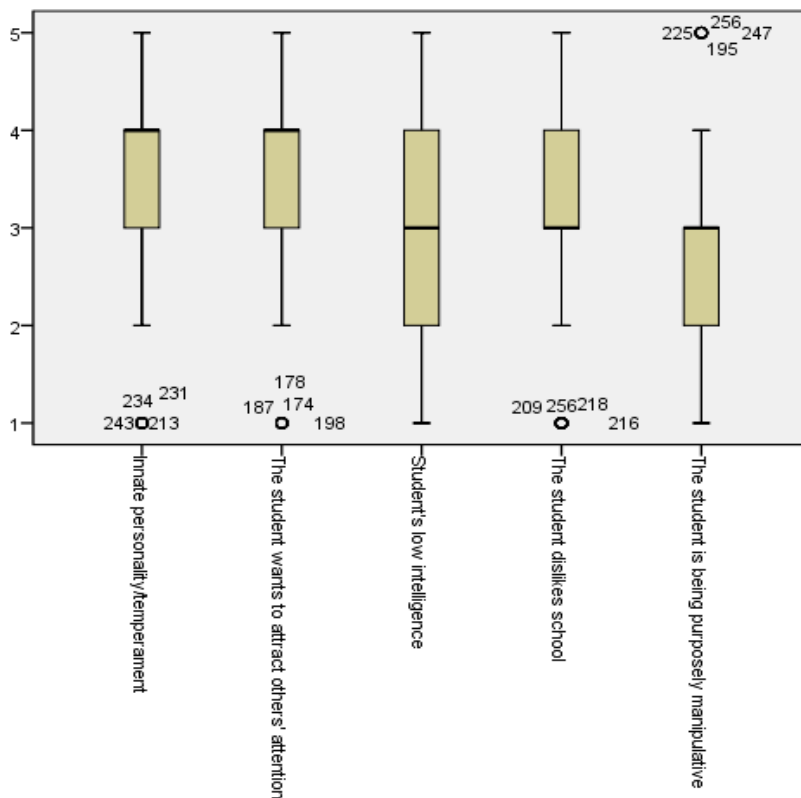
Figure 14.3 Visual boxplot of teachers' perceived causal attribution factors – Student factors
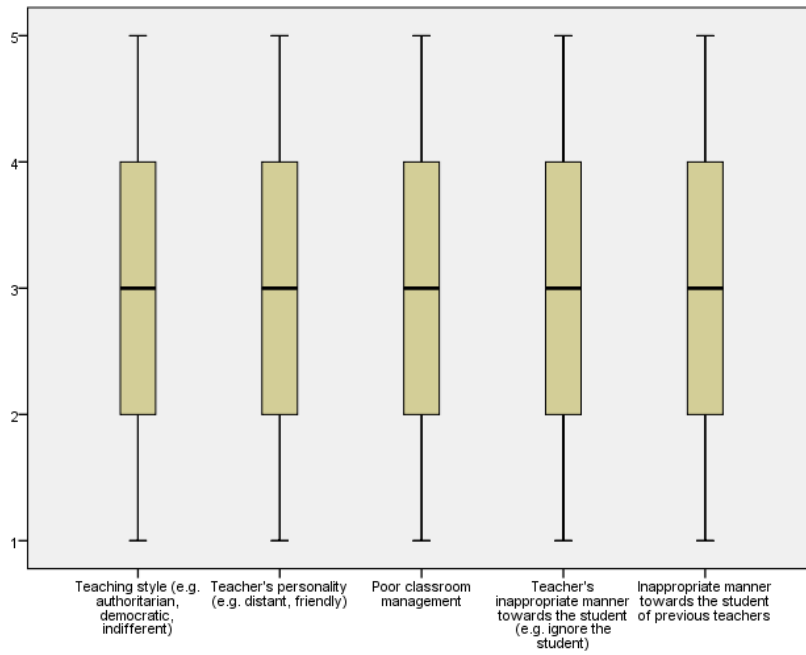
Figure 14.4 Visual boxplot of teachers' perceived causal attribution factors – Teacher factors
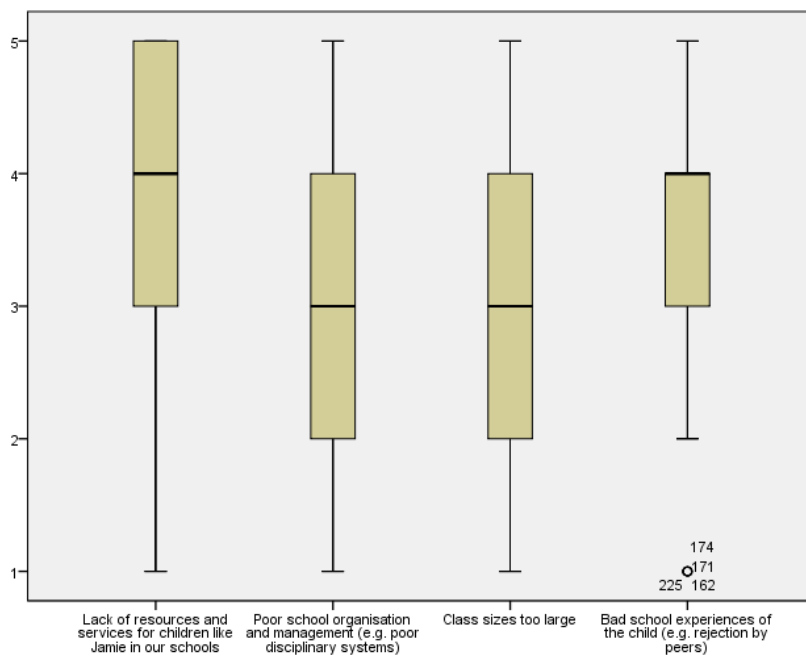
Figure 14.5 Visual boxplot of teachers' perceived causal attribution factors – School factors

14.5.3 Causal Attribution Factors and Behaviour Severity Groups Comparisons

The two teacher Behaviour Severity Groups were compared across causal factors using independent t-tests to determine any significant differences in what the two groups attributed to being the cause of the student's behaviour.

No significant differences were found between the two groups in relation to their perceived cause of the student's behaviour (Student, Teacher, Family and School factors) (see Table 14.19 in Appendix B). T-tests were also conducted for the individual causal factors, and no significant differences were found between the two groups. This suggests that the student's severity of behaviour did not impact on what teachers perceived to be the main cause of the student's behaviour.

14.5.4 Causal Attribution Factors and Perception of Student and Self Relationships

Perception of Student and Perception of Self were the only variables found to significantly relate to some causal attribution item factors with an effect size greater than .20. The significant Pearson Correlation Coefficient relationships are presented in Table 14.20.

Table 14.20

Significant correlations between causal attribution item factors and Teacher Perception of Student and Perception of Self variables (using Pearson's r) NB. Values <.2 are shown in ( ) for comparison purposes only

Causal Attribution Items	Perception of Student Responsibility	Perception of Teacher Responsibility
Lenient parental discipline	(.17**)	
The student wants to attract others' attention	(.13*)	
The student is being purposely manipulative	.27**	
Teaching style (e.g. authoritarian, democratic, indifferent)		.26**
Teacher's personality (e.g. distant, friendly)		.24**
Poor classroom management	(.16*)	
Teacher's inappropriate manner towards the student (e.g. ignore the student)		.21**
Inappropriate manner towards the student of previous teachers		(.19**)
Poor school organisation and management (e.g. poor disciplinary systems)	(.15*)	(.14*)

14.6 Chapter Summary

This chapter reported on the statistical and descriptive results (means and standard deviations) of teacher data. Significant variable intercorrelations, with relationship strengths greater than 0.2, were displayed (in matrix tables [Tables 14.6 to 14.20] and as visual diagrams [Figures 14.6 to 14.22]), as calculated using Pearson's Correlation Coefficient r and Spearman's rho Correlation Coefficient. There were no differences between the statistical significance of the two methods. Significant EI trait correlations (above 0.2) were found to demonstrate the independence and interrelation of each EI trait facet variable, as anticipated. The traits were generally low to moderately correlated, suggesting independence of the facets from each other (they clearly measure different theoretical concepts) yet they are interrelated, as would be necessary for personality scales. The EI trait facets generally showed (low to high) moderate correlations with Global EI, demonstrating shared dependency and contribution to a person's overall EI. Regression analysis R^2 demonstrated many possible relationships between the hypothesised and exploratory affective, cognitive and behaviour variables, that warranted further investigation.

Experimental group comparisons were made across the attribution factors. Differences between the High and Low Behaviour Severity Groups for each EI trait and Global EI were also tested. Only the significant findings of the One-Way ANOVA and t-tests were reported. Mann-Whitney (U) tests were also used as the non-parametric alternative to t-tests. However, the significance of results remained consistent across the two methods.

No significant differences were found between Behaviour Severity Groups for any EI traits, suggesting that a student's behavioural presentation does not have any significant effect or influence on a teacher's EI. EI also did not account for differences found between experimental groups in relation to the Attribution Model variables. Therefore, EI was considered effectively an independent variable.

Student behaviour seemed to be the factor to best explain significant differences in Self-Efficacy, Perceived Risk and Compassion variables, across the two teacher groups. Regardless of

these findings, still no significant differences were found between the two groups in relation to helping and punitive behaviour. So, despite the effect of student behaviour on teachers' cognitions and affect, it still did not affect teachers' behavioural outcomes. These comparisons help to support the notion that EI is still the dominant factor that influences helping outcomes.

The causal attribution factor scores (Student, Teacher, School and Family factors) were compared using related samples t-tests to determine if there were significant differences in how the different factors were perceived. Family factors were perceived to be the most significant cause for the students' behaviour, followed by School factors and then Student and Teacher factors.

No significant differences were found between the two experimental groups in relation to their perceptions of cause of the student's behaviour. T-tests conducted for the causal factors at the item level, revealed no significant differences between the two groups. This suggested that the student's severity of behaviour did not impact what teachers perceived to be the main cause of the student's behaviour.

Perception of Student and Perception of Self were the only variables found to significantly relate to some causal attribution item factors with an effect size greater than .20. The Perception of Student (Student Responsibility/Control) variable related to the item 'the student is being purposely manipulative'. The Perception of Self (Personal Responsibility) variable related to the items 'Teaching style' 'Teacher Personality' and 'Teachers' inappropriate manner'.

These results established the significant relationships and directionality between variables, which indicated possible variable arrangements for the development of the new model. The following chapter employs these suggestions and tests for suitability of the variable data in predicting helping behaviour.

14.7 Visual Diagrams of Significant Correlations between Current Study Variables

The following diagram relates to hypotheses 5 and 6 variables in that cognition relates to affect, which relates to behaviour.

Figure 14.6 Significant correlations found within hypothesised Attribution Model variables using Pearson's Correlation Coefficient
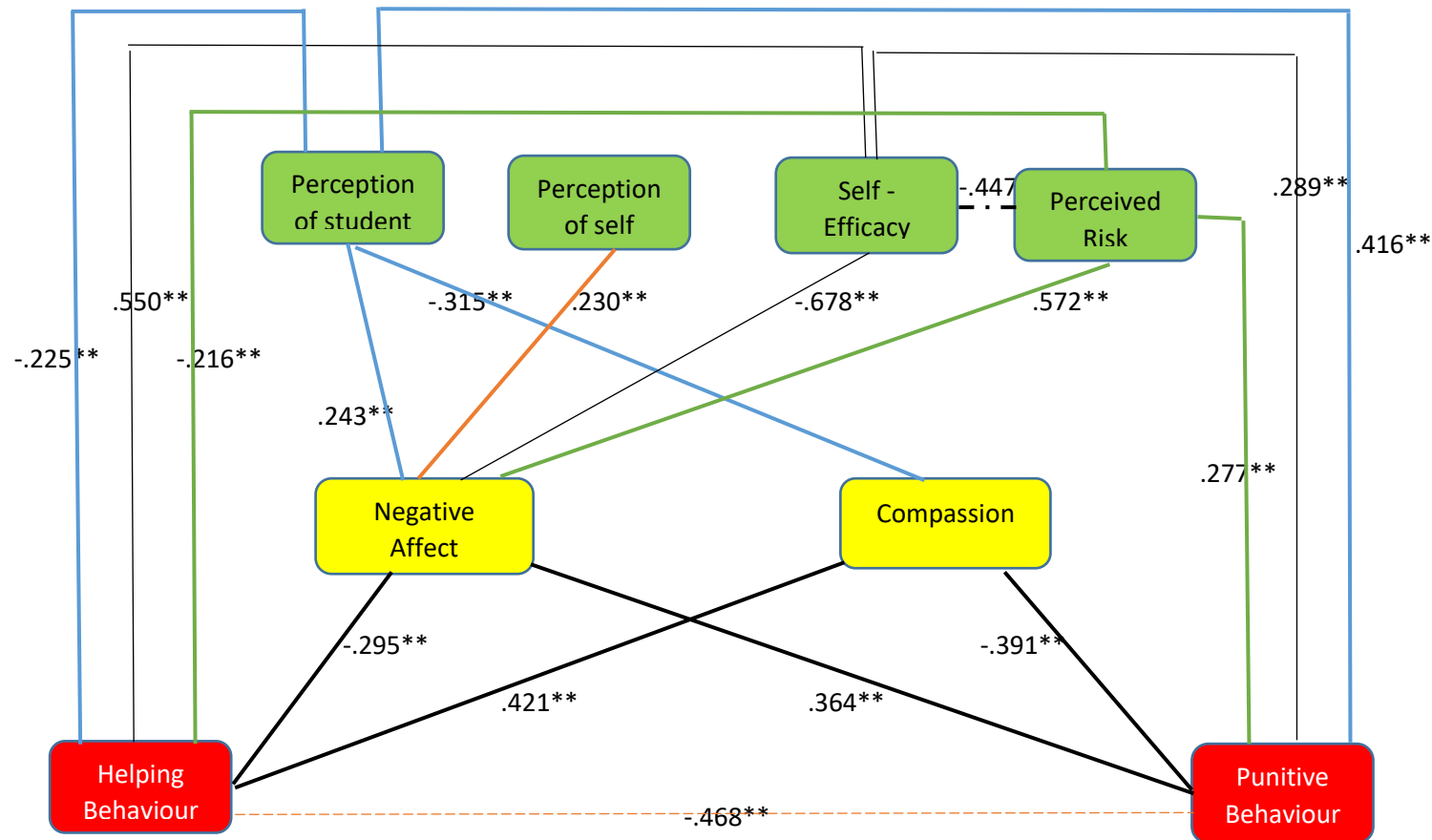
The following diagram relates to hypotheses 2, 3 and 4 in that Global (Total) EI relates to cognitive variables.

Figure 14.7 Significant correlations found within hypothesised Attribution Model variables and Total EI using Pearson's Correlation Coefficient
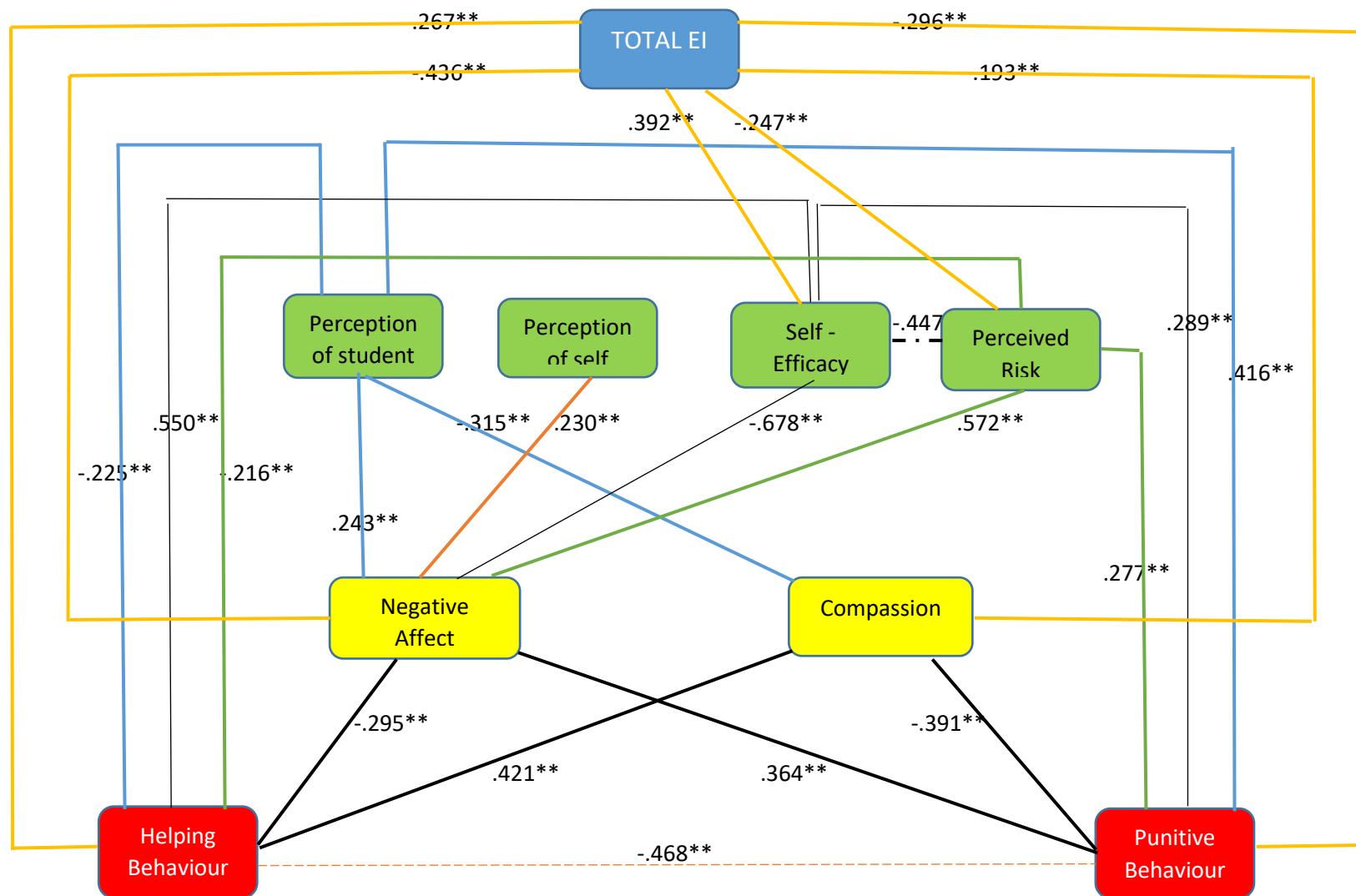
Figure 14.8 Significant correlations found between EI traits and Perception of Student using Pearson's Correlation Coefficient (related to hypothesis 2)
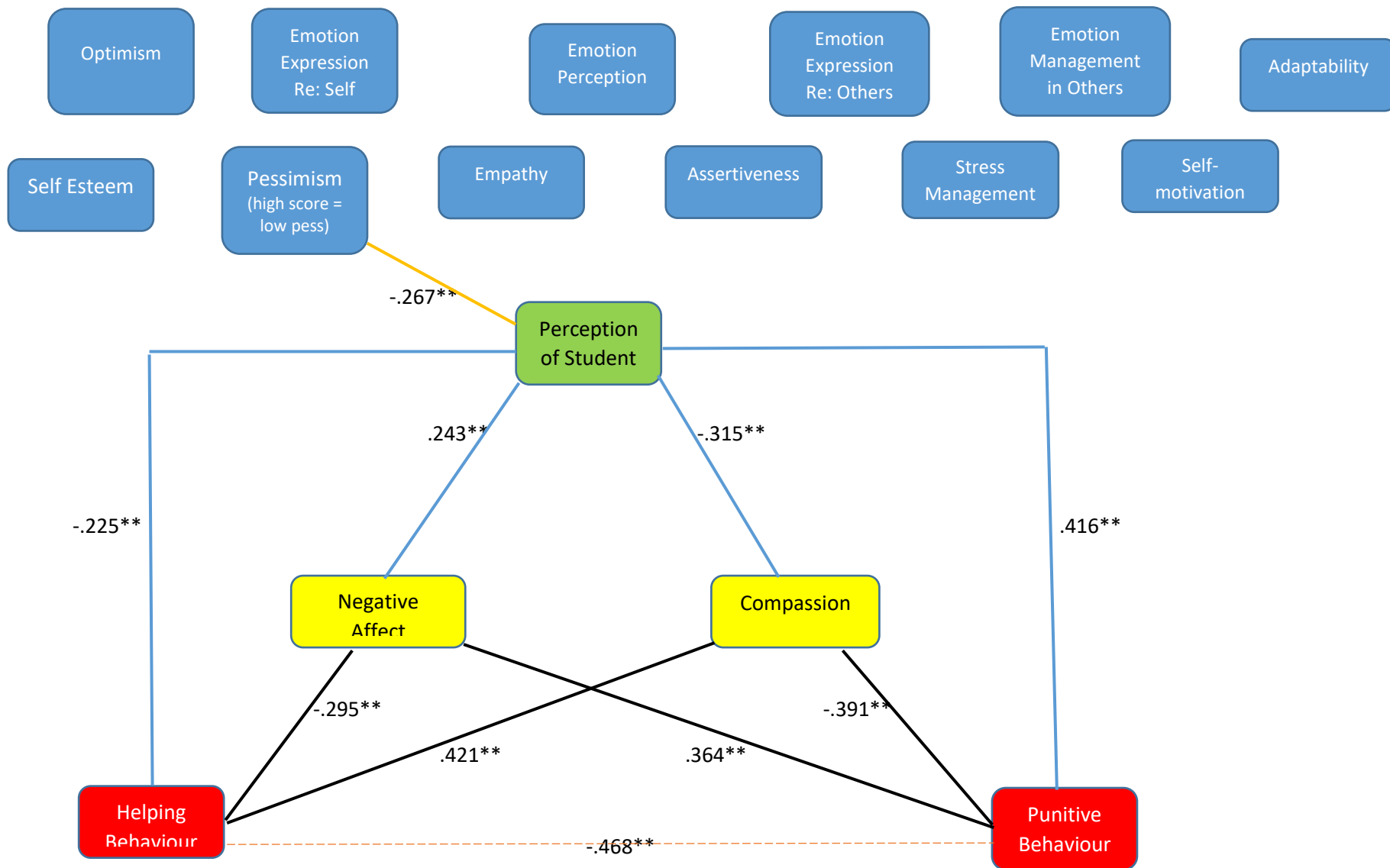
Figure 14.9 No significant correlations found between EI traits and Perception of Self using Pearson's Correlation Coefficient (related to hypothesis 2)
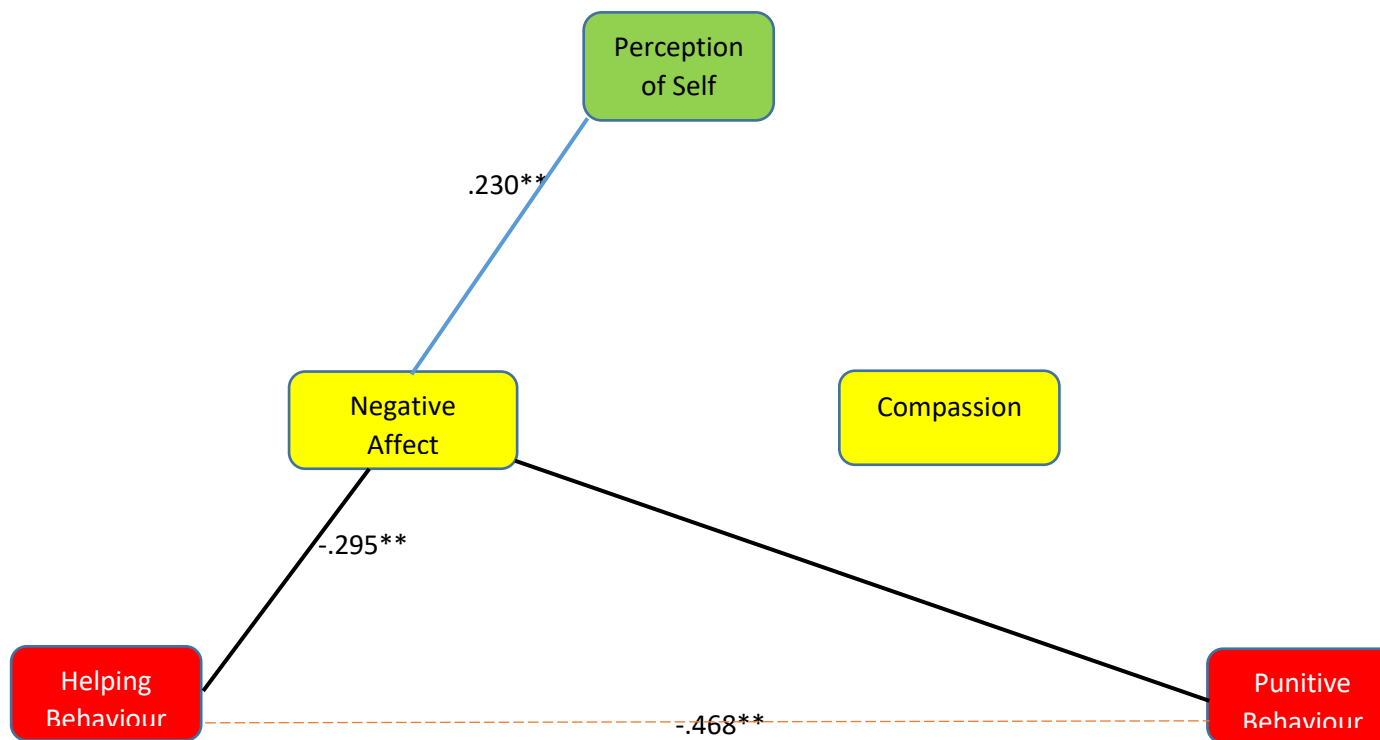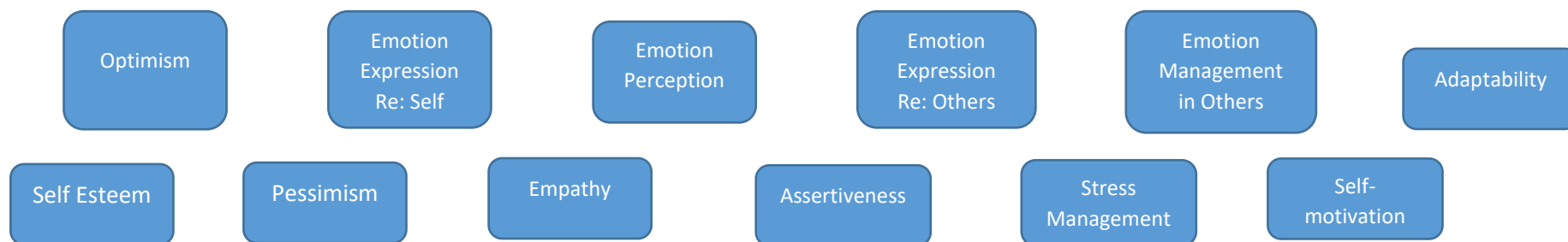
Figure 14.10 Significant Correlations found between EI traits and Self-Efficacy using Pearson's Correlation Coefficient (related to hypothesis 3)
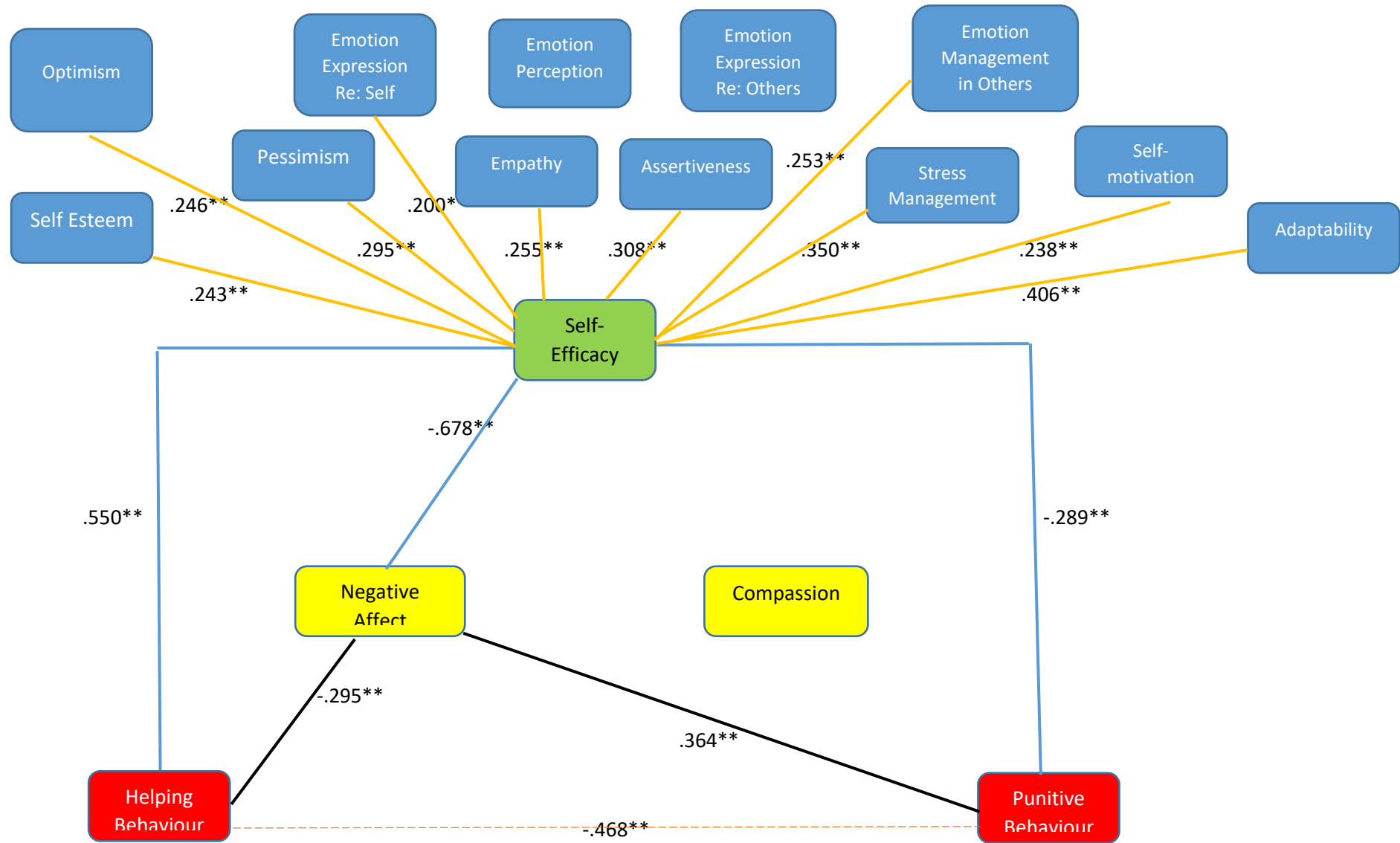
Figure 14.11 Significant correlations found between EI traits and Perceived Risk using Pearson's Correlation Coefficient (related to hypothesis 4)
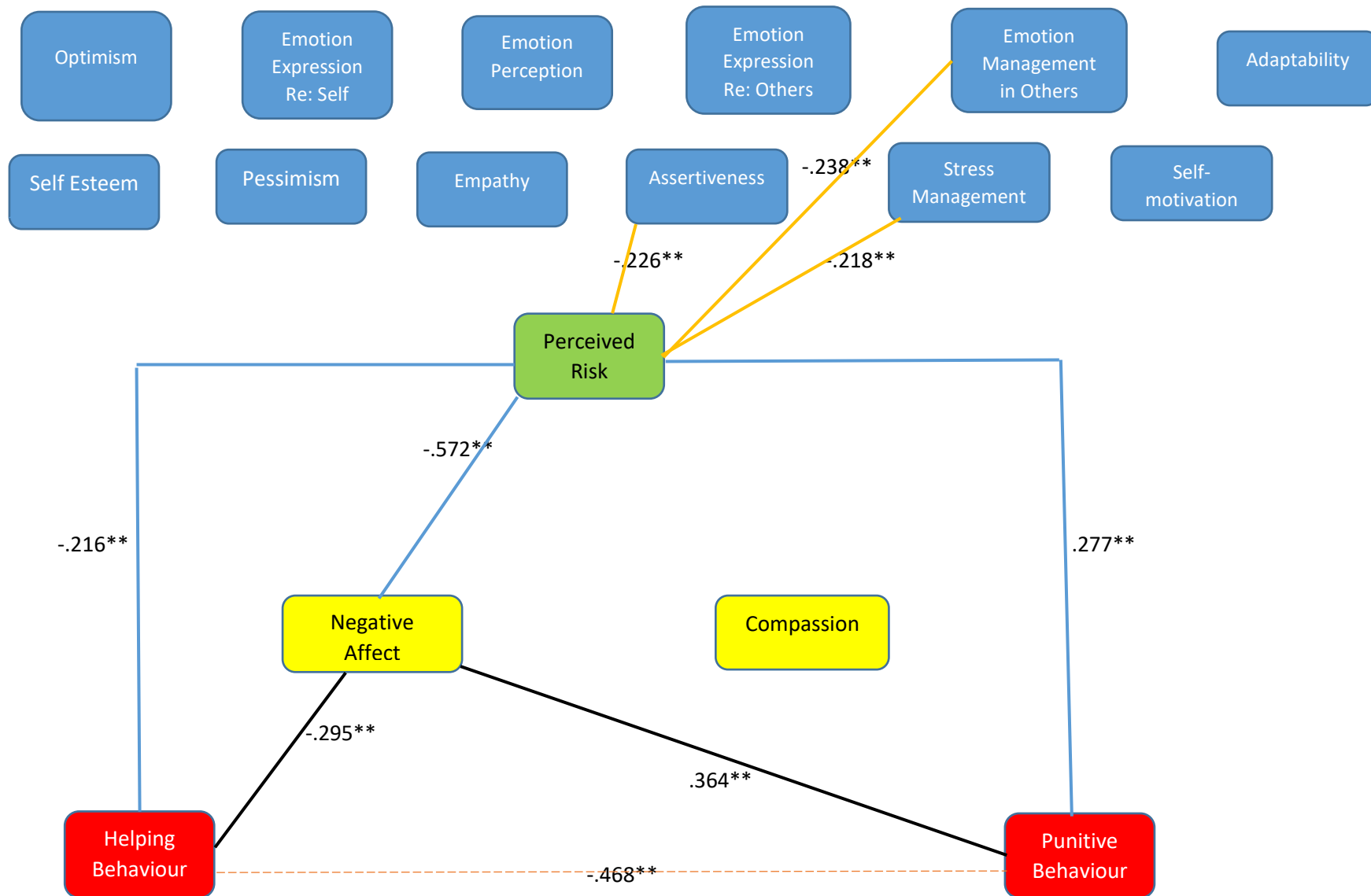
Figure 14.12 Significant correlations found between Self-Esteem trait and Attribution Model variables using Pearson's Correlation Coefficient
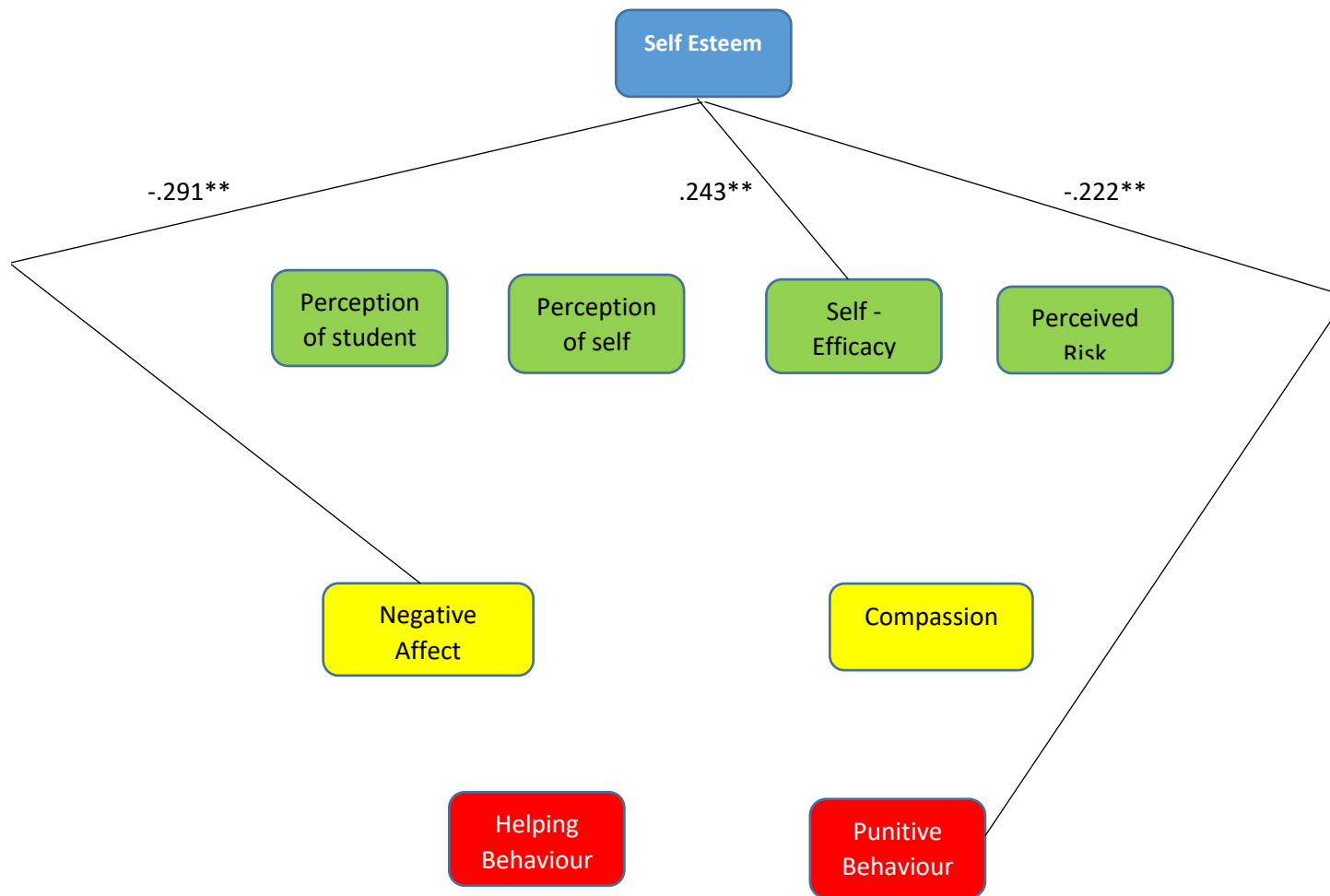
Figure 14.13 Significant correlations found between Optimism trait and Attribution Model variables using Pearson's Correlation Coefficient
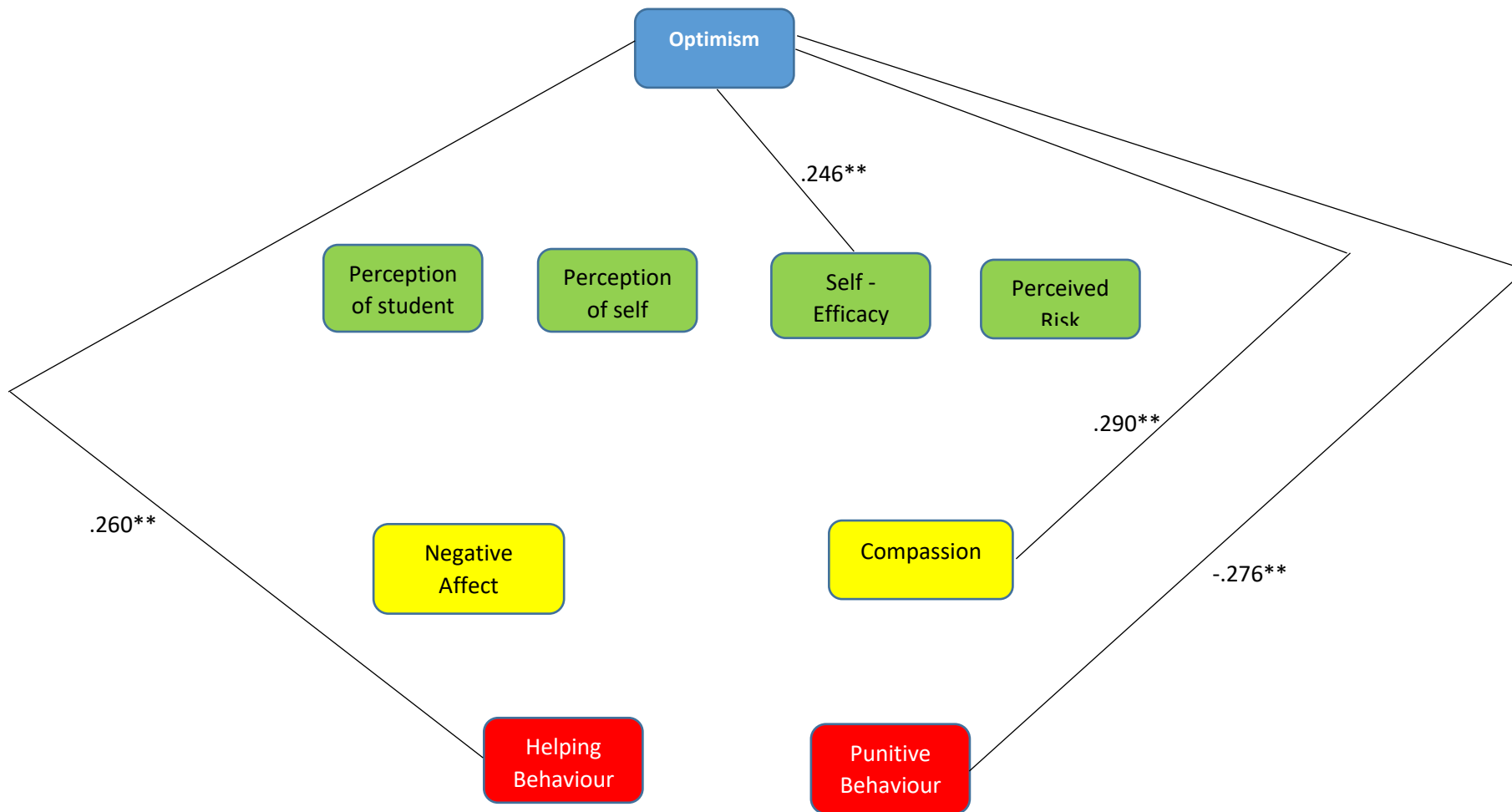
Figure 14.14 Significant correlations found between Pessimism trait and Attribution Model variables using Pearson's Correlation Coefficient
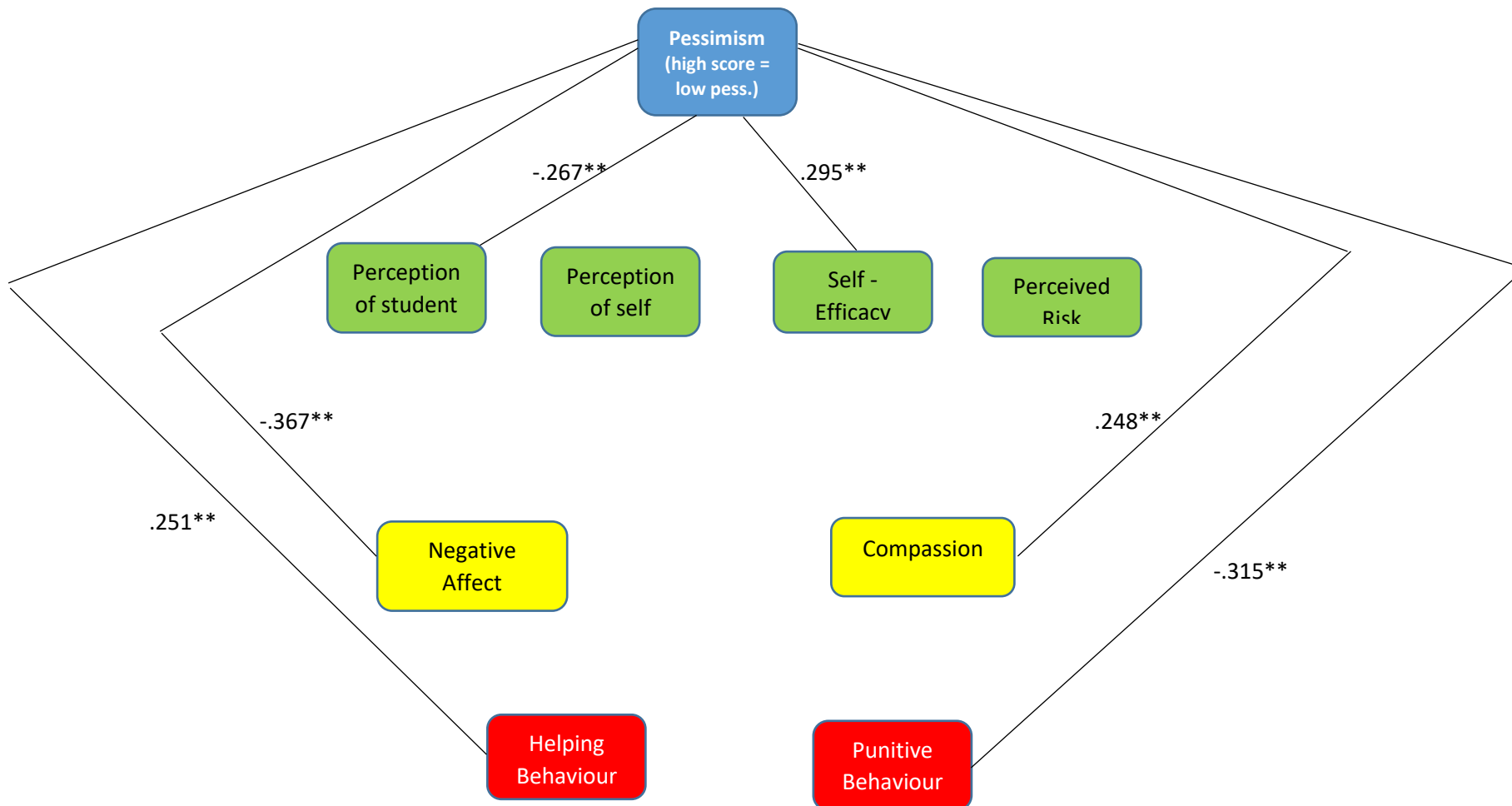
Figure 14.15 Significant correlations found between Emotion Expression trait and Attribution Model variables using Pearson's Correlation Coefficient
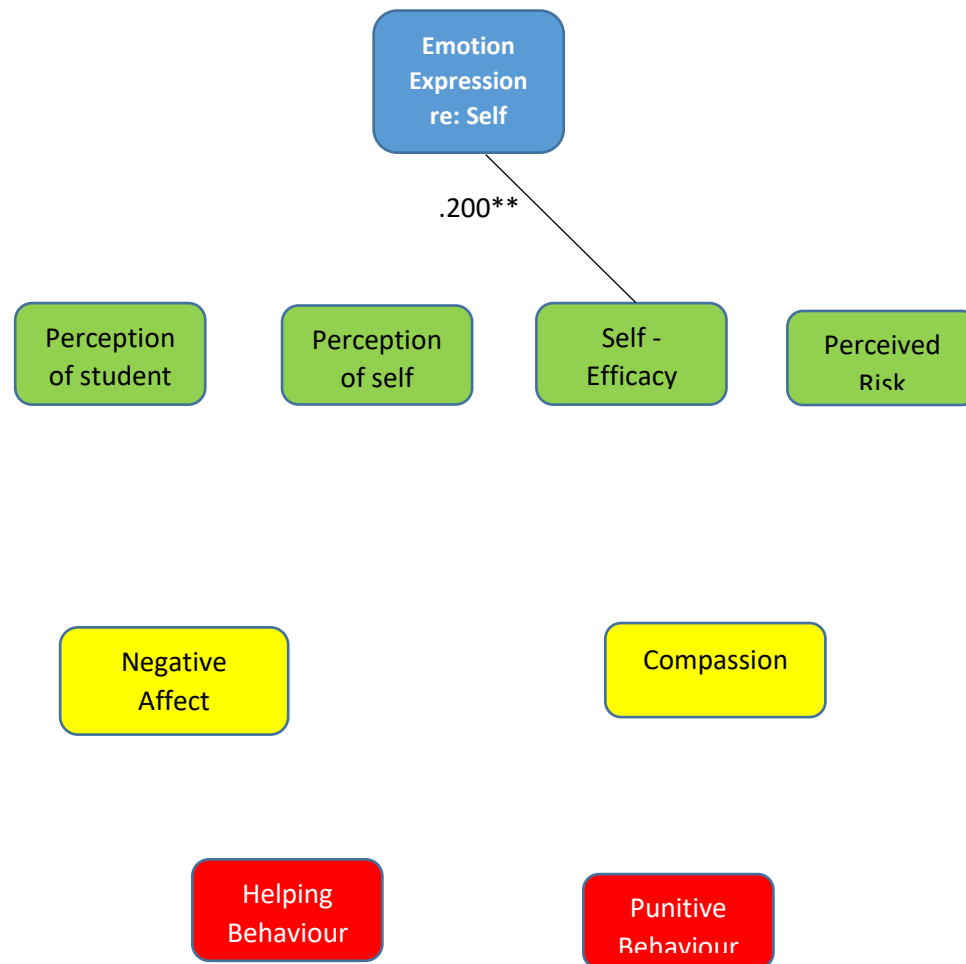
Figure 14.16 Significant correlations found between Empathy trait and Attribution Model variables using Pearson's Correlation Coefficient
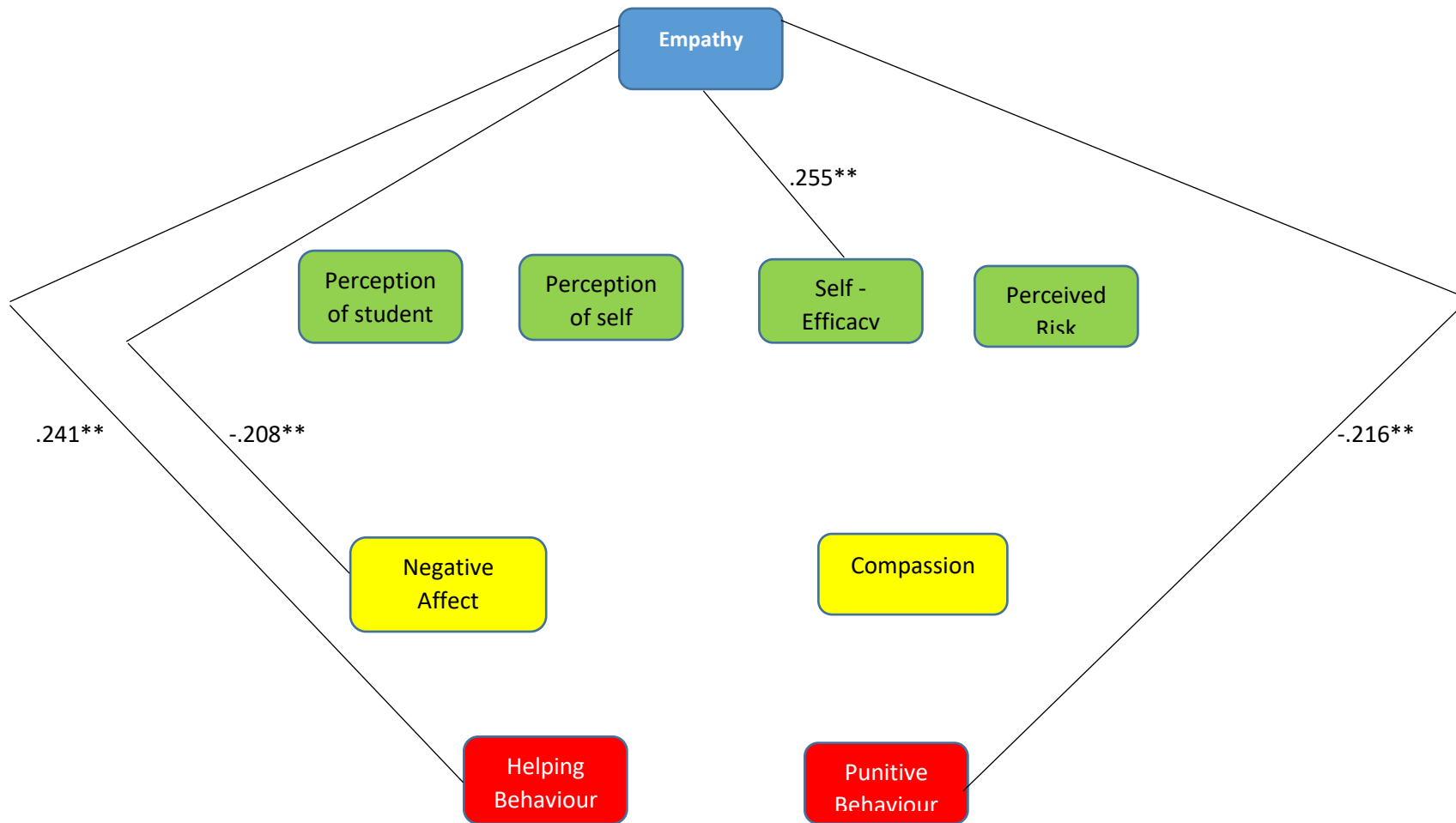
Figure 14.17 Significant correlations found between Emotion Perception trait and Attribution Model variables using Pearson's Correlation Coefficient
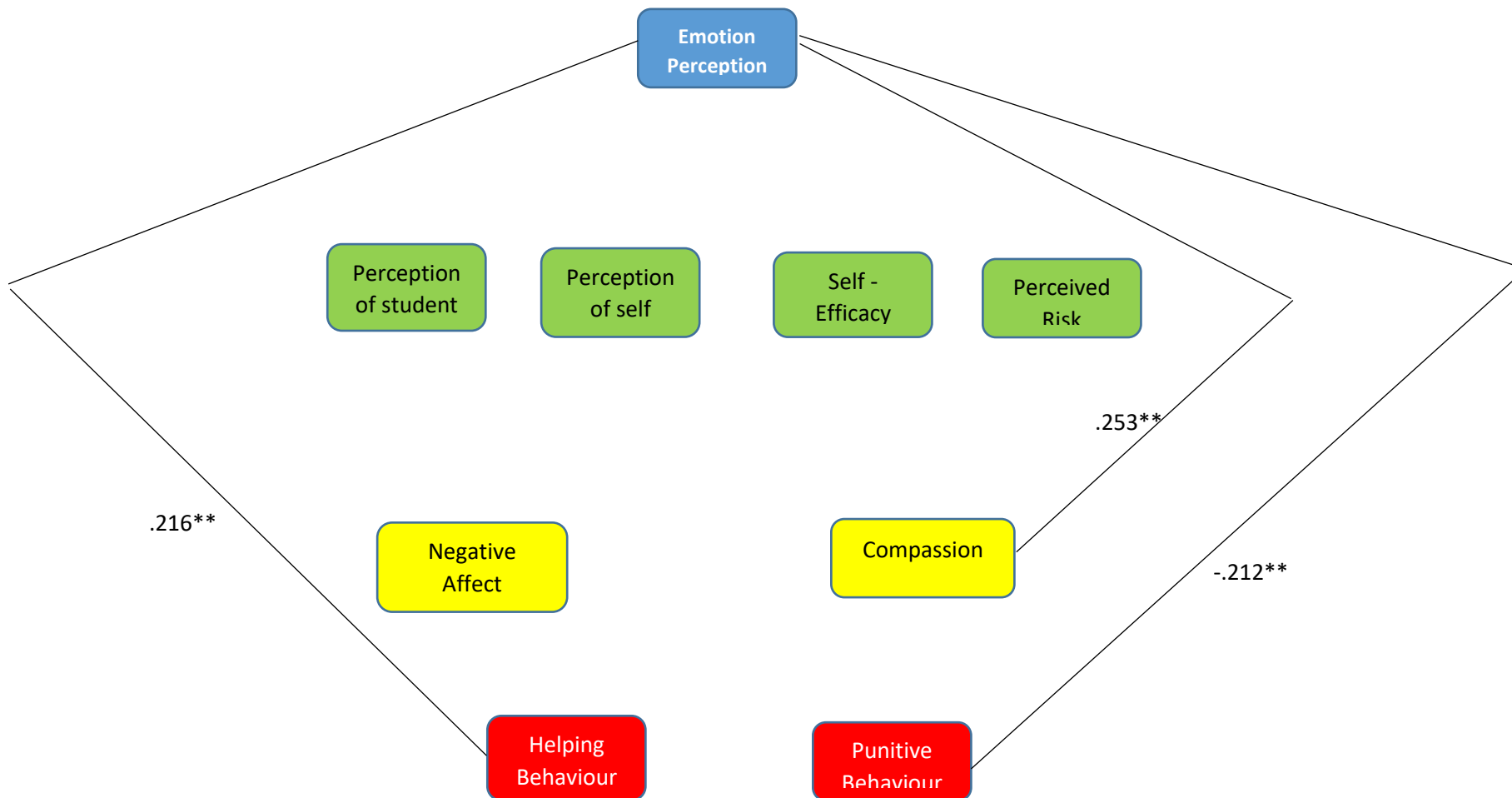
Figure 14.18 Significant correlations found between Assertiveness trait and Attribution Model variables using Pearson's Correlation Coefficient
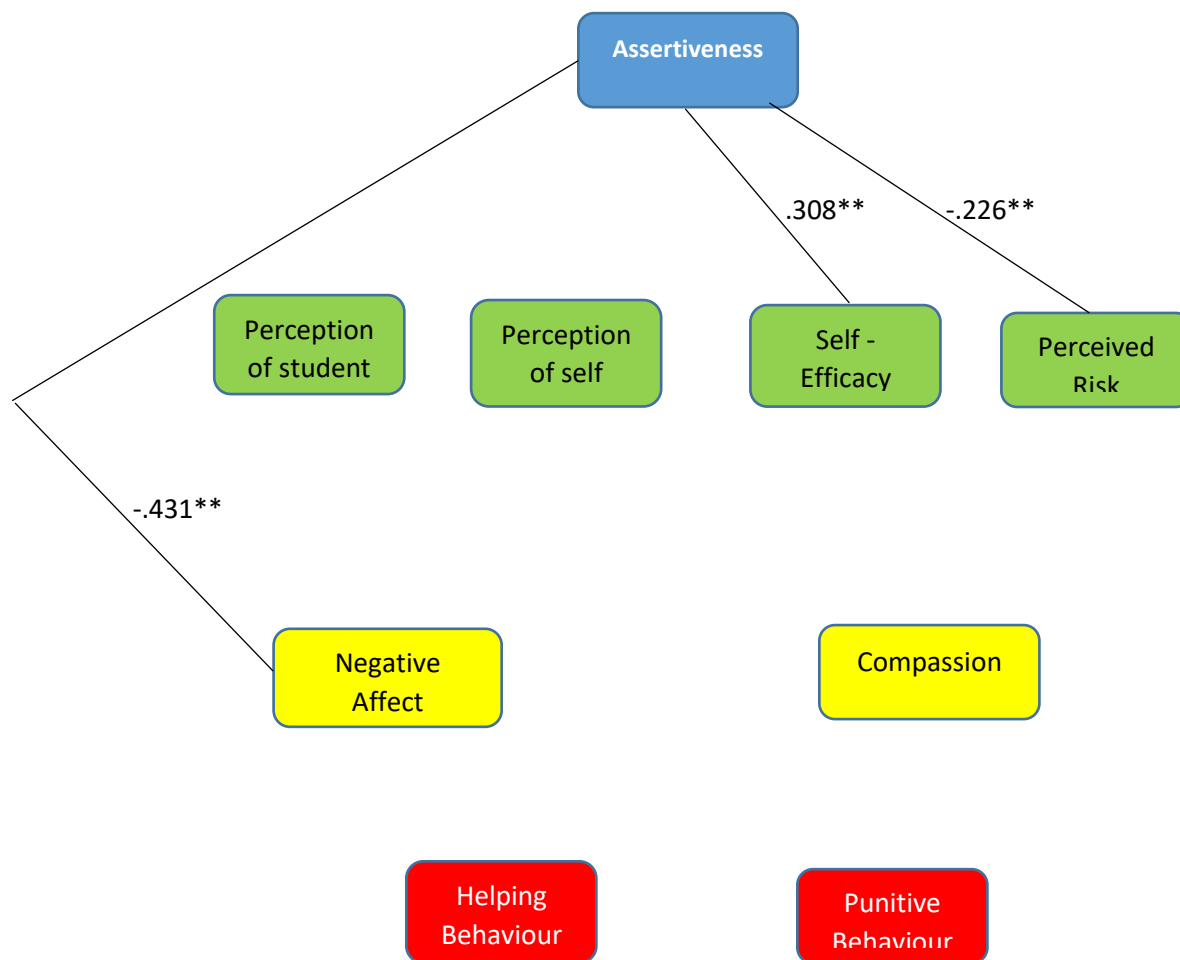
Figure 14.19 Significant correlations found between Emotion Management in Others trait and Attribution Model variables using Pearson's Correlation Coefficient
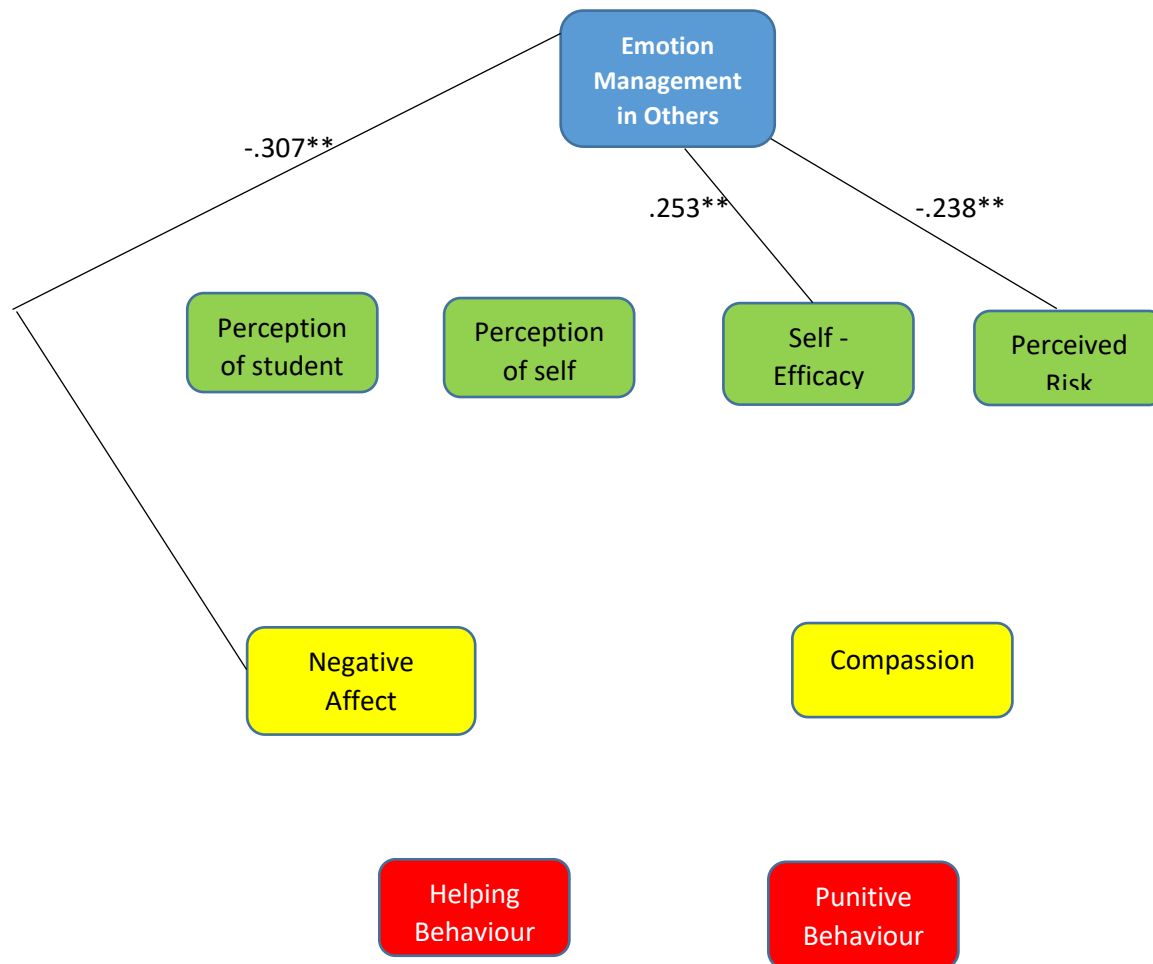
Figure 14.20 Significant correlations found between Stress Management trait and Attribution Model variables using Pearson's Correlation Coefficient
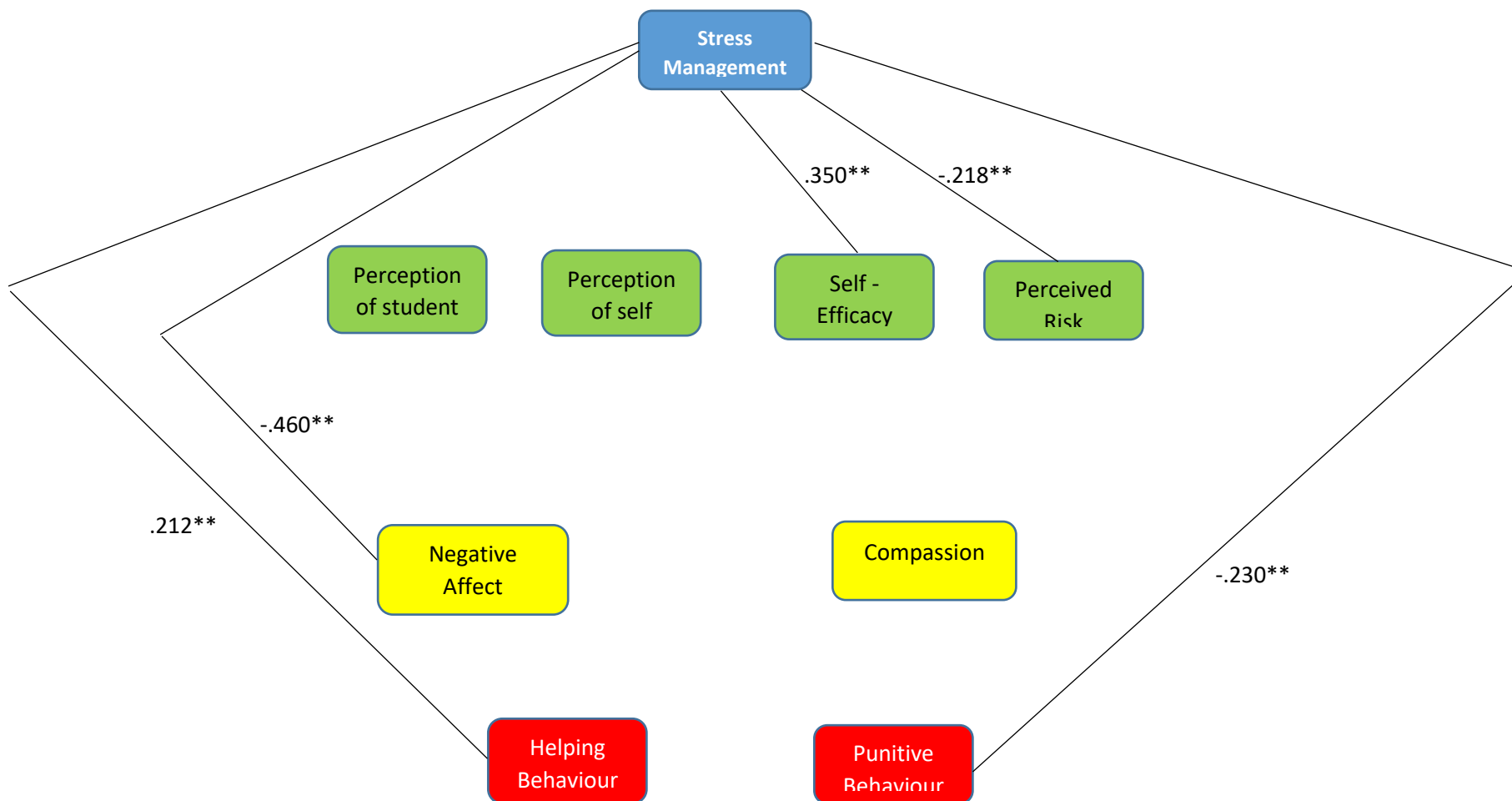
Figure 14.21 Significant correlations found between Self-Motivation trait and Attribution Model variables using Pearson's Correlation Coefficient
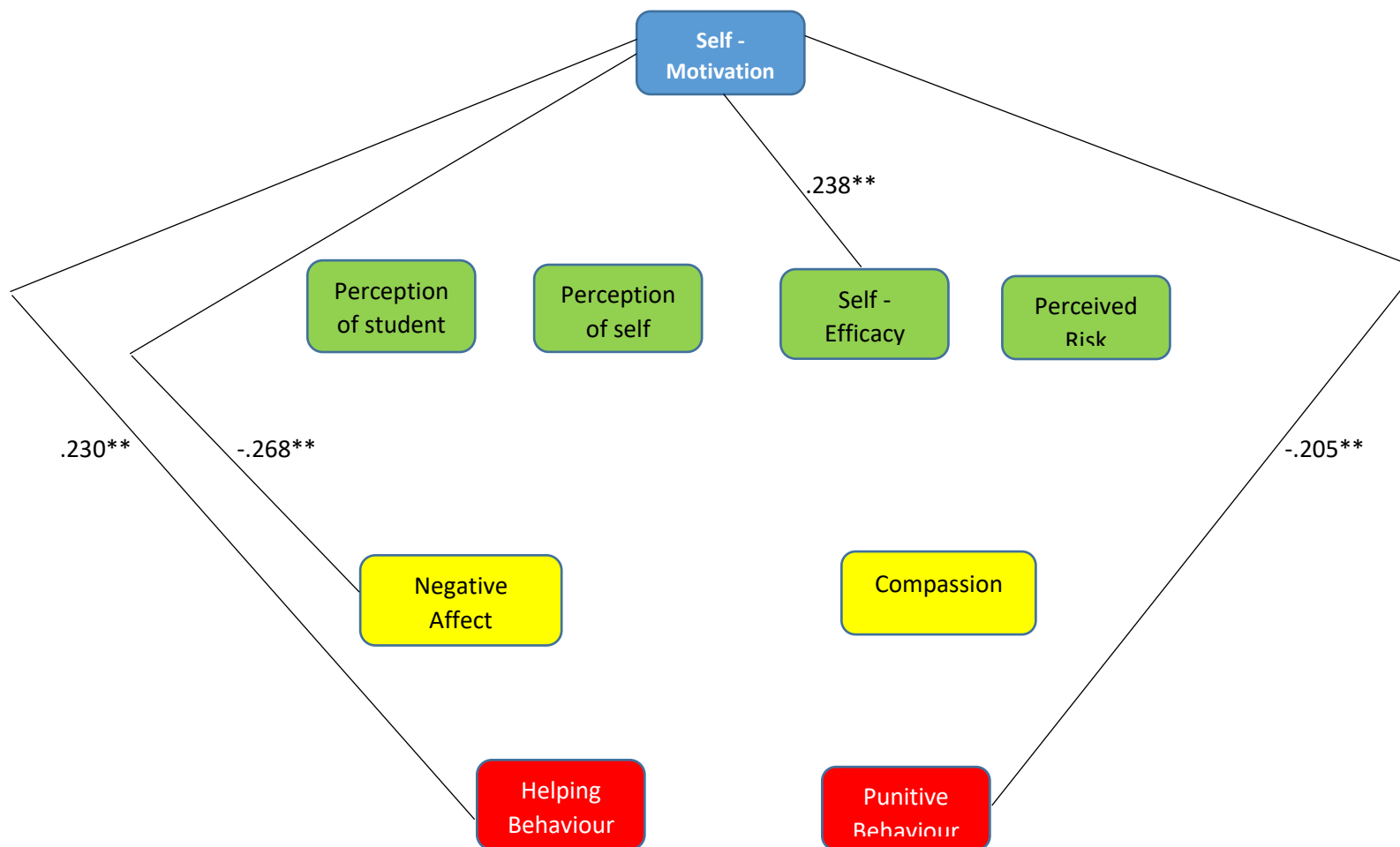
Figure 14.22 Significant correlations found between Adaptability trait and Attribution Model variables using Pearson's Correlation Coefficient
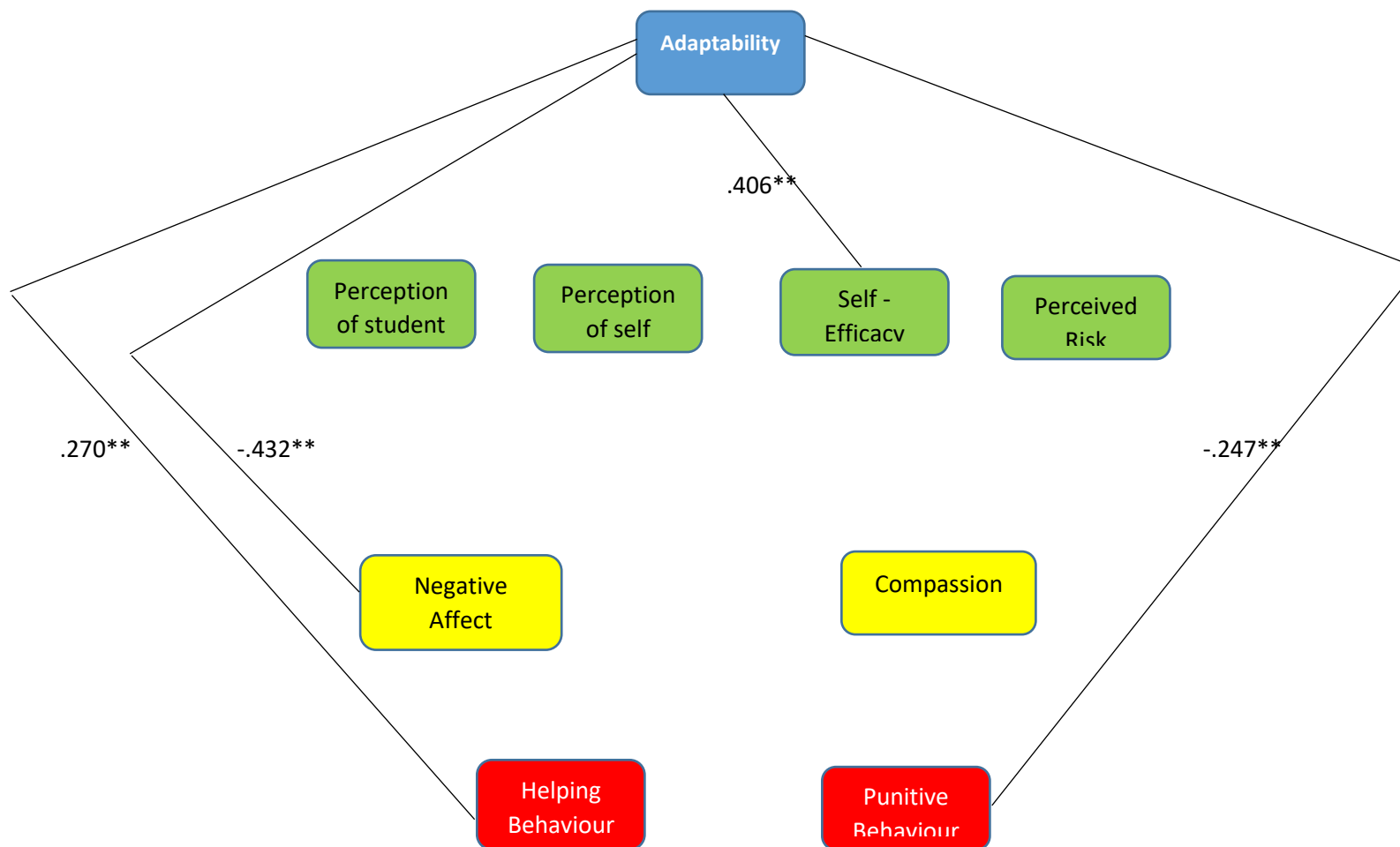
CHAPTER 15 - Development of a New EI Process Model of Stigmatisation (EPS-Model)

The analyses in this chapter provide assessment of the suitability and accuracy of the data to the conceptualised models. Following a series of hypothesised model designs, as tested and presented throughout this chapter, path analyses successfully identifies the pathway and factors most strongly associated with the outcome measures (Likely Helping and Punitive Behaviour) and the influence of EI on these measures. The directionality of the pathway, as well as other important indirect associations, are considered. This chapter also explores possible differences between the two experimental groups in relation to the newly proposed EPS-Model. As a result of path analysis, a new EI Process Model of Stigmatisation (EPS-Model) is proposed as a way of responding to the main research question and hypotheses. That is in exploring EI's predictability of teacher helping behaviour.

15.1 Path Analysis

A maximum likelihood chi-square estimation method was used to test the directional pathways of the hypothesised theoretical models. The hypothesised models were investigated using the teacher data. The advantage of path analysis over multiple regression analysis is that it can calculate causal relationships between all variables at the same time and not just correlations between pairs of variables at any one time.

To assess the fit of the analytic model to the data, several indices were considered. The Chi-square (χ^2) statistic measures the model fit to the sample used in the study. The chi-square statistic should be non-significant to indicate a model that works. A good fit is generally understood to be a χ^2 with a probability (p) greater than 0.05 (Kline, 1998).

There is one word of caution in using the χ^2 to test model fit. As documented in Allen, Titsworth, and Hunt (2008, p. 204), the chi-square is very sensitive to sample size and therefore a significant chi-square is common with large samples, as is the case with the current data. In the instance of a significant chi-square, it does not mean that a model is poor if the sample exceeds 100.

There are numerous other options for assessing a model's fit. Allen et al. (2008, p. 204) suggest that "adequate fit can be demonstrated if the model has a non-significant chi-square *or* meets the following targets for incremental tests" such as the Tucker-Lewis Index (TLI), root mean square error of approximation (RMSEA) and standardised root mean squared residual (SRMR) as also recommended by Hu and Bentler (1999). Pallant (2005) suggested using the Comparative Fit Index (CFI) as it controls for sample size. The Goodness of Fit (GFI) was another preferred index.

In the current study, the chi-square and the more robust root mean square error (RMSEA) index were used to determine fit. In addition to these statistics, model fit was assessed using the Comparative Fit Index (CFI), the Goodness of Fit Index (GFI), the Tucker-Lewis Index (TLI), and the standardised root mean square residual (SRMR).

The chi-square statistic was required to reach *non-significance* where p>0.05. Following the recommendation of Schumacker and Lomax (2010) cut-offs for each fit index was set at a value of >.95 for the CFI, GFI and TLI. For the SRMR, values of less than .05 to .08 suggested satisfactory to good model fit. A value of <.05 was required for the RMSEA.

Directions in the model were also only retained if they had a significant correlational value. Regression weights were calculated, where the highly significant p< .001 values (***) indicated which paths should definitely be retained. Values below .05 also indicated the significant paths that should be kept.

15.2 Hypothesised Theoretical Models

The hypothesised models developed from the previous correlational analyses are displayed in the tables below. The full Attribution Model was tested to determine if the directionality of the model was supported. The model was assessed for both Likely Helping Behaviour and Likely Punitive Behaviour.

Model 1 *Hypothesised Attribution Model pathway analysis to Likely Helping and Punitive Behaviour*
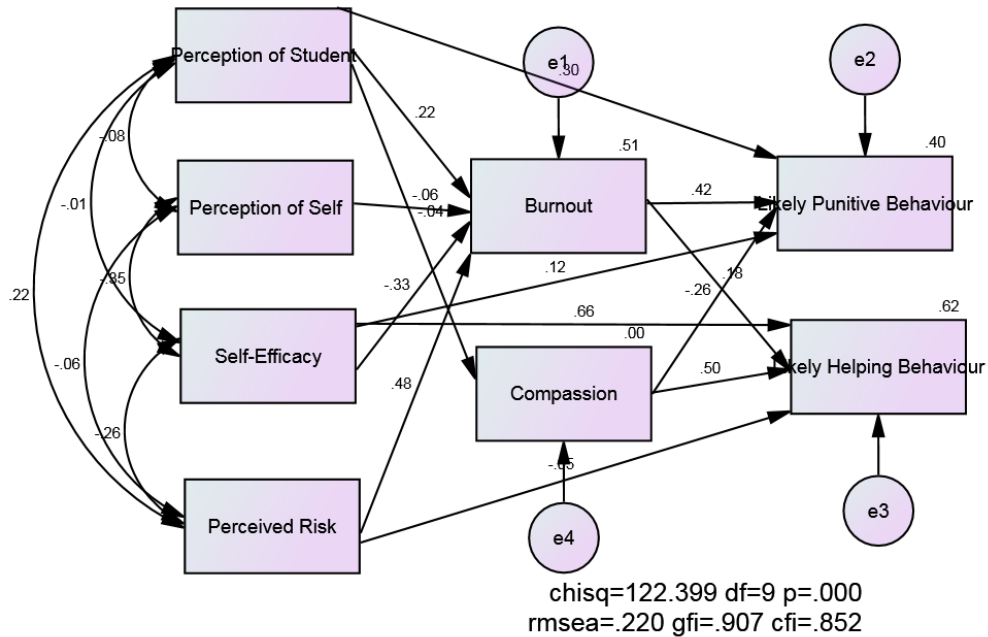
Standardized RMR = .1041

Based on all the fit indices, it was concluded that the overall Attribution Model tested did not offer good model-to-data fit (see regression weights of Model 1 in Table 15.1 of Appendix C). Some of the previously hypothesised correlations between variables were also insignificant. The directionality of the theoretical Attribution Model was not supported as hypothesised. The model was adjusted to take into account only the significant correlations, however, this did not appear to have any significant effect on the model statistics. Once Global EI was incorporated into the Attribution Model, as predicted from the previous correlational analysis, the model slightly improved but no significant results were again obtained (model below). This was also found for the individual EI traits (see regression weights of Model 2 in Table 15.2 of Appendix C).

Model 2 *Hypothesised Attribution Model pathway from EI to Likely Helping and Punitive Behaviour*
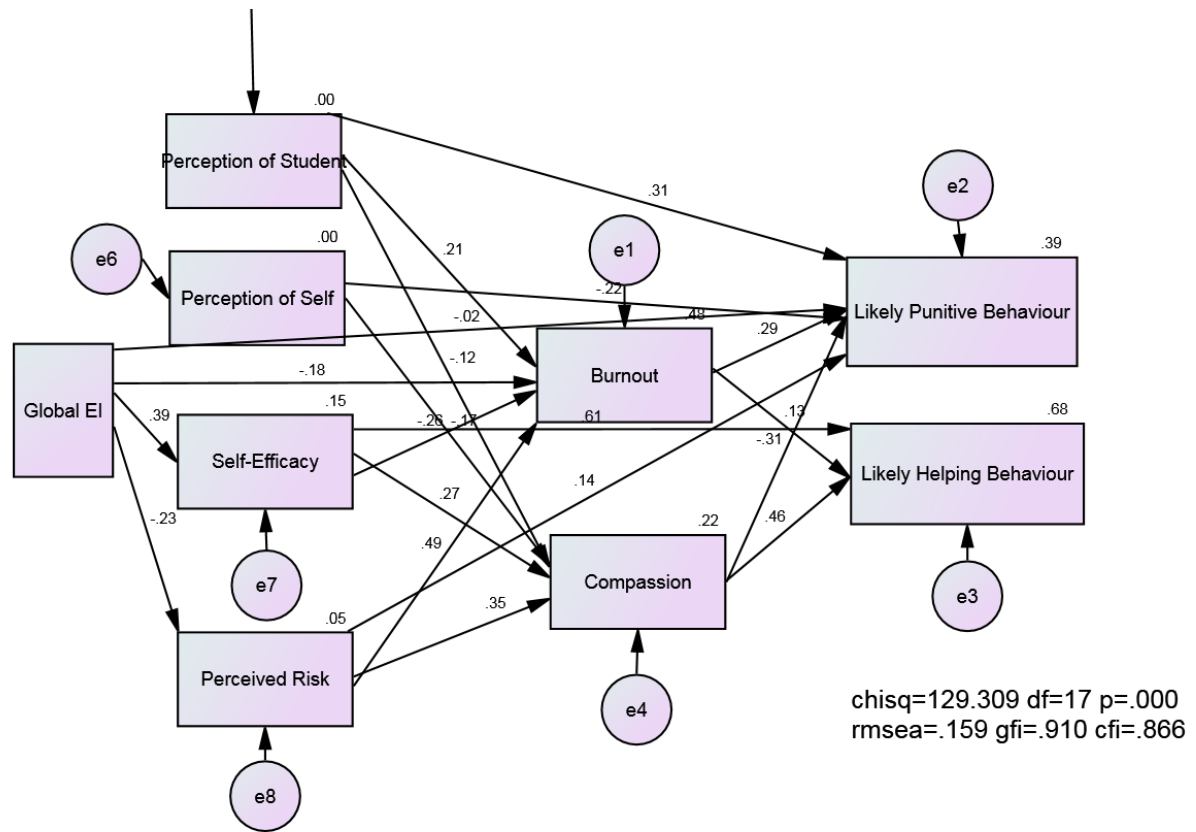
The hypothesised directionality of the Attribution Model could not be supported, and so it was concluded that Global EI and the individual EI traits did not have a direct relationship on Helping or Punitive Behaviour. It was also determined that, generally, EI and the individual EI traits did not significantly correlate or directly influence the cognitive variables.

Based on other statistical relationships found between variables, as presented in the previous section 14, path analysis was continued to be used to determine if there is another significant pathway from EI to Helping or Punitive Behaviour, moderated through Compassion and Negative Affect.

15.3 Development of an Operational Model

Model 3 *Process model of EI on Helping and Punitive Behaviour via an affective/cognitive pathway*

chisq=32.584 df=20 p=.037
rmsea=.050 gfi=.973 cfi=.981
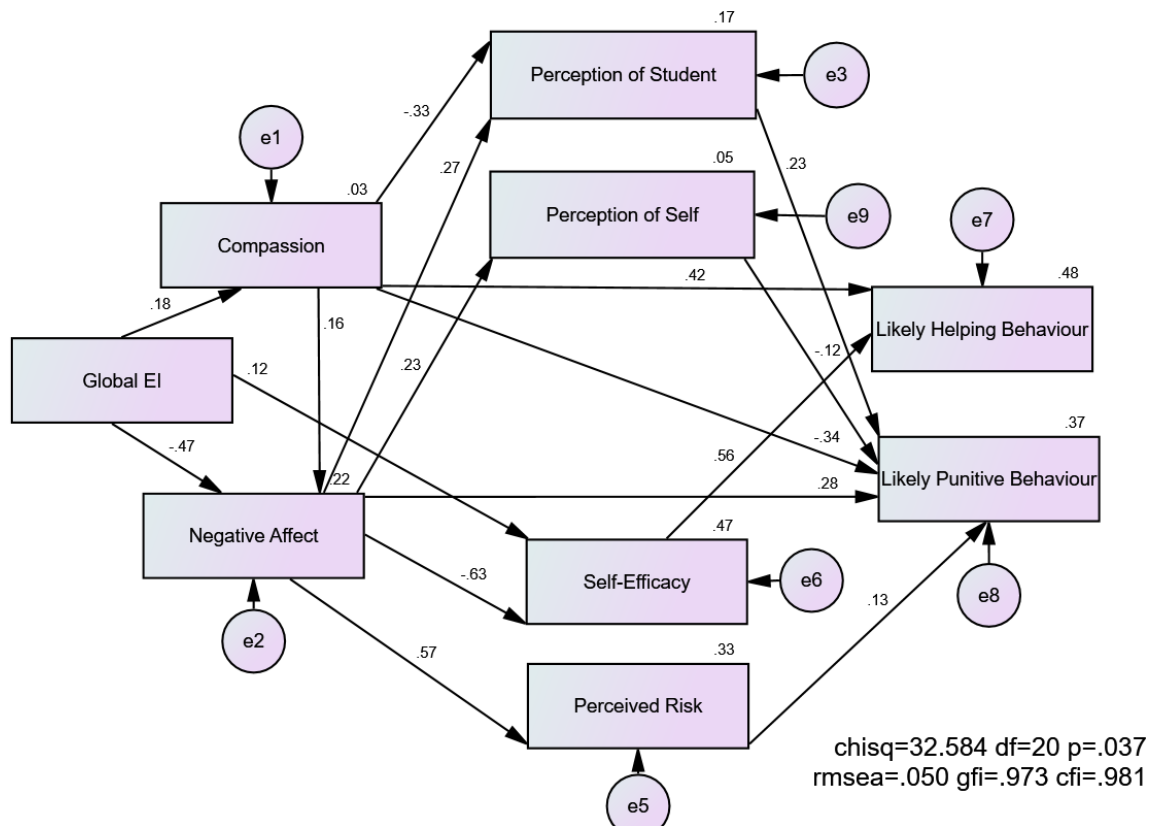
TLI = .966, Standardized RMR = .0356

The chi-square statistic in Model 3 is significant, indicating a less than adequate model fit to the sample variance-covariance matrix (Chi-Square = 32.584, *df* = 20, p = 0.037). However, several other model-fit indices for this theoretical model indicated reasonable data to model fit: RMSEA = 0.50, GFI = .973, CFI = .981, TLI = .966 and Standardized RMR = 0.0356.

In interpreting the pathway results of this model, higher Negative Affect caused teachers to see themselves as more highly responsible (Perception of Self) for the student's behaviour (β = .23), however, Perception of Self did not relate to levels of Helping or Punitive Behaviour as the model suggested. When the correlational data was investigated visually through scatterplots, the relationship found between Perception of Self and Punitive Behaviour appeared to be non-linear. This suggested that despite the significant relationship displayed in this pathway model, it was in fact considered to be invalid and unable to be interpreted. This was also confirmed through investigation of the preliminary

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correlational data and regression statistics in the previous chapter. This link was removed for future analyses.

Additional directional pathways were considered to determine if the chi-square statistic could be reduced, however, the alternatives did not reach correlational significance (p<.05). They also deviated further from the theoretical foundations that underpinned the original hypothesised model. Instead, a decision was made to add an error covariance between Helping and Punitive Behaviour that would decrease the model fit chi-square value by a significant 0.647. The modified theoretical model is diagrammed as Model 4.

Model 4 *Modified Model of EI on Helping and Punitive Behaviour via an affective/cognitive pathway.*

chisq=19.654 df=20 p=.480
rmsea=.000 gfi=.983 cfi=1.000

Standardized RMR = .0324; TLI = 1.001
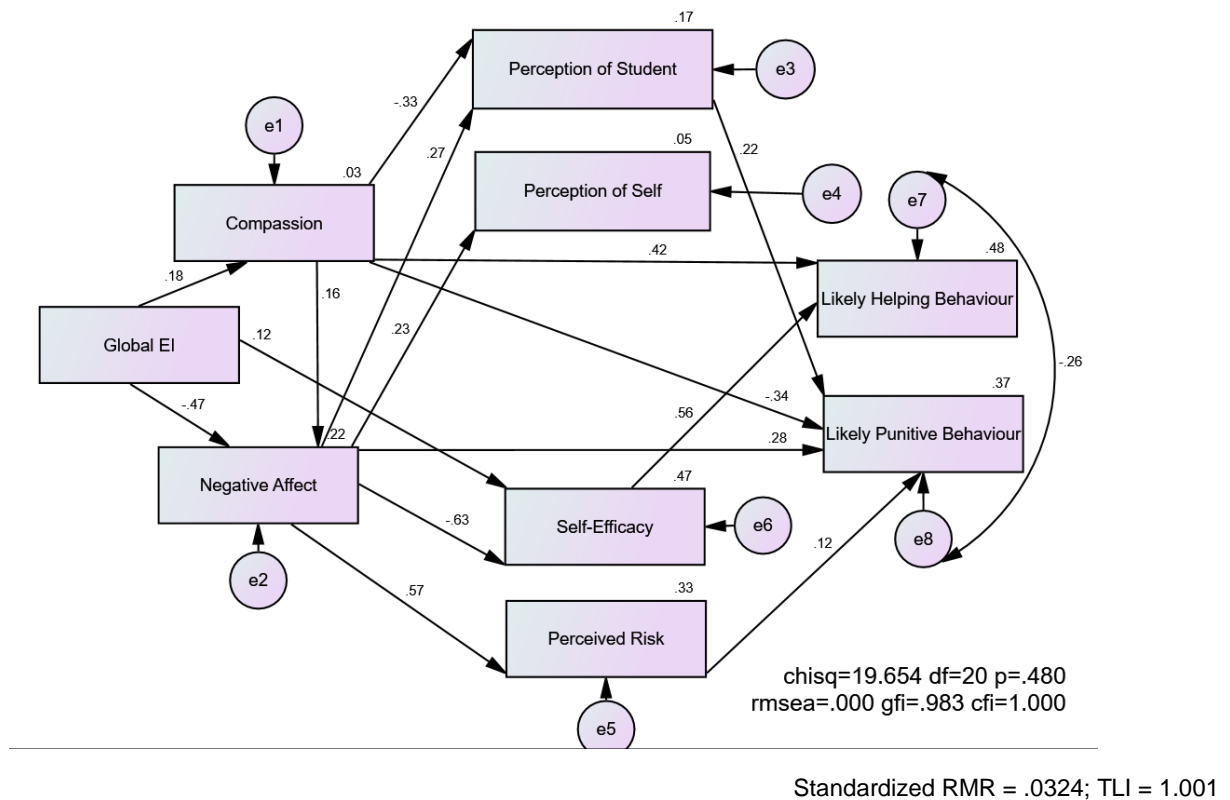
The resulting model statistics indicated a better model fit to the data with a non-significant chi-square result: $\chi2 = 19.654$ $df = 20$ and p = .480. All the other best fit indices in the reproduced model improved when compared with the first model, creating an almost perfect solution: RMSEA = .000, GFI = .983, CFI = 1.00, TLI = 1.00 and SRMR = .032. All the variables significantly correlated at the p = <0.05 level (as shown in the regression weights in Table 15.3 in Appendix C). This model

appeared favourable and numerous significant pathways were identified within the model. The variable, Perception of Self, was the only variable that did not form part of a pathway to Helping or Punitive Behaviour. Therefore, a final model was developed that did not include the variable, Perception of Self (see Model 5).

The values in the Squared Multiple Correlations Table 15.4 represent the percentage of variance (multiple R squared value) in the dependant variable explained by Model 4. Forty-eight percent of the variance in likely helping behaviour, whereas 37% of variance in likely Punitive Behaviour, is explained by the variables in the model.

Table 15.4

Squared Multiple Correlations of Model 4: (Group number 1 - Default model)

	Estimate
AffectCOMPASS_TOTAL	.033
AffectNEG_TOTAL	.216
CogSTUDENT_TOTAL	.166
CogSELFEFFICACY_TOTAL	.471
CogPERCEIVEDRISK_TOTAL	.330
CogSELF_TOTAL	.054
HELP_TOTAL	.481
PUNITIVE_TOTAL	.366

15.4 Final EI Process Model of Stigmatisation

Given the lack of influence and statistical significance of teacher Perception of Self on Helping and Punitive Behaviour, this original cognitive variable was removed from Model 4 to create Model 5. The following final model was then produced below, confirming that Perception of Self had not contributed at all to behaviour outcomes.

Model 5 Final EI Process Model of Stigmatisation
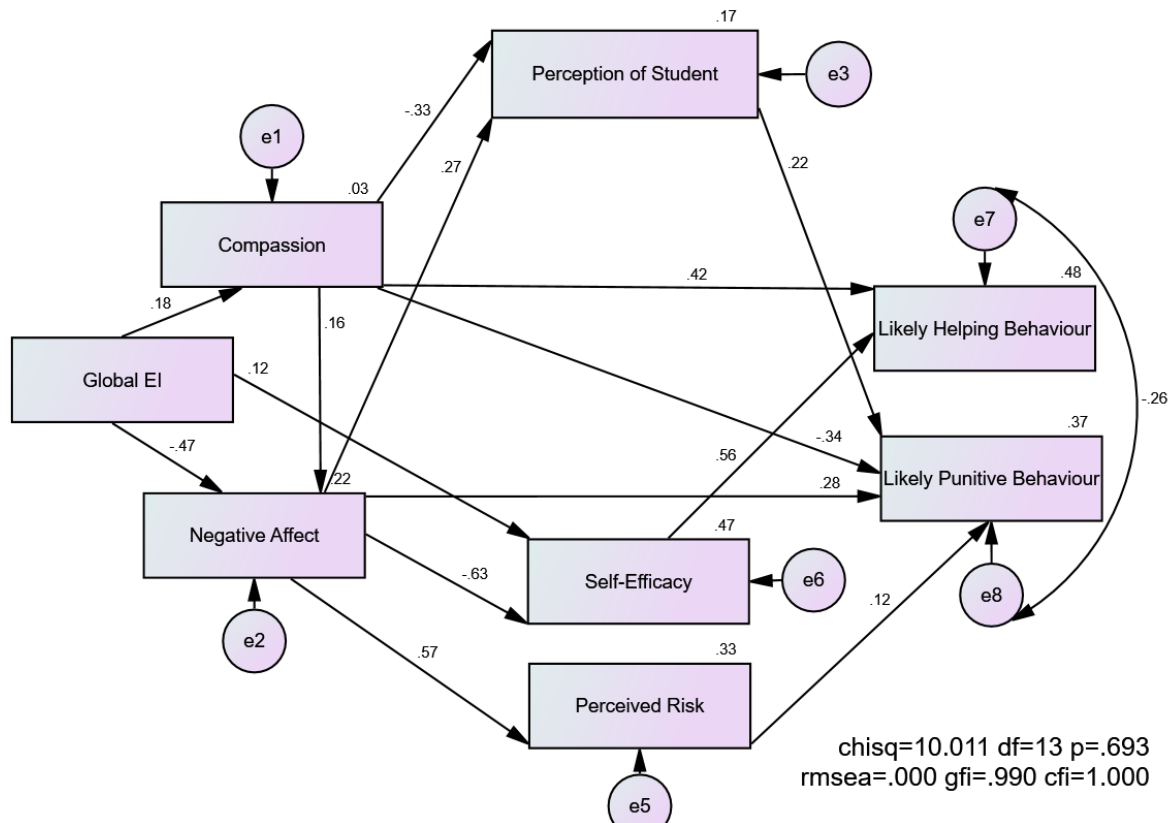
SRMR = .0215; TLI = 1.010

The resulting model statistics indicated an even better model fit to the data than in Model 4, with a non-significant chi-square result: $\chi2 = 10.011$, $df = 13$ and p = .693. All the other best fit indices in the reproduced model improved when compared with the first model, creating an almost perfect solution: RMSEA = .000, GFI = .990, CFI = 1.00, TLI = 1.01 and SRMR = .0215. All variables significantly correlated at the p = <0.05 level (as shown in the Regression Weights Table 15.5 in Appendix C).

The values in the Squared Multiple Correlations Table 15.6 represent the percentage of variance (multiple R squared value) in the dependant variable explained by the model. Forty eight percent of the variance in likely helping behaviour is explained by the variables in the model. The corresponding value for likely punitive behaviour shows 37% of variance is explained. The values displayed in Table 15.6 are identical to those found in Table 15.4, whether Perception of Self is present or not.

Table 15.6

Squared Multiple Correlations of Final Model 5: (Group number 1 - Default model)

	Estimate
AffectCOMPASS_TOTAL	.033
AffectNEG_TOTAL	.216
CogSTUDENT_TOTAL	.166
CogSELFEFFICACY_TOTAL	.471
CogPERCEIVEDRISK_TOTAL	.330
HELP_TOTAL	.481
PUNITIVE_TOTAL	.366

15.4.1 Final Model Pathways

Within the Final Model, a number of directional pathways were identified, where likely Helping and Punitive Behaviour outcomes were dependent on teacher EI levels as hypothesised. EI did not directly predict Helping or Punitive Behaviour but relied on the affective and cognitive factors to translate the unconscious EI processes into either Helping or Punitive Behaviours. A number of possible pathways extracted for teachers, resulted in either likely Helping or Punitive Behaviours. These were categorised into direct and indirect pathways.

15.4.1.1 Direct Pathways:

Generally, EI influenced affect which directly influenced behaviour. Specifically, higher EI levels led to teachers experiencing lower levels of Negative Affect ($\beta = -.47$), which led to lower Punitive Behaviours towards the student ($\beta = .30$), and vice versa. Higher EI levels also led to higher Compassion ($\beta = .18$) which led to higher Helping ($\beta = .42$) and lower Punitive Behaviour ($\beta = -.34$).

15.4.1.2 Indirect Pathways:

In the current model, teacher cognitions also acted as mediators between EI, affect and helping, which did not appear to influence or change the course of action for teachers. Higher EI produced higher perceived confidence (Self Efficacy) in teachers towards managing the student ($\beta = .12$) which led to higher Helping Behaviour ($\beta = .56$).

Compassion featured on two conflicting paths which will be theoretically justified in the discussion section. Teachers with higher Compassion towards the student perceived the student to be less responsible for their behaviour (Perception of Student: β = -.33) which resulted in lower Punitive Behaviours (β = .22). Higher Compassion also had a directional link to higher Negative Affect levels (β = .16) which led to higher levels of Punitive Behaviour. Level of Negative Affect was also a predictor of Perceived Risk (β = .57) and high Perception of Student Responsibility/Control (β = .27) which both showed on separate paths leading to likely Punitive Behaviour (β = .12; β = .22).

15.5 Summary of Different Pathways Identified in the Proposed Model

Six variable pathways were identified from EI to likely behaviour, determined through the new proposed model:

Direct Pathways (EI → Affect → Behaviour):

- *Pathway 1* – Negative Affect was directly related to Likely Punitive Behaviour
- *Pathway 2* - Compassion was directly related to both Likely Helping and Punitive Behaviour

Indirect Pathways (EI → Affect → Cognitive → Behaviour):

- *Pathway 3* – Compassion → Perception of Student Responsibility → Likely Punitive
- *Pathway 4* - Negative Affect → Self-Efficacy → Likely Helping Behaviour
- *Pathway 5* - Negative Affect → Perceived Risk → Likely Punitive Behaviour
- *Pathway 6* - Negative Affect → Perception of Student Responsibility → Likely Punitive

15.6 Model Incorporating Causal Factors

A further exploratory analysis model incorporated the Teacher causal factors as an addition to the previous Model 5. School and Family factors were not found to significantly relate to any other variables in the model. Child factors related to Perception of Student, however, the pathway model statistically rejected this variable being included. Those teachers who highly attributed Teacher factors

as the cause of the student's behaviour perceived themselves to have higher responsibility for the student's presentation (Personal Responsibility). This model supports the hypothesis that perceived causal factors can influence cognitions, but these cognitive variables did not appear to influence helping.

The Teacher causal factor variable increased the multiple r squared value of Perception of Self. Teacher causal factors explained an additional 11% of variance in Perception of Self than the 5% explained by Negative Affect. This did not, however, influence or change any of the path outcomes.

Model 6 *EI Model Incorporating Causal Factors*
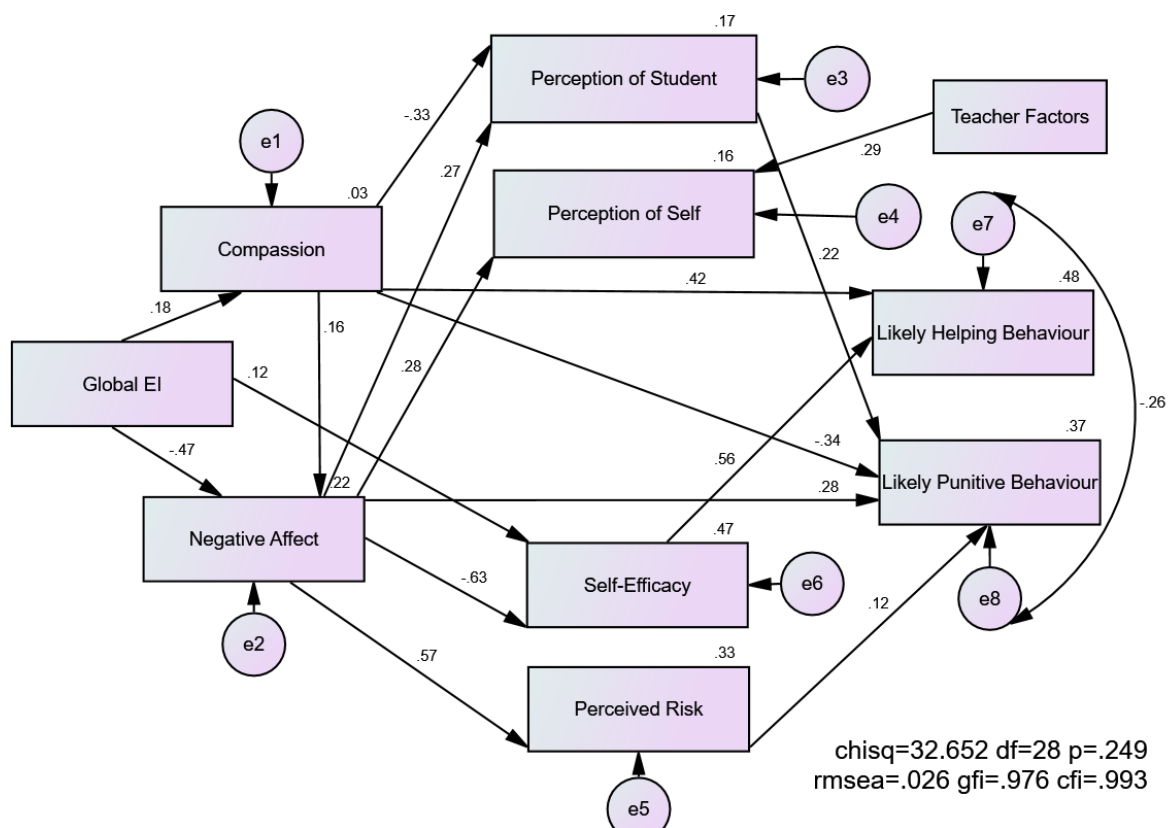
SRMR = .0569; TLI = .989

The resulting model statistics indicated a good model fit to the data with a non-significant chi-square result: $\chi2 = 32.652$ *df* = 28 and p = .249. All the other best fit indices in the current model were slightly reduced when compared with the previous models, however, it still reached high statistical significance: RMSEA = .026, GFI = .976, CFI = 993, TLI = .993 and SRMR = .0569. All variables

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significantly correlated at the p = <0.05 level (as shown in the regression weights Table 15.7 in

Appendix C). There were no changes from the previous Model 5, on squared multiple correlations (see

Table 15.8).

Table 15.8

Squared Multiple Correlations of Model 6: (Group number 1 - Default model)

	Estimate
AffectCOMPASS_TOTAL	.033
AffectNEG_TOTAL	.216
CogSTUDENT_TOTAL	.166
CogSELFEFFICACY_TOTAL	.471
CogPERCEIVEDRISK_TOTAL	.330
CogSELF_TOTAL	.159
HELP_TOTAL	.481
PUNITIVE_TOTAL	.366

Teacher factors did not account for any additional variance in Helping or Punitive Behaviour

when compared with the original model. This suggests that the attribution factors relate to teachers'

perceived causal factors, however, they seem to have no bearing on predicting behaviour. Due to the

lack of significance and contribution of the Teacher causal factors, this model was rejected and Model

5 accepted.

15.7 Models Incorporating Student Behaviour Severity Groups

The final proposed pathway Model 5 was used to test if there were any differences between

the two Behaviour Severity Groups. These models may not be statistically reliable due to their small

sample size, however, they do provide useful additional conceptual information in trying to understand

the effects of the different severity levels of student behaviour and EI.

15.7.1 Low Behaviour Severity Group Models

The data from the Low Behaviour Severity teacher group were placed into the model and

revealed the following results (Model 7).

Model 7 *Low Behaviour Severity Teacher Group applied to final proposed model*

chisq=11.806 df=13 p=.544
rmsea=.000 gfi=.976 cfi=1.000
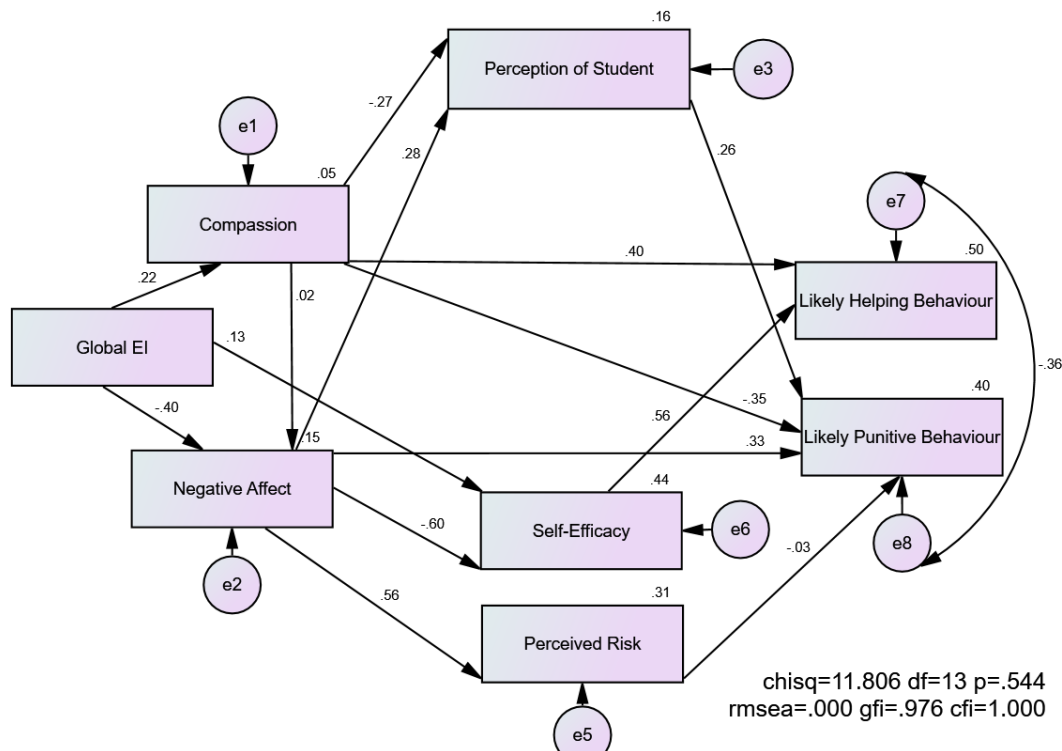
No statistically significant relationship was found between Perceived Risk and Punitive Behaviour, nor between the Compassion and Negative Affect variables, nor Global EI and Self-Efficacy (refer to Table 15.9 in Appendix C). These directional links were therefore removed to reveal the final Low Student Behaviour Severity Model 8. (See also Table 15.10).

Model 8 *Low Behaviour Severity group – Final Model*
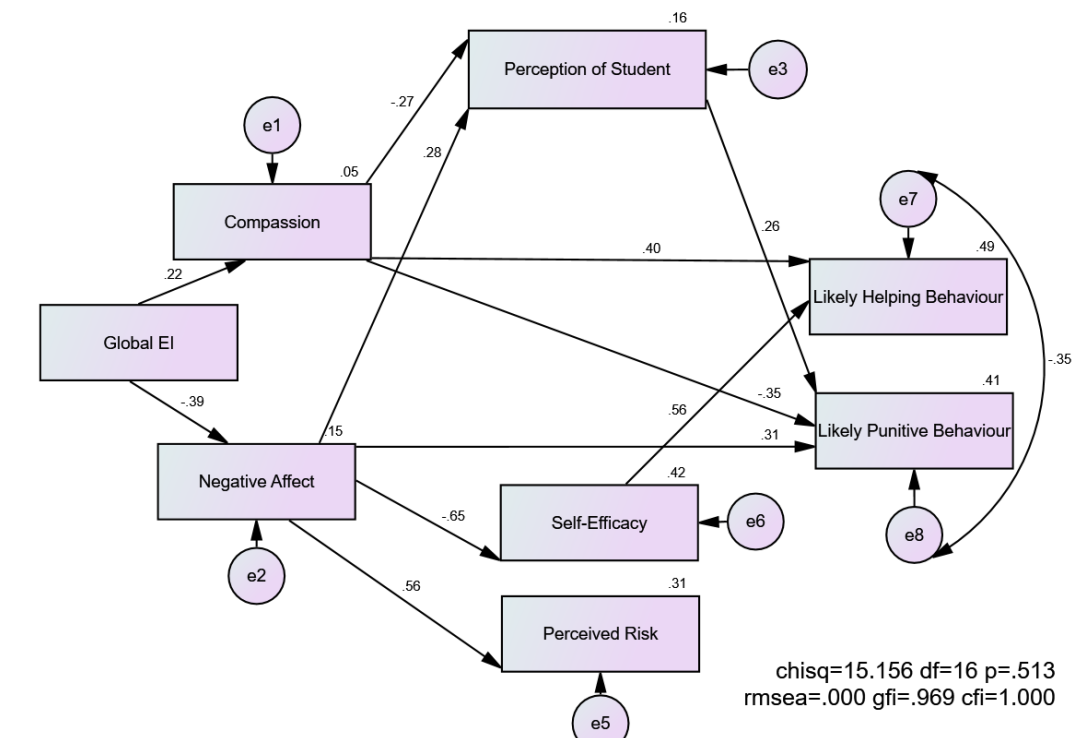
Table 15.10
Squared Multiple Correlations of Model 8: (Group number 1 - Default model)

	Estimate
AffectNEG_TOTAL	.153
AffectCOMPASS_TOTAL	.050
CogSTUDENT_TOTAL	.161
CogSELFEFFICACY_TOTAL	.422
HELP_TOTAL	.495
PUNITIVE_TOTAL	.407
CogPERCEIVEDRISK_TOTAL	.313

Model 8 was found to fit the data well, according to the displayed significant statistics. This model suggests that teachers' level of Perceived Risk is not relevant to Punitive or Helping Behaviour when the students' behaviour severity does not indicate a physical risk component. It also appears that high Compassion does not lead to high levels of Negative Affective experiences when the student behaviour is only mild and not physically threatening (see regression Table 15.11 in Appendix C).

15.7.2 High Behaviour Severity Group Models

The data from the High Behaviour Severity teacher group were placed into the model and
revealed the following results (Model 9), with associated Table 15.12.

Model 9 *High Behaviour Severity Teacher Group applied to final proposed model*
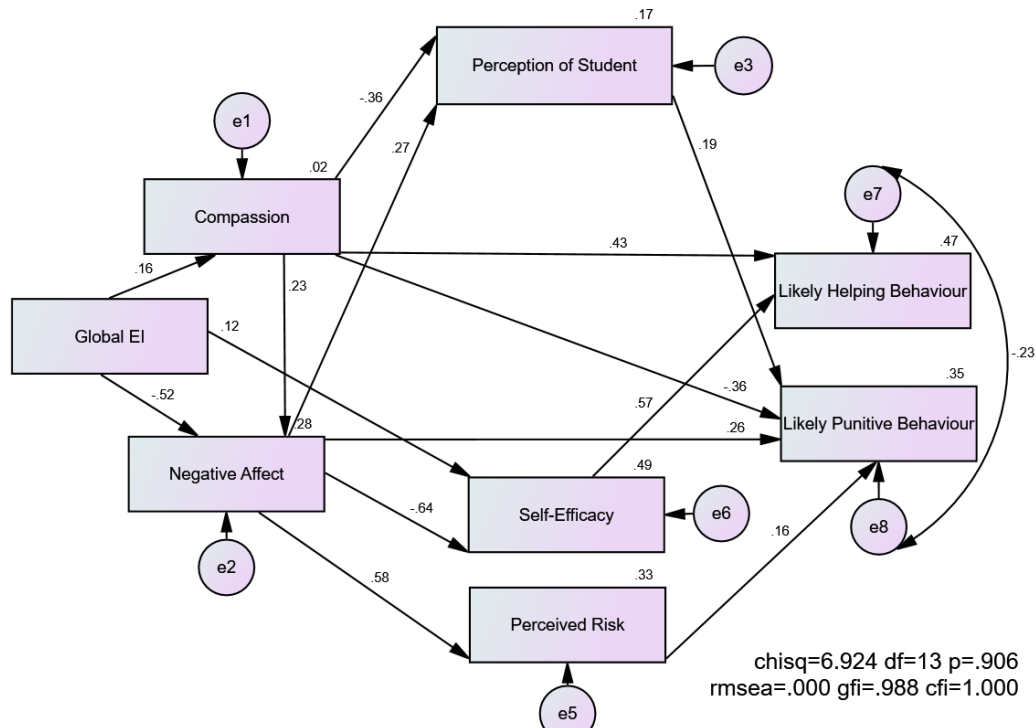
Table 15.12
Squared Multiple Correlations of Model 9: (Group number 1 - Default model)

	Estimate
AffectCOMPASS_TOTAL	.024
AffectNEG_TOTAL	.283
CogSTUDENT_TOTAL	.174
CogSELFEFFICACY_TOTAL	.493
CogPERCEIVEDRISK_TOTAL	.333
HELP_TOTAL	.470
PUNITIVE_TOTAL	.349

No statistically significant relationship was found between the EI and Self-Efficacy link and
so they were removed (see regression Table 15.13 in Appendix C). All the other variables remained in
the model. The final High Student Behaviour Severity Model is presented below (model 10). This

model was found to fit the data well, according to the displayed statistics (see regression Table 15.14 in Appendix C).

Model 10 *High Behaviour Severity group – Final Model*
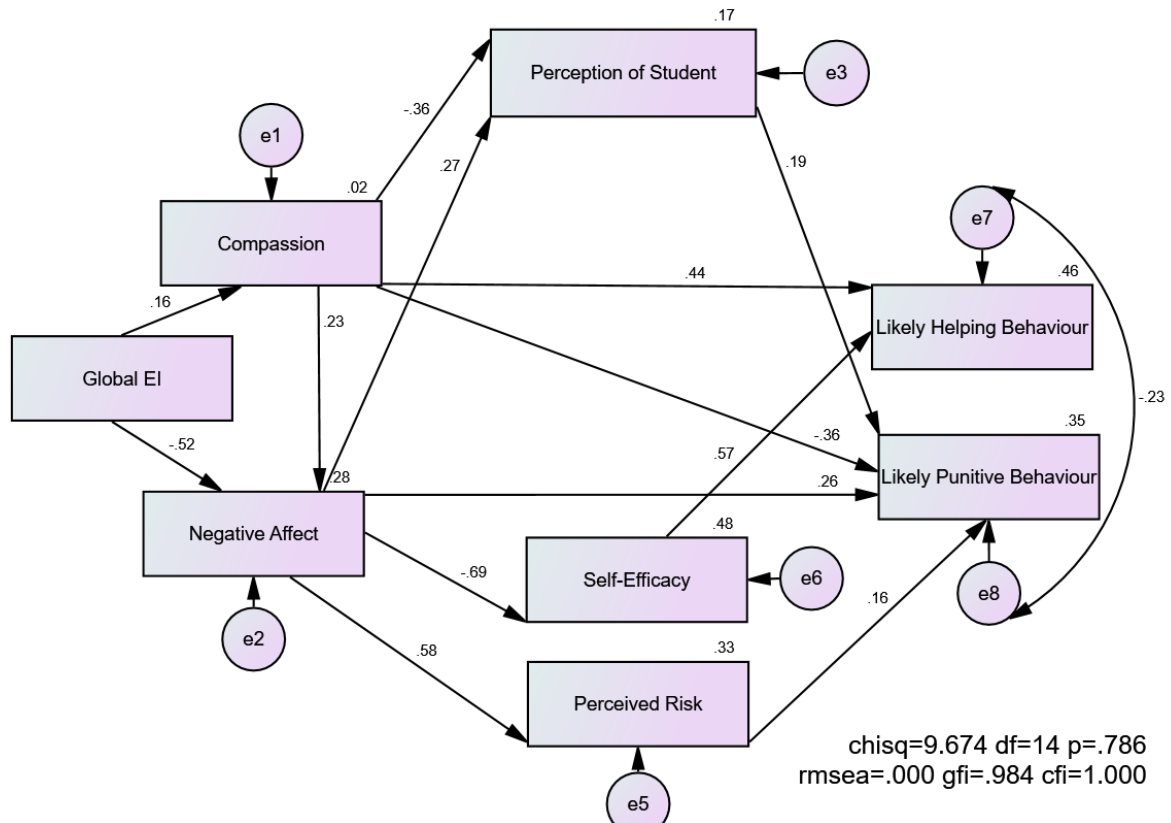
Table 15.15
Squared Multiple Correlations of Model 10: (Group number 1 - Default model)

	Estimate
AffectCOMPASS_TOTAL	.024
AffectNEG_TOTAL	.283
CogSTUDENT_TOTAL	.174
CogSELFEFFICACY_TOTAL	.483
CogPERCEIVEDRISK_TOTAL	.333
HELP_TOTAL	.463
PUNITIVE_TOTAL	.349

In comparison with the Low Behaviour Severity Model (Model 8), this Model 10 (High Behaviour Severity Group) (with associated Table 15.15) suggested that teachers' level of Perceived Risk relates to Punitive Behaviour when a student's behaviour indicates a physical risk. It also revealed that when the student's behaviour is high in severity and physically threatening, high

Compassion levels in teachers can lead to some teachers also experiencing high levels of Negative Affect.

15.8 Chapter Summary

A series of hypothesised and revised model designs were statistically tested where path analyses eventually identified the pathway and variables that most strongly associated with the outcome measures (Helping and Punitive Behaviour) and the influence of EI on these measures. The significant correlational relationships found between EI and the attribution variables, following confirmation of directionality, are displayed as visual pathway diagrams (Figures 15.1 & 15.2).

As a result of successful path analysis, a new EI Process Model of Stigmatisation (EPS-Model) is proposed as a way to understand the process of EI predicting behaviour. The model statistics indicated a good fit to the data, with a non-significant Chi-Square result: $\chi2 = 10.011$, $df = 13$ and p = .693. All the other best fit indices created an almost perfect solution. All variables significantly correlated at the p = <0.05 level.

Within this EPS-Model, six directional pathways were identified, where likely Helping and Punitive Behaviour outcomes were dependent on teacher EI levels, as hypothesised. EI did not directly predict Helping or Punitive Behaviour but relied on the affective and sometimes mediating cognitive factors to translate the unconscious EI processes into either helping or punitive behaviours. These different pathways were categorised into 'direct' and 'indirect' pathways.

The causal attribution factors of School and Family were not found to significantly relate to any other variables in the model. Child factors related to Perception of Student, however, the pathway model statistically rejected this variable being included. Teacher causal factors related to Perception of Personal Responsibility, however, these variables provided no additional statistical significance to the model, nor did they have any bearing on predicting behaviour. In addition to the attribution factors not being included in the EPS-Model, the Personal Responsibility variable was removed as it did not relate to any helping outcomes.

This chapter also explored possible differences between the two behaviour severity groups (Low and High Behaviour Severity), in relation to the newly proposed EPS-Model, to help understand the possible influence of student behaviour on the model's processes. Model comparisons of the two groups indicated that teachers' level of Perceived Risk only relates to Punitive Behaviour when a student's behaviour indicates a physical risk. It also revealed that only when the student's behaviour is high in severity and/or physically threatening, that high Compassion levels in teachers can lead to some of these teachers experiencing high levels of Negative Affect.

The EI Model of Stigmatisation has provided insight into the processes behind teacher helping behaviour. The statistical methods in the following chapters use these proposed pathways to identify the profile of teachers whose scores are most related to lower helping and higher punitive outcomes. This will assist with determining the most ideal teacher traits and the development of the ASET tool.

15.9 Visual Diagrams of Significant Correlations following Revised Pathway Analysis Results (directionality confirmed)

Figure 15.1 Significant correlations found (using Pearson's r) between EI and attribution variables following confirmation of relationship directionality
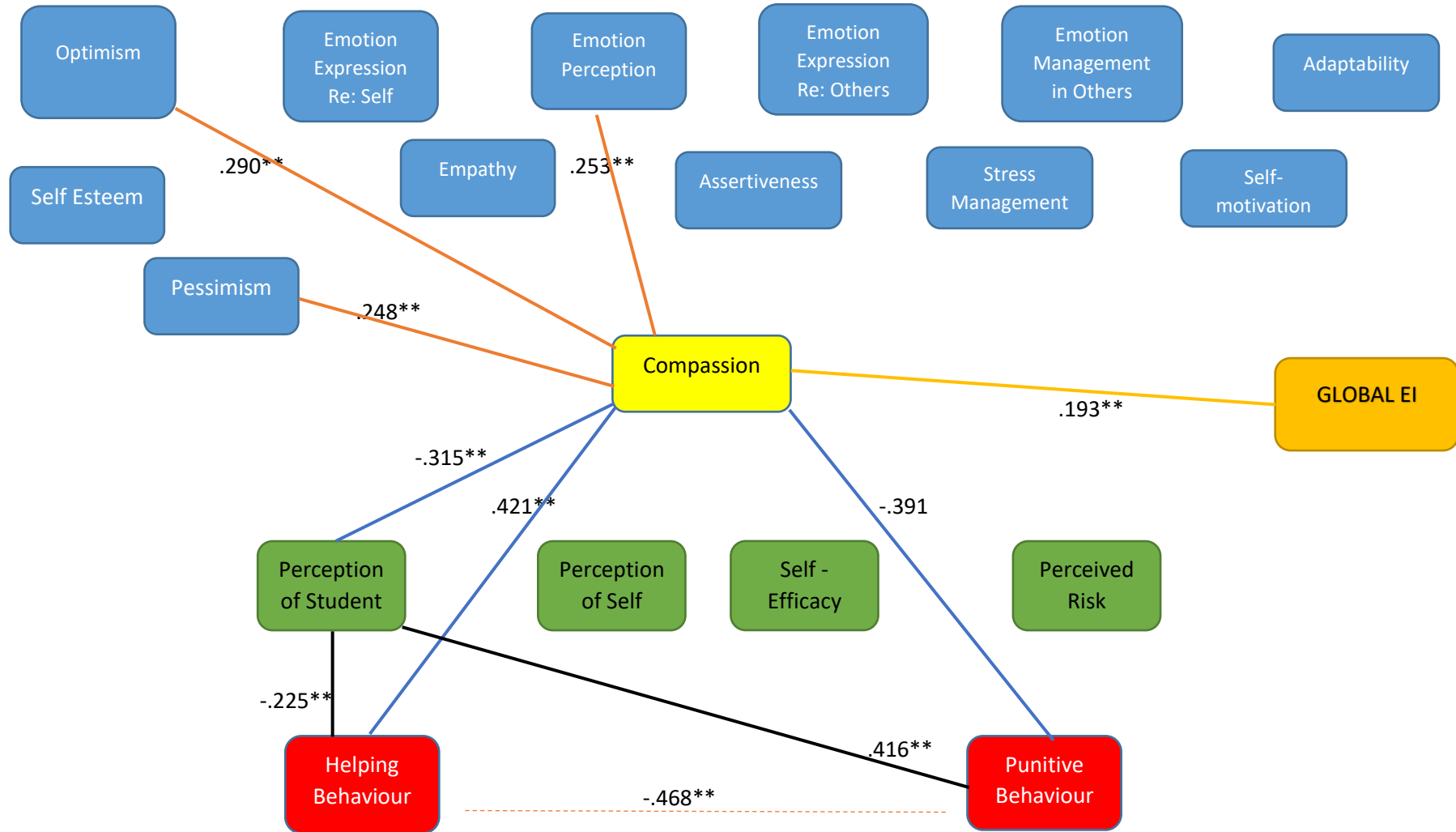
Figure 15.2 Significant correlations found (using Pearson's r) between EI and attribution variables following confirmation of relationship directionality
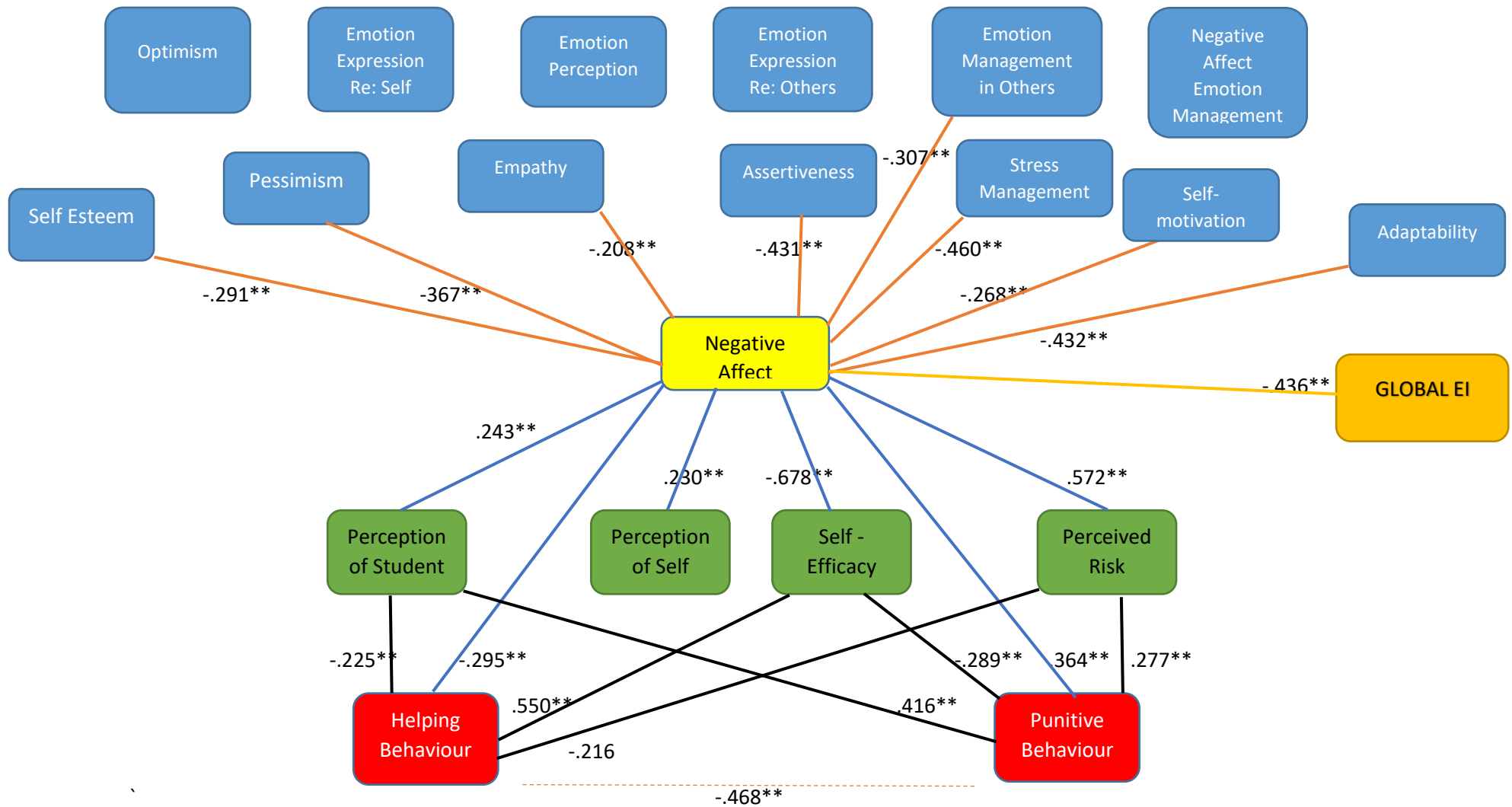
SECTION IV – DEVELOPMENT OF THE ASET TOOL

This section relates to development of the practical Assessment Screen for Emotionally Intelligent Teachers (ASET). The following chapters (Chapters 16 and 17) present the statistical methods, processes and rationale used to identify special 'clinical' or targeted 'extreme score' groups within the teacher data. The EI traits that distinguish these selected groups from the rest of the population are also identified and tested as criteria used in the proposed ASET tool. Based on these results, a new ASET tool is proposed. The ASET tool is presented in Appendix E, in its final questionnaire form, and the administrative considerations, scoring instructions and the quantitative and qualitative profile interpretations are included as the instrument's source.

CHAPTER 16 - Profile Group Development for ASET Tool

Cases (or scores) in the teacher data were specifically explored to determine 'who' the 'extreme' are so that 'ideal' teacher profiles could start to be developed. This method helped to identify and cluster those teachers whose scores on the Attribution Model pathway were most related to lower helping and higher punitive outcomes. The methods presented in this chapter also helped to identify the specific EI traits that had significant variance between the 'extreme' profiles group and the rest of the teacher population. As these comparisons were made, EI trait 'cut-off' scores were also developed and tested for use in the proposed Assessment Screen for Emotionally Intelligent Teachers (ASET).

16.1 Development of Extracted Profile Groups

The 'Extracted Profile' groups to be used for analysis were identified based on their high or low scores (within the top or bottom 25th percentile of scores) on the Attribution Model variables. This was one method which helped to identify and cluster those teachers whose scores on the Attribution Model pathway were most related to lower helping and higher punitive (the least ideal helping outcomes). It is through comparison with the teacher sample population data that determines whether a

cluster group is considered higher or lower than the general teacher population. These identified

extreme groups or cluster of scores are referred to as Extracted Profile Groups (EPG).

The six different variable pathways to likely behaviour, as determined through the proposed

model, are reiterated and summarised below:

<u>Direct Pathways (Affect → Behaviour)</u>:

- *Pathway 1*: Negative Affect was directly related to Likely Punitive behaviour = Extracted
  Profile Group 1 (EPG1)

- *Pathway 2*: Compassion was directly related to both Likely Helping and Punitive behaviour =
  Extracted Profile Group 2 (EPG2)

<u>Indirect Pathways (Affect → Cognitive → Behaviour)</u>:

- *Pathway 3*: Compassion → Perception of Student Responsibility → Likely Punitive
  Behaviour = Extracted Profile Group 3 (EPG3)

- *Pathway 4*: Negative Affect → Self-Efficacy → Likely Helping Behaviour = Extracted Profile
  Group 4 (EPG4)

- *Pathway 5* - Negative Affect → Perceived Risk → Likely Punitive Behaviour = Extracted
  Profile Group 5 (EPG5)

- *Pathway 6*: Negative Affect → Perception of Student Responsibility → Likely Punitive
  Behaviour = Extracted Profile Group 6 (EPG6)

16.2 Pathway 1: Negative Affect → Likely Punitive Behaviour

16.2.1 Step 1: Extracted Profile Group Selection

The Extracted Profile Group 1 was selected by first determining the teacher score percentiles

for each variable in the relevant pathway (see Table 16.1). Pathway 1 included the top 25% of (high)

Negative Affect teacher scores (scores above 40) and the top 25% of (high) Punitive scores (scores above 11.5). Those teachers whose scores fell into both these selected percentile criteria were allocated to EPG1.

Table 16.1
Teacher Percentile Scores for Pathway 1 variables

Statistics

		Negative Affect	Likely Punitive Behaviour
N	Valid	257	257
	Missing	4	4
Mean		32.37	9.07
Std. Deviation		11.24	3.98
Variance		126.30	15.88
Range		50.00	22.00
Minimum		9.00	4.00
Maximum		59.00	26.00
Percentiles	5	13.00	4.00
	15	19.00	4.70
	25	24.50	6.00
	50	33.00	9.00
	75	40.00	11.50
	85	44.00	13.00
	95	51.10	16.00

16.2.2 Step 2: Group Comparisons across Pathway 1 Attribution Model Factors

The EPG1 was compared with the remaining teacher population who did not fit this profile cluster. The two groups were compared, using parametric (independent t-tests) and nonparametric tests to ensure that the newly created EPG1 significantly differed from, or was unique to, the rest of the population who did not fit this profile. This condition was satisfied using both methods; where the EPG1 was found to be significantly higher in Negative Affect and Punitive behaviour than the remaining population.

In addition to the expected significant differences in Negative Affect ($t(255)=12.8$, $p<.001$) and Punitive variables ($t(255)=8.24$, $p<.001$) between the two groups, the EPG1 was also found to

differ in Perception of Student Responsibility (t(255)=5.48, p<.001), Self-Efficacy (t(255)=3.96, p<.001), Perceived Risk (t(255)=3.14, p<.001) and Helping Behaviour (t(255)=-2.18, p<.001. The EPG1 members perceived the student in the scenario to be more responsible and attributed higher blame. They had lower personal Self-Efficacy, higher Perceived Risk and lower likely Helping Behaviour (refer to Tables 16.2 & 16.3 in Appendix D).

16.2.3 Step 3: Trait EI Group Comparisons for Pathway 1

The EPG1 members were investigated, using independent t-tests, for differences in trait EI compared with the remaining population.

The statistical analyses reported (in Tables 16.4 and 16.5 of Appendix D) revealed that the EPG1 was significantly lower in Self-Esteem (t(255)=5.23, p<.001), Optimism (t(255)=2.60, p<.01), Empathy (t(255)=-2.85, p<.01), Emotion Perception (t(255)=-2.77, p<.01), Assertiveness (t(255)=2.54, p<.05) , Emotion Management in Others (t(34.06)=-3.23, p<.01), Stress Management (t(31.32)=-4.82, p<.001, Self-Motivation (t(255)=-2.73, p<.001), Adaptability (t(255)=-3.59, p<.001) and Global EI (t(255)=-4.48, p<.001). They were also significantly higher in Pessimism (t(255)=-4.07, p<.001) compared with the remaining population (see Tables 16.4 & 16.5 in Appendix D).

16.3 Pathway 2:

Compassion   → Likely Helping
               → Likely Punitive

16.3.1 Step 1: Extracted Profile Group Selection

The Extracted Profile Group 2 was created by first determining the teacher score percentiles for each relevant variable. In this case, the bottom 25% of (low) Compassion and (low) Helping Behaviour scores were selected, as well as the top 25% of (high) Punitive Scores. Those teachers who fell into these 3 selected percentiles were allocated to EPG2 (Table 16.6).

Table 16.6

Teacher Percentile Scores for Pathway 2 variables

Statistics

		Compassion	Likely Helping Behaviour	Likely Punitive Behaviour
N	Valid	257	257	257
	Missing	4	4	4
Mean		16.33	33.23	9.07
Std. Deviation		2.75	5.20	3.98
Variance		7.59	27.05	15.88
Minimum		8.00	17.00	4.00
Maximum		21.00	42.00	26.00
Percentiles	5	12.00	24.00	4.00
	15	13.00	27.00	4.70
	25	14.00	30.00	6.00
	50	16.00	34.00	9.00
	75	18.00	37.00	11.50
	85	19.00	39.00	13.00
	95	21.00	41.00	16.00

16.3.2 Step 2: Group Comparisons across Pathway 2 Attribution Model Factors

The EPG2 was compared with the remaining population, who did not fit this profile category. The two groups were compared, using parametric and nonparametric (independent t-tests), to ensure that the newly created EPG2 was significantly different from, or unique to, the rest of the population who did not fit this profile. This condition was satisfied using both methods, where the EPG2 was significantly lower in Compassion and Helping and higher in Punitive Behaviour than the remaining population.

In addition to the expected significant differences in Compassion (t(31.68)=-15.33, p<.001), Helping (t(16.39)=-11.68, p<.001), and Punitive (t(253)=6.20, p<.001) variables between the two groups, the EPG2 also differed in relation to Perception of Student Responsibility (t(253)=2.95, p<.01), and Self-Efficacy (t(16.02)=-4.52, p<.001). The EPG2 perceived the student in the scenario to

be more responsible/higher blame and have lower personal Self-Efficacy (see Tables 16.7 & 16.8 in Appendix D).

16.3.3 Step 3: Trait EI Group Comparisons for Pathway 2

The EPG2 was investigated, using independent t-tests, for differences in trait EI compared with the remaining teacher population.

The EPG2 was lower in Optimism ($t(253)=-3.89$, $p<.001$), Emotion Expression of self ($t(253)=-3.89$, $p<.01$), Empathy ($t(253)=-2.66$, $p<.01$), Emotion Perception ($t(253)=-3.87$, $p<.001$), Stress Management ($t(253)=-2.14$, $p<.05$), Self-Motivation ($t(253)=-2.72$, $p<.01$), Adaptability ($t(253)=-3.31$, $p<.001$) and Global EI ($t(253)=-3.63$, $p<.001$). They were also higher in Pessimism ($t(253)=-3.89$, $p<.001$) than the remaining population (see Table 16.9 in Appendix D). Nonparametric tests are no longer presented and reported throughout the rest of this thesis as they found the same statistically significant findings as the parametric tests.

16.4 Pathway 3:

Compassion → Perception of Student Responsibility → Likely Punitive Behaviour

16.4.1 Step 1: Extracted Profile Group Selection

The Extracted Profile Group 3 (EPG3) was selected by first determining the teacher score percentiles for each variable in the relevant pathway. Pathway 3 included the bottom 25% of (low) Compassion teacher scores and the top 25% of (high) Perception of Student Responsibility and the top 25% of (high) Punitive Behaviour. Those teachers whose scores fell into these selected percentile criteria were allocated to EPG3 (Table 16.10).

Table 16.10

Teacher Percentile Scores for Pathway 3 variables

Statistics

		Compassion	Student Responsibility	Likely Punitive Behaviour
N	Valid	257	257	257
	Missing	4	4	4
Mean		16.3288	9.1070	9.0661
Std. Deviation		2.75459	3.09252	3.98428
Variance		7.588	9.564	15.875
Minimum		8.00	3.00	4.00
Maximum		21.00	20.00	26.00
Percentiles	5	12.0000	4.0000	4.0000
	15	13.0000	6.0000	4.7000
	25	14.0000	7.0000	6.0000
	50	16.0000	9.0000	9.0000
	75	18.0000	11.0000	11.5000
	85	19.0000	13.0000	13.0000
	95	21.0000	14.0000	16.0000

16.4.2 Step 2: Group Comparisons across Pathway 3 Attribution Model Factors

The EPG3 was compared with the remaining teacher population, who did not fit into this profile category. The two groups were compared, using parametric (independent t-tests), to ensure that the newly created EPG3 was significantly different from, or unique to, the remaining population who did not fit this profile. This condition was satisfied as the EPG3 was significantly lower in Compassion ($t(21.08)=-11.48$, $p<.001$), higher in Perception of Student Responsibility/Fault ($t(20.23)=-8.15$, $p<.001$) and higher in Likely Punitive Behaviour ($t(255)=8.07$, $p<.001$) than the remaining population (see Table 16.11 in Appendix D).

In addition to these expected significant differences between the two groups, the EPG3 also differed in relation to likely Helping Behaviour ($t(255)=5.97$, $p<.001$), with EPG3 showing significantly lower Helping Behaviour scores.

16.4.3 Step 3: Trait EI Group Comparisons for Pathway 1

EPG3 was compared with the remaining population, using independent t-tests, for differences in trait EI.

The EPG3 was significantly lower in Self-Esteem (t(256)=-2.05, p<.05), Emotion Expression of self (t(256)=-3.82, p<.01), Empathy (t(256)=-3.82, p<.001), Emotion Perception (t(256)=-3.16, p<.01), Stress Management (t(21.70)=-2.51, p<.05), Self-Motivation (t(256)=-2.83, p<.01), Adaptability (t(256)=-2.41, p<.05) and Global EI (t(256)=-3.29, p<.001). They were also significantly higher in Pessimism (t(256)=-3.82, p<.001) compared with the sample population (see Table 16.12 in Appendix D).

16.5 Indirect Pathway 4:

Negative Affect → Self-Efficacy → Likely Helping

16.5.1 Step 1: Extracted Profile Group Selection

The Extracted Profile Group 4 (EPG4) was selected by first determining the teacher score percentiles for each variable in the relevant pathway. Pathway 4 included the top 25% of (high) Negative Affect teacher scores, the bottom 25% of (low) perceived Self-Efficacy and the bottom 25% of (low) Helping Behaviour. Those teachers whose scores fell into each of these selected percentile criteria were allocated to EPG4 (Table 16.13).

Table 16.13

Teacher Percentile Scores for Pathway 4 variables

Statistics

		Negative Affect	Self-Efficacy	Likely Helping Behaviour
N	Valid	257	257	257
	Missing	4	4	4
Mean		32.3658	19.9805	33.2296
Std. Deviation		11.23847	5.26742	5.20046
Variance		126.303	27.746	27.045
Minimum		9.00	4.00	17.00
Maximum		59.00	28.00	42.00
Percentiles	5	13.0000	10.0000	24.0000
	15	19.0000	14.0000	27.0000
	25	24.5000	17.0000	30.0000
	50	33.0000	20.0000	34.0000
	75	40.0000	24.0000	37.0000
	85	44.0000	26.0000	39.0000
	95	51.1000	28.0000	41.0000

16.5.2 Step 2: Group Comparisons across Pathway 4 Attribution Model Factors

The EPG4 was compared with the remaining sample population, who did not fit into this profile category. The two groups were compared, using independent t-tests, to ensure that the newly created EPG4 was significantly different from, or unique to, the remaining population who did not fit this profile. This condition was satisfied as the EPG4 was significantly higher in Negative Affect (t(24.15)=10.87, p<.001), lower in Self-Efficacy (t(255)=-7.62, p<.001) and lower in Helping Behaviour (t(23.05)=-9.76, p<.001) than the remaining population.

In addition to these expected significant differences between the two groups, the EPG4 also differed in relation to Perception of Risk (t(255)=2.98, p<.01) and Likely Punitive Behaviour (t(255)=-3.27, p<.001). The EPG4 had significantly higher Perceived Risk and were higher in Likely Punitive Behaviour (see Table 16.14 in Appendix D).

16.5.3 Step 3: Trait EI Group Comparisons for Pathway 4

EPG4 was compared with the remaining population, using independent t-tests, for differences in trait EI.

The EPG4 was significantly lower in Emotion Expression of self (t(255)=-2.46, p<.05), Empathy (t(255)=-2.53, p<.05), Emotion Perception (t(255)=-3.03, p<.01), Emotion Expression of others (t(255)=-2.29, p<.05), Assertiveness (t(255)=-2.74, p<.01), Stress Management (t(255)=-3.22, p<.001), Self-Motivation (t(255)=-2.27, p<.05), Adaptability (t(255)=-2.692, p<.01) and Global EI (t(255)=-3.46, p<.001) compared with the remaining population (refer to Table 16.15 in Appendix D).

16.6 Indirect Pathway 5:

Negative Affect → Perceived Risk → Likely Punitive

16.6.1 Step 1: Extracted Profile Group Selection

Table 16.16
Teacher Percentile Scores for Pathway 5 variables

Statistics

		Negative Affect	Perceived Risk	Likely Punitive Behaviour
N	Valid	257	257	261
	Missing	4	4	0
Mean		32.3658	7.3035	8.9272
Std. Deviation		11.23847	2.89823	4.10797
Variance		126.303	8.400	16.875
Range		50.00	12.00	26.00
Minimum		9.00	2.00	.00
Maximum		59.00	14.00	26.00
Percentiles	5	13.0000	3.0000	4.0000
	15	19.0000	4.0000	4.0000
	25	24.5000	5.0000	6.0000
	50	33.0000	8.0000	8.0000
	75	40.0000	10.0000	11.0000
	85	44.0000	10.3000	13.0000
	95	51.1000	12.0000	16.0000

The Extracted Profile Group 5 (EPG5) was selected by first determining the teacher score percentiles for each variable in the relevant pathway. Pathway 5 included the top 25% of (high) Negative Affect teacher scores, the top 25% of (high) Perceived Risk and the top 25% of (high) Punitive Behaviour. Those teachers whose scores fell into all of these selected percentile criteria were allocated to EPG5 (Table 16.16).

16.6.2 Step 2: Group Comparisons across Pathway 5 Attribution Model Factors

Independent t-tests were used to compare EPG5 with the remaining population, who did not fit into this profile category, for significant differences. This condition was satisfied as the EPG5 was significantly higher in Negative Affect (t(255)=6.64, p<.001), higher in Perceived Risk (t(255)=6.13, p<.001) and higher in Punitive Behaviour (t(255)=4.43, p<.001) than the remaining population.

In addition to these expected significant differences between the two groups, the EPG5 also differed in relation to their Self-Efficacy (t(255)=-4.38, p<.001) with EPG5 showing significantly lower Self-Efficacy (refer to Table 16.17 in Appendix D).

16.6.3 Step 3: Trait EI Group Comparisons for Pathway 5

EPG5 was compared with the remaining population, using independent t-tests, for differences in trait EI.

The EPG5 was significantly lower in Self-esteem (t(255)=-2.17, p<.05), Optimism (t(255)=-2.61, p<.01), Assertiveness (t(19.70)=-3.37, p<.01), Emotion Management of others (t(255)=-2.49, p<.05), Stress Management (t(255)=-2.47, p<.05), Adaptability (t(255)=-2.37, p<.05) and Global EI (t(255)=-2.83, p<.01) (refer to Table 16.18 in Appendix D).

16.7 Indirect Pathway 6:

Negative Affect → Perception of Student → Likely Punitive

16.7.1 Step 1: Extracted Profile Group Selection

The Extracted Profile Group 6 was selected by first determining the teacher score percentiles for each variable in the relevant pathway. Pathway 6 included the top 25% of (high) Negative Affect teacher scores, the top 25% of (high) Perception of Student Responsibility and the top 25% of (high) Punitive Behaviour. Those teachers whose scores fell into all these selected percentile criteria were allocated to EPG6 (Table 16.19).

Table 16.19
Teacher Percentile Scores for Pathway 6 variables

Statistics

		Negative Affect	Student Responsibility	Likely Punitive Behaviour
N	Valid	257	257	261
	Missing	4	4	0
Mean		32.37	9.11	8.93
Std. Deviation		11.24	3.09	4.11
Variance		126.30	9.56	16.88
Range		50.00	17.00	26.00
Minimum		9.00	3.00	.00
Maximum		59.00	20.00	26.00
Percentiles	5	13.00	4.00	4.00
	15	19.00	6.00	4.00
	25	24.50	7.00	6.00
	50	33.00	9.00	8.00
	75	40.00	11.00	11.00
	85	44.00	13.00	13.00
	95	51.10	14.00	16.00

16.7.2 Step 2: Group Comparisons across Pathway 6 Attribution Model Factors

The EPG6 was compared, using parametric independent t-tests, with the remaining population, who did not fit into this profile category, for significant differences. This condition was satisfied as the EPG6 was significantly higher in Negative Affect ($t(25.22)=10.27$, $p<.001$), higher in Perception of Student Responsibility ($t(255)=6.79$, $p<.001$) and higher in Punitive Behaviour ($t(255)=6.51$, $p<.001$) than the remaining population.

In addition to these expected significant differences between the two groups, the EPG6 also differed in relation to their Perception of Self-Responsibility (t(255)=-2, p<.05), Self-Efficacy (t(255)=-3.76, p<.001) and Helping (t(255)=-2.83, p<.01). The EPG6 had a significantly higher Perception of Personal Responsibility, lower Self-Efficacy and lower Helping (see Table 16.20 in Appendix D).

16.7.3 Step 3: Trait EI Group Comparisons for Pathway 6

Independent t-tests were used to compare EPG6 with the remaining population, for differences in trait EI. The EPG6 was significantly higher in Pessimism (t(255)=-3.03, p<.01), lower in Empathy (t(255)=-2.87, p<.01), Emotion management in others (t(255)=-2.56, p<.05), Stress Management (t(21.48)=-2.96, p<.01) and Global EI (t(255)=-2.87, p<.01) (see Table 16.21 in Appendix D).

16.8 Creating Cut-Off Points in the Teacher Population Data

By exploring the quartile scores of the remaining population some cut-off points were generated. The EPG clusters were excluded as they were considered distinct 'clinical' profile groups, based on their distinguishing factors from the 'normed' teacher sample population data (as demonstrated previously). Twenty two teachers were included in all the EPG clusters. Therefore, cut-off score criteria for the 'ideal' EI teacher traits were created from this normed data, at and below the 24th percentile. Above the 25th percentile was considered within the ideal trait range.

Using Global EI as an example in Table 16.22, a score above 62.47 in Global EI would be considered in the 'ideal' and higher range of the remaining teacher population. The cut-off score was placed at and below 61.85, which when compared to the EPG1, captured approximately the lower 40-50% of scorers that were considered to be extremely high in Negative Affect and punitive behaviour. A score below 58.73 (bottom 15%) is considered to be moderately lower in trait and below 53.22 (less than 5% population group) is considered to be significantly lower in trait.

16.8.1 Pathway 1 Cut-Off Criteria

Table 16.22

Percentiles showing criteria cut-off scores for Pathway 1

Statistics

		SELF ESTEEM	OPTIMISM	PESSIMISM (LOW)	EMPATHY	EMOTION PERCEP	ASSERT	EMOTION MGT IN OTHERS	STRESS MGT	ADAPT	SELF MOTIV	Global EI	
N	Valid	233	233	233	233	233	233	233	233	233	233	233	
	Missing	0	0	0	0	0	0	0	0	0	0	0	
Mean		5.13	5.80	5.69	5.19	5.86	4.37	4.75	5.17	5.29	5.50	67.68	
Std. Deviation		1.03	.85	1.05	.86	1.10	1.12	1.00	1.04	.89	.97	8.18	
Variance		1.07	.72	1.10	.75	1.21	1.25	1.00	1.09	.79	.94	66.90	
Range		5.17	4.60	4.60	4.83	5.00	5.50	5.60	4.43	4.86	4.20	39.84	
Minimum		1.83	2.40	2.40	2.17	2.00	1.33	1.40	2.57	2.14	2.80	45.97	
Maximum		7.00	7.00	7.00	7.00	7.00	6.83	7.00	7.00	7.00	7.00	85.81	
Percentiles	5	3.17	4.40	3.80	3.67	3.67	2.50	2.80	3.14	3.71	3.74	53.22	<5% = Severely Low in Trait
	15	4.17	4.82	4.60	4.33	4.67	3.18	3.60	4.00	4.43	4.40	58.73	>5-15% = Moderately Low in Trait
	24	4.33	5.20	5.00	4.67	5.05	3.53	4.00	4.43	4.71	4.80	61.85	>16-24% = Mildly Low in Trait
	25	4.50	5.20	5.00	4.67	5.33	3.67	4.20	4.43	4.71	5.00	62.47	**≥25% = IDEAL TRAIT LEVELS**
	50	5.17	6.00	5.80	5.33	6.00	4.33	4.80	5.29	5.29	5.60	68.11	
	75	5.83	6.40	6.60	5.83	6.67	5.17	5.60	6.00	6.00	6.20	74.08	
	85	6.17	6.60	6.80	6.00	7.00	5.67	5.80	6.29	6.14	6.58	76.52	
	95	6.83	7.00	7.00	6.50	7.00	6.33	6.20	6.61	6.71	7.00	80.79	

Similar procedures were used to determine cut-off criteria for the other five pathways (Tables 16.23 to 16.27).

16.8.2 Pathway 2 Cut-Off Criteria

Table 16.23

Percentiles showing criteria cut-off scores for Pathway 2

Statistics

		OPTIMISM	PESSIMISM	EMOTION EXPRESSION RE SELF	EMPATHY	EMOTION PERCEPTION	STRESS MANAGEMENT	SELF MOTIVATION	ADAPTABILITY	Global EI
N	Valid	242	242	242	242	242	242	242	242	242
	Missing	0	0	0	0	0	0	0	0	0
Mean		5.81	5.68	5.18	5.17	5.87	5.12	5.49	5.27	67.41
Std. Deviation		.85	1.08	1.17	.90	1.10	1.06	.98	.91	8.27
Variance		.73	1.17	1.37	.80	1.21	1.13	.95	.84	68.41
Minimum		2.00	2.20	1.43	2.00	2.00	2.43	2.80	2.14	40.05
Maximum		7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	85.81
Percentiles	5	4.40	3.80	3.02	3.67	3.67	3.14	3.63	3.71	53.01
	15	5.00	4.60	3.86	4.33	4.67	3.86	4.29	4.43	58.84
	24	5.20	5.00	4.43	4.67	5.33	4.43	4.80	4.71	61.57
	25	5.20	5.00	4.43	4.67	5.33	4.43	4.95	4.71	61.89
	50	6.00	5.80	5.36	5.33	6.00	5.29	5.60	5.29	67.65
	75	6.40	6.60	6.00	5.83	6.67	6.00	6.20	5.89	73.91
	85	6.60	6.80	6.43	6.00	7.00	6.29	6.60	6.14	75.97
	95	7.00	7.00	6.71	6.50	7.00	6.57	7.00	6.71	80.60

16.8.3 Pathway 3 Cut-Off Criteria

Table 16.24

Percentiles showing criteria cut-off scores for Pathway 3

Statistics

		SELF ESTEEM	PESSIMISM	EMOTION EXPRESSION RE SELF	EMPATHY	EMOTION PERCEPTION	STRESS MANAGEMENT	SELF MOTIVATION	ADAPTABILITY	Global EI
N	Valid	243	243	243	243	243	243	243	243	243
	Missing	0	0	0	0	0	0	0	0	0
Mean		5.09	5.67	5.18	5.18	5.86	5.10	5.49	5.26	67.35
Std. Deviation		1.05	1.09	1.16	.88	1.09	1.07	.97	.92	8.31
Variance		1.11	1.19	1.35	.77	1.19	1.16	.94	.85	69.08
Minimum		1.33	2.20	1.43	2.17	2.00	2.43	2.80	2.14	40.05
Maximum		7.00	7.00	7.00	7.00	7.00	7.00	7.00	7.00	85.81
Percentiles	5	3.17	3.64	3.14	3.67	3.67	3.14	3.64	3.60	53.02
	15	4.00	4.60	3.86	4.27	4.67	3.86	4.40	4.43	58.75
	24	4.33	5.00	4.43	4.59	5.33	4.29	4.80	4.71	61.48
	25	4.33	5.00	4.43	4.67	5.33	4.43	4.80	4.71	61.84
	50	5.17	5.80	5.29	5.33	6.00	5.29	5.60	5.29	67.62
	75	5.83	6.60	6.00	5.83	6.67	6.00	6.20	5.86	73.89
	85	6.17	6.80	6.43	6.00	7.00	6.29	6.48	6.14	75.95
	95	6.83	7.00	6.71	6.50	7.00	6.57	7.00	6.71	80.60

16.8.4 Pathway 4 Cut-Off Criteria

Table 16.25

Percentiles showing criteria cut-off scores for Pathway 4

Statistics

		EMOTION EXPRESSION RE SELF	EMPATHY	EMOTION PERCEPTION	EMOTION EXPRESSION RE OTHERS	ASSERTIVENESS	STRESS MANAGEMENT	SELF MOTIVATION	ADAPTABILITY	Global EI
N	Valid	240	240	240	240	240	240	240	240	240
	Missing	0	0	0	0	0	0	0	0	0
Mean		5.18	5.17	5.86	5.22	4.37	5.14	5.48	5.26	67.43
Std. Deviation		1.16	.88	1.09	1.31	1.10	1.04	.96	.90	8.22
Variance		1.34	.77	1.19	1.72	1.21	1.08	.93	.82	67.50
Minimum		1.43	2.00	2.00	1.33	1.50	2.57	2.80	2.14	45.97
Maximum		7.00	7.00	7.00	7.00	6.83	7.00	7.00	7.00	85.81
Percentiles	5	3.14	3.67	3.67	2.67	2.50	3.15	3.80	3.71	53.14
	15	3.86	4.19	4.67	3.67	3.17	4.00	4.40	4.43	58.37
	24	4.43	4.67	5.33	4.33	3.50	4.41	4.80	4.71	61.38
	25	4.43	4.67	5.33	4.42	3.67	4.43	4.85	4.71	61.86
	50	5.36	5.33	6.00	5.67	4.33	5.29	5.60	5.29	67.96
	75	6.00	5.83	6.67	6.33	5.17	6.00	6.20	5.86	73.96
	85	6.43	6.00	7.00	6.67	5.67	6.29	6.57	6.14	76.01
	95	6.71	6.50	7.00	7.00	6.33	6.57	7.00	6.71	80.61

16.8.5 Pathway 5 Cut-Off Criteria

Table 16.26

Percentiles showing criteria cut-off scores for Pathway 5

Statistics

		SELF ESTEEM	OPTIMISM	ASSERTIVENESS	EMOTION MANAGEMENT IN OTHERS	STRESS MANAGEMENT	ADAPTABILITY	Global EI
N	Valid	242	242	242	242	242	242	242
	Missing	0	0	0	0	0	0	0
Mean		5.09	5.79	4.35	4.74	5.12	5.26	67.32
Std. Deviation		1.04	.86	1.12	.98	1.06	.90	8.26
Variance		1.07	.73	1.25	.97	1.11	.81	68.26
Range		5.17	4.60	5.50	5.60	4.43	4.86	39.84
Minimum		1.83	2.40	1.33	1.40	2.57	2.14	45.97
Maximum		7.00	7.00	6.83	7.00	7.00	7.00	85.81
Percentiles	5	3.17	4.40	2.50	2.80	3.14	3.71	53.04
	15	4.00	4.80	3.17	3.80	3.86	4.43	58.42
	24	4.33	5.20	3.50	4.00	4.43	4.57	61.11
	25	4.33	5.20	3.50	4.15	4.43	4.71	61.37
	50	5.17	6.00	4.33	4.80	5.29	5.29	67.65
	75	5.83	6.40	5.17	5.45	6.00	5.89	73.91
	85	6.17	6.60	5.67	5.80	6.29	6.14	75.97
	95	6.83	7.00	6.31	6.20	6.57	6.71	80.60

16.8.6 Pathway 6 Cut-Off Criteria

Table 16.27

Percentiles showing criteria cut-off scores for Pathway 6

Statistics

		PESSIMISM	EMPATHY	EMOTION MANAGEMENT IN OTHERS	STRESS MANAGEMENT	Global EI
N	Valid	240	240	240	240	240
	Missing	0	0	0	0	0
Mean		5.66	5.18	4.74	5.12	67.35
Std. Deviation		1.08	.86	.98	1.07	8.34
Variance		1.16	.75	.96	1.14	69.53
Range		4.80	4.83	5.60	4.57	45.76
Minimum		2.20	2.17	1.40	2.43	40.05
Maximum		7.00	7.00	7.00	7.00	85.81
Percentiles	5	3.80	3.67	2.81	3.14	53.01
	15	4.60	4.33	3.80	3.88	58.47
	24	5.00	4.67	4.00	4.41	61.26
	25	5.00	4.67	4.20	4.43	61.68
	50	5.80	5.33	4.80	5.29	67.65
	75	6.60	5.83	5.55	6.00	73.96
	85	6.80	6.00	5.80	6.29	76.01
	95	7.00	6.50	6.20	6.57	80.61

16.9 Statistically Recommended Cut-Off Criteria Scores for EI Trait Combination Profiles

In reviewing the cut-off scores produced in Section 16.8, it was revealed that each EI trait ended up producing a similar, or the same, cut-off score across other Pathways; where that specific EI trait was present. For example, the Assertiveness trait produced cut-off scores of 3.53, 3.5 and 3.5 for Pathways 1, 4 and 5 in the previous analyses. Therefore, an Average cut-off score of 3.51 was calculated and used for the Assertiveness trait within *all* these three relevant Pathway groups.

Every 'cut-off' score for each individual trait within each pathway group was added together to calculate a 'Total Cut-off Score' for each Pathway. Each column in the tables below, that has a score, represents the presence of that EI trait within each attribution pathway group (as previously established in section 16.1). For Pathway 6, for example, the Pessimism, Empathy, Emotion Management and Stress Management cut-off scores were added together to total an EI group profile score of 18.06 (5 + 4.66 + 4 + 4.41 = 18.07). To recall, these were considered important traits due to their variance from the EPG6 clinical group. The combined EI traits (within each pathway) from this particular point are referred to as *profile* groups, indicating the six ideal EI trait 'combination' for teachers. These profile groups still reflect the data for each of the six attribution pathways but have been re-labelled to provide for easier clinical interpretation.

Tables 16.28 to 16.30 display the total cut-off scores for six EI 'Trait Profiles', and classify the scores as being either Mildly Lower, Moderately Lower or Significantly Lower in a particular Trait Profile, compared with the overall teacher sample.

16.9.1 Cut-Off Scores For 'Mildly Lower' In EI Trait

Table 16.28

Summary of Total (Mildly Lower) Cut-off Scores for each of the 6 Pathway Profiles

EI TRAIT	Pathway1 (Profile1)	Pathway2 (Profile2)	Pathway3 (Profile3)	Pathway4 (Profile4)	Pathway5 (Profile5)	Pathway6 (Profile6)	AVERAGE CUT-OFF SCORE
Self Esteem	4.33	-	4.33	-	4.33	-	4.33
Optimism	5.2	5.2	-	-	5.2	-	5.2
Pessimism	5	5	5	-	-	5	5
Emotion Express (of self)	-	4.43	4.43	4.43	-	-	4.43
Empathy	4.67	4.67	4.59	4.67	-	4.67	(4.62)
Emotion Perception	5.05	5.33	5.33	5.33	-	-	(5.26)
Emotion Express (of others)	-	-	-	4.33	-	-	4.33
Assertiveness	3.53	-	-	3.5	3.5	-	(3.51)
Emotion Management	4	-	-	-	4	4	4
Stress Management	4.43	4.43	4.29	4.41	4.43	4.41	(4.4)
Adaptability	4.71	4.71	4.71	4.71	4.57	-	(4.68)
Self-Motivation	4.8	4.8	4.8	4.8	-	-	4.8
GLOBAL EI	61.85	61.57	61.48	61.38	61.11	61.26	61.44
TOTAL CUT OFF CRITERION SCORE MILDLY LOWER IN PROFILE TRAIT	**45.8**	**38.39**	**37.52**	**36.03**	**26.12**	**18.02**	

16.9.2 Cut-Off Scores For 'Moderately Lower' In EI Trait

Table 16.29

Summary of Total (Moderately Lower) Cut-off Scores for each of the 6 Trait Profiles

EI TRAIT	Pathway1 (Profile1)	Pathway2 (Profile2)	Pathway3 (Profile3)	Pathway4 (Profile4)	Pathway5 (Profile5)	Pathway6 (Profile6)	AVERAGE CUT-OFF SCORE
Self Esteem	4.17	-	4	-	4	-	(4.06)
Optimism	4.82	5	-	-	4.8	-	(4.87)
Pessimism	4.6	4.6	4.6	-	-	4.6	4.6
Emotion Express (of self)	-	3.86	3.85	3.85	-	-	(3.85)
Empathy	4.33	4.33	4.27	4.19	-	4.33	(4.29)
Emotion Perception	4.67	4.67	4.67	4.67	-	-	4.67
Emotion Express (of others)	-	-	-	3.67	-	-	3.67
Assertiveness	3.18	-	-	3.17	3.17	-	(3.17)
Emotion Management	3.6	-	-	-	3.8	3.8	(3.73)
Stress Management	4	3.85	3.86	4	3.86	3.88	(3.91)
Adaptability	4.43	4.43	4.43	4.43	4.43	-	4.43
Self-Motivation	4.4	4.29	4.4	4.4	-	-	(4.37)
GLOBAL EI	58.7	58.8	58.8	58.4	58.4	58.5	58.6
TOTAL CUT-OFF CRITERION SCORE MODERATELY LOWER IN PROFILE TRAIT	**42.1**	**34.99**	**34.18**	**32.36**	**24.17**	**16.53**	

16.9.3 Cut-Off Scores For 'Significantly Lower' In EI Trait

Table 16.30

Summary of Total (Significantly Lower) Cut-off Scores for each of the 6 Trait Profiles

EI TRAIT	Pathway1 (Profile1)	Pathway2 (Profile2)	Pathway3 (Profile3)	Pathway4 (Profile4)	Pathway5 (Profile5)	Pathway6 (Profile6)	AVERAGE CUT-OFF SCORE
Self Esteem	3.17	-	3.17	-	3.17	-	3.17
Optimism	4.4	4.4	-	-	4.4	-	4.4
Pessimism	*3.8*	*3.8*	*3.64*	-	-	*3.8*	(3.76)
Emotion Express (of self)	-	3.02	3.14	3.14	-	-	(3.1)
Empathy	3.67	3.67	3.67	3.67	-	3.67	3.67
Emotion Perception	3.67	3.67	3.67	3.67	-	-	3.67
Emotion Express (of others)	-	-	-	2.67	-	-	2.67
Assertiveness	2.5	-	-	2.5	2.5	-	2.5
Emotion Management	2.8	-	-	-	2.8	*2.81*	(2.8)
Stress Management	3.14	3.14	3.14	*3.15*	3.14	3.14	(3.14)
Adaptability	*3.71*	*3.71*	*3.64*	*3.71*	*3.71*	-	(3.69)
Self-Motivation	*3.74*	*3.63*	*3.6*	*3.8*	-	-	(3.69)
GLOBAL EI	53.22	53.01	53.02	53.14	53.04	53.01	53.07
TOTAL CUT-OFF CRITERION SCORE *SIGNIFICANTLY LOWER IN PROFILE TRAIT*	**34.49**	**29.12**	**27.89**	**26.13**	**19.7**	**13.37**	

16.9.4 Ideal EI Trait Profile Criteria Scores

The scores in table 16.31 are derived from teacher scores that fall within the 25th to 100th percentile of scores (or 2nd quartile and above) in the remaining data. Scores above these criterion cut-offs are considered to be the most 'ideal' teacher Trait Profile scores for this sample, according to the developed teacher sample.

Table 16.31

The Ideal EI Trait Profile Cut-off Scores for each of the 6 Trait Profiles

EI TRAIT	Pathway1 (Profile1)	Pathway2 (Profile2)	Pathway3 (Profile3)	Pathway4 (Profile4)	Pathway5 (Profile5)	Pathway6 (Profile6)	AVERAGE CUT-OFF SCORE
Self Esteem	4.5	-	4.43	-	4.33	-	(4.42)
Optimism	5.2	5.2	-	-	5.2	-	5.2
Pessimism	5	5	5	-	-	5	5
Emotion Express (of self)	-	4.43	4.43	4.43	-	-	4.43
Empathy	4.67	4.67	4.67	4.67	-	4.67	4.67
Emotion Perception	5.33	5.33	5.33	5.33	-	-	5.33
Emotion Express (of others)	-	-	-	4.42	-	-	4.42
Assertiveness	3.67	-	-	3.67	3.5	-	(3.61)
Emotion Management	4.2	-	-	-	4.15	4.2	(4.18)
Stress Management	4.43	4.43	4.43	4.43	4.43	4.43	4.43
Adaptability	4.71	4.71	4.71	4.71	4.71	-	4.71
Self-Motivation	5	4.95	4.8	4.85	-	-	(4.9)
GLOBAL EI	62.47	61.89	61.84	61.86	61.37	61.68	61.85
OVERALL TRAIT EI PROFILE CRITERION SCORE *IDEAL EI TRAIT PROFILE*	**46.45**	**38.67**	**37.89**	**36.5**	**26.55**	**18.28**	

16.10 Practical Testing of the Proposed Cut-Off Criteria

The whole teacher sample was divided into two groups - those whose scores fell below the newly developed criterion cut-off and those who scored above cut-off (within the 'ideal' EI trait range). The two groups (High and Low trait EI profile groups) were compared using independent t-tests and non-parametric sample comparisons (Mann-Whitney U). This was to determine whether the newly developed cut-off scores for the identified EI trait profiles were still predictive of EI trait variances originally identified across the Attribution Pathway Model. The nonparametric results are not presented as they indicated the same significant results as the independent t-tests.

16.10.1 High and Low Trait EI Profile Group Comparisons across Pathway 1

- Pathway 1 = Negative Affect → Punitive Behaviour

For Pathway 1, teachers who scored above the cut-off criteria score were significantly higher in Self-Efficacy ($t(255)=-3.65$, $p<.001$), Compassion ($t(255)=-3.23$, $p<.001$) and Likely Helping Behaviour ($t(255)=-3.91$, $p<.001$). They were significantly lower in Perception of Student Responsibility ($t(255)=2.61$, $p<.01$), Negative Affect ($t(255)=3.65$, $p<.001$) and Likely Punitive Behaviour ($t(255)=2.96$, $p<.01$) compared with those who did not meet the cut-off for the 'ideal' trait profile (see Table 16.32 in Appendix D).

16.10.2 High and Low Trait EI Profile Group Comparisons across Pathway 2

- Pathway 2 = Compassion → Helping Behaviour

For Pathway 2, teachers who scored above the cut-off criteria score were significantly higher in Self-Efficacy ($t(255)=-4.10$, $p<.001$), Compassion ($t(255)=-3.75$, $p<.001$) and Likely Helping Behaviour ($t(255)=-4.42$, $p<.001$). They were significantly lower in Perception of Student Responsibility ($t(255)=3.59$, $p<.001$), Negative Affect ($t(255)=4.18$, $p<.001$), Perceived Risk ($t(255)=2.30$, $p<.05$) and Likely Punitive Behaviour ($t(255)=4.43$, $p<.001$) compared with those who did not meet the cut-off for the 'ideal' trait profile (see Table 16.33 in Appendix D).

16.10.3 High and Low Trait EI Profile Group Comparisons across Pathway 3

- Indirect Pathway 3 – Compassion → Perception of Student Responsibility → Likely Punitive

For Pathway 3, teachers who scored above the cut-off criteria score were significantly higher in Self-Efficacy (t(255)=-3.55, p<.001), Compassion (t(255)=-2.34, p<.05) and Likely Helping Behaviour (t(255)=-2.98, p<.01). They were significantly lower in Perception of Student Responsibility (t(255)=3.17, p<.01), Negative Affect (t(255)=4.20, p<.001), Perceived Risk (t(255)=2.65, p<.01) and Likely Punitive Behaviour (t(64.37)=2.84, p<.01) compared with those who did not meet the cut-off for the 'ideal' trait profile (see Table 16.34 in Appendix D).

16.10.4 High and Low Trait EI Profile Group Comparisons across Pathway 4

- Indirect Pathway 4 – Negative Affect → Self-Efficacy → Likely Helping Behaviour

For Pathway 4, teachers who scored above the cut-off criteria score were significantly higher in Self-Efficacy (t(255)=-3.90, p<.001), Compassion (t(63.72)=-2.31, p<.05) and Likely Helping Behaviour (t(65.78)=-3.02, p<.01). They were significantly lower in Perception of Student Responsibility (t(255)=2.00, p<.05), Negative Affect (t(255)=4.22, p<.001), Perceived Risk (t(255)=2.44, p<.05) and Likely Punitive Behaviour (t(255)=2.78, p<.01) compared with those teachers who did not meet the cut-off for the 'ideal' trait profile (see Table 16.35 in Appendix D).

16.10.5 High and Low Trait EI Profile Group Comparisons across Pathway 5

- Indirect Pathway 5 – Negative Affect → Perceived Risk → Likely Punitive Behaviour

For Pathway 5, teachers who scored above the cut-off criteria score were significantly higher in Self-Efficacy (t(255)=-4.81, p<.001), Compassion (t(255)=-2.27, p<.05) and Likely Helping Behaviour (t(255)=-3.83, p<.001). They were significantly lower in Perception of Student Responsibility (t(255)=2.56, p<.05), Negative Affect (t(255)=4.58, p<.001), Perceived Risk (t(255)=2.10, p<.05) and Likely Punitive Behaviour (t(255)=3.15, p<.01) compared with those who did not meet the cut-off for the 'ideal' trait profile (see Table 16.36 in Appendix D).

16.10.6 High and Low Trait EI Profile Group Comparisons across Pathway 6

▪ Indirect Pathway 6 – Negative Affect → Perception of Student Responsibility → Likely Punitive Behaviour

For Pathway 6, teachers who scored above the cut-off criteria score were significantly higher in Self-Efficacy (t(255)=-4.20, p<.001), Compassion (t(255)=-2.29, p<.05) and Likely Helping Behaviour (t(255)=-3.19, p<.01). They were significantly lower in Perception of Student Responsibility (t(255)=2.57, p<.05), Negative Affect (t(255)=4.47, p<.001), Perceived Risk (t(255)=2.58, p<.01) and Likely Punitive Behaviour (t(255)=3.34, p<.001) compared with those who did not meet the cut-off for the 'ideal' trait profile (see Table 16.37 in Appendix D).

16.11 Summary of 'Ideal' EI Trait Profiles

Cut-off scores were developed for pathways 1 to 6 which predicted differences in EI trait levels between teachers who met the criteria and those who didn't. The EI trait levels within each profile also predicted differences in how teachers are likely to react emotionally, cognitively and behaviourally. Those who did not meet the ideal level 'cut-offs' were more likely to show responses indicative of stigmatisation and discrimination against students with EBDs.

16.11.1 Ideal Trait Profile 1

This group was characterised by their lower levels of Negative Affect and Punitive Behaviour across Pathway 1.

(EI → Negative Affect → Likely Punitive behaviour)

Trait EI Factors:

The Profile 1 group were found to be significantly different across 10 EI traits and global EI. The Profile1 group were:

- Significantly higher in Self-Esteem, Optimism, Empathy, Emotion Perception, Assertiveness, Emotion Management in Others, Stress Management, Self-Motivation, Adaptability and Global EI.
- Significantly lower in Pessimism

Attribution Factors:

These higher EI trait combinations found within Profile 1 also predicted:

- Significantly lower in Negative Affect, Perception of Student Responsibility/Fault, Perceived Risk and Punitive Behaviour
- Significantly higher in Compassion, Self-Efficacy and Likely Helping Behaviour

16.11.2 Ideal Trait Profile 2

This group was characterised by their higher Compassion, Likely Helping Behaviour and lower Punitive Behaviour levels across Pathway 2.

(EI → Compassion → Likely Helping and Punitive behaviour)

Trait EI Factors:

The Profile 2 group were found to be significantly different across 8 EI traits and global EI. The Profile2 group were:

- Significantly higher in Optimism, Emotion Expression of self, Empathy, Emotion Perception, Stress Management, Self-Motivation, Adaptability and Global EI.
- Significantly lower in Pessimism

<u>***Attribution Factors***</u>***:***

These higher EI trait combinations found within Profile 2 also predicted:

- Significantly higher Compassion, Self-Efficacy and Likely Helping Behaviour

- Significantly lower Perception of Student Responsibility/Fault, Perceived Risk and Punitive Behaviour

16.11.3 Ideal Trait Profile 3

This group was characterised by their higher Compassion, Likely Helping Behaviour and lower Punitive Behaviour levels across Pathway 3.

(EI → Compassion → Perception of Student Responsibility → Likely Punitive)

<u>***Trait EI Factors***</u>***:***

The Profile 3 group were found to be significantly different across 8 EI traits and global EI. The Profile 3 group were:

- Significantly higher in Optimism, Emotion Expression of self, Empathy, Emotion Perception, Stress Management, Self-Motivation, Adaptability and Global EI.

- Significantly lower in Pessimism

<u>***Attribution Factors***</u>***:***

These higher EI trait combinations found within Profile 3 also predicted:

- Significantly higher Compassion, Self-Efficacy and Likely Helping Behaviour

- Significantly lower Perception of Student Responsibility/Fault, Perceived Risk and Punitive Behaviour.

16.11.4 Ideal Trait Profile 4

This group was characterised by their lower levels of Negative Affect, higher Self-Efficacy and Likely Helping Behaviour across Pathway 4.

(EI → Negative Affect → Self-Efficacy → Likely Helping Behaviour)

<u>Trait EI Factors</u>:

The Profile 4 group were found to be significantly different across 8 EI traits and global EI. The Profile 4 group were:

- Significantly higher in Emotion Expression (of self), Empathy, Emotion Perception, Emotion Expression (of others), Stress Management, Self-Motivation, Adaptability and Global EI.

<u>Attribution Factors</u>:

These higher EI trait combinations found within Profile 4 also predicted:

- Significantly higher Compassion, Self-Efficacy and Likely Helping Behaviour
- Significantly lower Negative Affect, Perception of Student Responsibility/Fault, Perceived Risk and Punitive Behaviour

16.11.5 Ideal Trait Profile 5

This group was characterised by their lower levels of Negative Affect, higher Perceived Risk and lower Likely Punitive Behaviour across Pathway 5.

(EI → Negative Affect → Perceived Risk → Likely Punitive Behaviour)

<u>Trait EI Factors</u>:

The Profile 5 group were found to be significantly different across 6 EI traits and global EI. The Profile 5 group were:

- Significantly higher in Self-Esteem, Optimism, Assertiveness, Emotion Management of others, Stress Management, Adaptability and Global EI.

<u>Attribution Factors</u>:

These higher EI trait combinations found within Profile 5 also predicted:

- Significantly higher Compassion, Self-Efficacy and Likely Helping Behaviour

- Significantly lower Negative Affect, Perception of Student Responsibility/Fault, Perceived Risk and Punitive Behaviour

16.11.6 Ideal Trait Profile 6

This group was characterised by their lower levels of Negative Affect, Perception of Student Responsibility and lower Likely Punitive Behaviour across Pathway 6.

(EI → Negative Affect → Perception of Student Responsibility → Likely Punitive Behaviour)

Trait EI Factors:

The Profile 6 group were found to be significantly different across 4 EI traits and global EI. The Profile 6 group were:

- Significantly higher in Empathy, Emotion Management (in others) and Stress Management and Global EI.

- Significantly lower in Pessimism

Attribution Factors:

These higher EI trait combinations found within Profile 6 also predicted:

- Significantly higher Compassion, Self-Efficacy and Likely Helping Behaviour

- Significantly lower Negative Affect, Perception of Student Responsibility/Fault, Perceived Risk and Punitive Behaviour

The current chapter has confirmed the ability of EI to predict helping outcomes and identified desirable teacher qualities. Based on notions identified from the literature, the following chapter explores some additional EI traits related to Compassion Stress Resilience and profession Longevity. These 'ideal' teacher profiles address the primary research questions (see Chapter 18) and form the basis of the ASET tool found in Appendix E.

CHAPTER 17

Development of the Compassion Stress Resilience Indicator Scale

This chapter aims to facilitate understanding of the correlational link in the pathway model between the Compassion and Negative Affect variables. The following analysis employed the top 25% of high Compassion scorers (4th quartile of teacher sample population). Within this selected sample, the teachers were all statistically equal in their high levels of reported Compassion, yet they significantly varied in their levels of Negative Affect. The following analysis helped to determine the differences between those participants who reported high Negative Affect, despite having the same level of Compassion as other low Negative Affect scorers. This analysis relates to the notion of compassion stress, in that, it would be expected that excessively high Compassion would likely result in compassion stress or high negative affective states. The methods presented in this chapter also helped to identify the specific EI traits that showed significant variance between the 'Compassion Stress' group and the remaining teacher population. As these comparisons were made, EI trait 'cut-off' scores were also developed and tested for use in the proposed Assessment Screen for Emotionally Intelligent Teachers (ASET).

In addition, Self-Motivation trait was explored as a possible indicator of teaching Longevity. This investigation was prompted by the teacher demographic data, where significant differences were found in Self-Motivation between younger age groups/those with less than five years' experience and those who had been teaching longer. Based on the research that referred to some teachers leaving the profession within their first three to five years (Allen, 2005; Chang, 2009b; Goddard, O'Brian, & Goddard, 2006), the researcher posits that this pattern is an "effect of attrition". In other words, those teachers who commence their careers with lower levels of the trait Self-Motivation may leave the profession earlier, and are therefore not captured in the later age/experience figures. This notion is tested and applied as a measure to the ASET tool.

17.1 Compassion Comparison Group Development

The following analysis included only those teachers whose scores fell within the top 25% of the population on the Compassion scale (fourth quartile). Group 1 reflected those high Compassion teachers who also reported a higher Negative Affect score (top 25% of population scores on the Negative Affect scale). This was referred to as the Compassion Stress group. Group 2 reflected those teachers who were also high in Compassion but were lower in Negative Affect (bottom 75% of Negative Affect) (HC/LNA group). T-tests reveal that the two high Compassion groups were equal in their level of Compassion ($t(90)=-.21$, $p=.835$), but significantly differed in their levels of Negative Affect ($t(90)=12.66$, $p<.001$) (see Table 17.1 in Appendix D).

17.2: High Compassion Comparison Groups across EI Traits

The two high Compassion groups were compared in relation to their levels of EI. Statistically significant differences were found between the two groups in relation to many of the EI traits. The results demonstrated that, despite both groups reporting equally high levels of Compassion, they differed in their levels of EI, relating to the differences in Negative Affect outcomes.

As can be seen in the data presented in the text, the Compassion Stress group, who were highest in Compassion and highest in Negative Affect had higher levels of Pessimism ($t(90)=-3.49$, $p<.01$), and lower levels of Emotion Expression regarding self ($t(90)=-2.48$, $p<.05$) and others ($t(90)=-2.22$, $p<.05$), Emotion Perception ($t(32.72)=-2.22$, $p<.05$), Assertiveness ($t(90)=-3.26$, $p<.01$), Emotion Management in others ($t(90)=-2.53$, $p<.05$), Stress Management ($t(90)=-3.98$, $p<.001$), Adaptability ($t(90)=-3.43$, $p<.001$) and overall EI ($t(90)=-4.24$, $p<.001$). This suggested that teachers who have higher Compassion levels are at higher risk of experiencing higher compassion stress (higher Negative Affect) if their levels of EI are lower (refer to Table 17.2 in Appendix D).

These test results indicate that EI is a more significant influence on a teacher's mental negative affective state than is level of compassion.

17.3: Sample Population Comparisons

To determine how 'severe' the levels of Negative Affect were for the Compassion Stress group, as an additional confirmation analysis, the Compassion Stress group was compared with the total remaining population in relation to their Negative Affect scores. The t-test showed that this identified Compassion Stress group was still significantly higher in Negative Affect compared with the remaining total population ($t(49.61)=14.01$, $p<.001$) (see Table 17.3 in Appendix D).

The Compassion Stress group also had significantly higher levels of Negative Affect compared with the sample population of high Negative Affect scorers only (selected from within the top 25% of the remaining population), ($t(66)=-2.66$, $p<.05$). This suggests that compassion stress is a contributor to reporting higher than average negative affective states in teachers (see Table 17.4 in Appendix D).

To summarise, the results showed that those teachers who reported high compassion stress levels (higher Compassion and Negative Affect) had significantly higher Negative Affect levels compared with the total remaining population as well as those from the remaining population who reported high Negative Affect levels (within the top 25% of the remaining population).

17.4 Sample Population and Compassion Stress Group Comparisons across EI Traits

If compassion stress is one of the more important indicators of poor outcomes for both teachers and students, then how does this group differ in their EI levels compared with the remaining population? The following t-tests identified differences in levels of EI trait between the Compassion Stress group and the remaining population of teachers. The total teacher population was found to have significantly higher levels of EI across some of the EI traits compared with the Compassion Stress group. Only the significant differences found in trait levels are presented as follows: Assertiveness ($t(259)=-3.55$, $p<.001$), Emotion Management in others ($t(259)=-2.21$, $p<.05$), Stress Management ($t(259)=-2.38$, $p<.05$) and Adaptability ($t(259)=-2.23$, $p<.05$) (see Table 17.5 in Appendix D).

17.5 Cut-Off Scores for 'Ideal' Trait EI Profiles in relation to Compassion Stress Resilience

In considering the quartile scores of the total teacher population (excluding the Compassion Stress group), some cut-off points were generated (refer to Table 17.6). Only the EI traits that were found to significantly differ between the Compassion Stress group and the remaining teacher population were used. The EI traits that significantly divided the two groups included Assertiveness, Emotion Management in others, Stress Management and Adaptability. These are the EI traits considered to relate to compassion stress resilience.

Cut-off score criteria for these EI teacher traits were created at and below the 24th percentile. Above the 25th percentile was considered within the 'ideal' compassion stress resilience trait range. Using Assertiveness trait as an example in Table 17.6, a score above 3.67 in Assertiveness would be considered in the 'average' or 'ideal' and higher range of the remaining teacher population. The cut-off score was placed below 3.67, which when compared to the Compassion Stress group, included approximately the lower 40% of scorers that were considered to be extremely high in Compassion and Negative Affect or vulnerable to compassion stress (whose percentile scores are displayed in Table 17.7. A score below 3.33 (bottom 15%) is considered to be moderately lower in Assertiveness trait and below 2.63 (less than 5% population group) is considered to be significantly lower in this trait.

Table 17.6
Percentiles showing criteria cut-off scores for Compassion Stress Resiliency

Statistics

		ASSERT	EMOTION MGT IN OTHERS	STRESS MGT	ADAPTABILI	
N	Valid	235	235	235	235	
	Missing	0	0	0	0	
Mean		4.40	4.74	5.12	5.26	
Std. Deviation		1.08	.95	1.04	.91	
Percentiles	5	2.63	2.80	3.14	3.71	<5% = Severely Low in Trait
	15	3.33	3.80	4.00	4.34	≥5-14% = Moderately Low in Trait
	25	3.67	4.20	4.43	4.71	>15-24% = Mildly Low in Trait
	50	4.33	4.80	5.29	5.29	**≥ 25% = IDEAL TRAIT LEVELS**
	75	5.17	5.40	6.00	5.86	
	85	5.67	5.80	6.29	6.14	
	95	6.33	6.20	6.57	6.71	

Table 17.7

Percentiles showing percentile scores for Compassion Stress Group

Statistics

		ASSERTIVENESS	EMOTION MANAGEMENT IN OTHERS	STRESS MANAGEMENT	ADAPTABILITY
N	Valid	26	26	26	26
	Missing	0	0	0	0
Mean		3.61	4.30	4.61	4.85
Std. Deviation		1.03	1.11	1.11	.83
Percentiles	5	1.50	2.02	2.71	2.72
	15	2.36	3.21	3.57	4.02
	25	3.00	3.55	3.71	4.43
	50	3.75	4.40	4.64	5.00
	75	4.21	4.75	5.57	5.29
	85	4.49	5.60	5.71	5.42
	95	5.55	6.39	6.71	6.28

17.6 Testing out the Compassion Stress Cut-Off Criteria:

17.6.1 High and Low Assertiveness Trait level Group Comparisons across Attribution Factors:

Teachers with scores below the Assertiveness cut-off of <3.67 were compared, using t-tests, with those above the cut-off (ideal ranges) in relation to the attribution variables. Those who fell below the Assertiveness cut-off scored significantly higher in Negative Affect (t(259)=5.01, p<.001) but lower in Self-Efficacy (t(259)=-2.63, p<.01) and Perceived Risk (t(259)=-2.39, p<.05). This supports the idea that Assertiveness was a contributor to teacher groups of concern (e.g. compassion stress risk). It also shows the effect of this trait on other variables in the model that affect helping outcomes (refer to Table 17.8 in Appendix D).

17.6.2 High and Low Emotion Management (in Others) Trait level Group Comparisons across Attribution Factors:

Teachers with scores below the Emotion Management of others' cut-off score of ≤4.2 were compared, using t-tests, with those above the cut-off (ideal ranges) in relation to the attribution variables. Those who fell below the Emotion Management cut-off criteria scored significantly higher in their levels of Negative Affect (t(259)=2.79, p<.01) and lower in levels of Self-Efficacy (t(134.91)=-3.22, p<.01) and Likely Helping Behaviour (t(259)=-2.10, p<.05). This supported the idea that Emotion Management of others is a contributor to teacher groups of concern (e.g. those at risk of compassion stress). It also shows the effect of this trait on other variables in the model that affects helping outcomes (refer to Table 17.9 in Appendix D).

17.6.3 High and Low Stress Management Trait level Group Comparisons across Attribution Factors

Teachers with scores below the Stress Management cut-off score of <4.43 were compared, using t-tests, with those above the cut-off (ideal trait ranges) in relation to the attribution variables. Those who fell below the Stress Management cut-off criteria scored significantly higher in Negative Affect (t(259)=4.45, p<.001), Perception of Personal Responsibility (t(259)=2.08, p<.05) and Likely

Punitive Behaviour (t(259)=2.10, p<.05), but were lower in Compassion (t(255)=-2.81, p<.01), Self-Efficacy (t(259)=-3.84, p<.01) and Likely Helping Behaviour (t(259)=-2.25, p<.05). This supports the idea that Stress Management is a contributor to teacher groups of concern (e.g. those at risk of compassion stress). It also shows the effect of this trait on other variables in the model that affect helping outcomes (refer to Table 17.10 in Appendix D).

17.6.4 High and Low Adaptability Trait level Group Comparisons across Attribution Factors

Teachers with scores below the Adaptability cut-off score of ≤4.71 were compared, using t-tests, with those above the cut-off (ideal ranges) in relation to the attribution variables using. Those who fell below the Adaptability cut-off criteria scored significantly higher in Negative Affect (t(259)=4.00, p<.001), Perception of Personal Responsibility (t(259)=-3.17, p<.01) and Likely Punitive Behaviour (t(259)=2.70, p<.01), but were lower in Compassion (t(255)=-3.18, p<.01), Self-Efficacy (t(259)=-4.79, p<.001) and Likely Helping Behaviour (t(259)=-3.46, p<.001). This supported the idea that Adaptability is a contributor to teacher groups of concern (e.g. those at risk of compassion stress). It also shows the effect of this trait on other variables in the model that affect helping outcomes (refer to Table 17.11 in Appendix D).

17.6.5 High and Low Total Compassion Stress level Group Comparisons across Attribution Factors

When the cut-off criteria scores were added together, the total was 17.01. These 'ideal' scores were combined to create the total Compassion Stress Resilience cut-off score. Significant differences were found between those teachers who met the criteria (ideal range) and those who did not. Not only does this highlight the 'ideal' EI traits related to reducing the chance of high negative affective states, due to high compassion, but it is also likely to improve student outcomes (as confirmed through path analysis relationships as indicated in previous sections).

Those whose scores fell below the 'ideal trait' cut-off (<17.01) of EI teacher traits (comprised of the Assertiveness, Emotion Management in others, Stress Management and Adaptability scales)

scored significantly higher on Negative Affect (t(259)=6.21, p<.001), perception of Student Responsibility/Fault (t(259)=2.92, p<.05), Perceived Risk (t(259)=2.92, p<.01), and Punitive Behaviour (t(259)=3.09, p<.01) and significantly lower on Self-Efficacy (t(259)=-4.31, p<.001) compared with the 'ideal' teacher trait profile (refer to Table 17.12 in Appendix D).

17.7 Summary of Compassion Stress Resiliency Indicator Profile

The developed cut-off score for the Compassion Stress Resiliency scale predicted differences in EI trait levels between teachers who met the criteria and those who did not. The trait levels within the profile also predicted differences in how teachers are likely to react emotionally, cognitively and behaviourally. Those who did not meet the 'ideal' level cut-off scores were more likely to experience compassion stress and have greater likelihood of stigmatising and discriminating against the student with EBDs.

The Compassion Stress Resiliency group was characterised by high levels of Compassion and lower levels of Negative Affect.

Trait EI Factors:

The Compassion Stress Resiliency group were found to be significantly different from the Compassion Stress group across four EI traits and global EI. This resiliency group scored:

- Significantly higher in Assertiveness, Emotion Management (in others), Stress Management, Adaptability and Global EI.

Attribution Factors:

These higher EI trait combinations found within the Compassion Stress Resiliency group also predicted:

- Significantly lower Negative Affect, Perception of Student Responsibility, Perceived Risk and Likely Punitive Behaviour
- Significantly higher Self-Efficacy

- Lower Perception of Personal Responsibility levels were found to be a product of these lower levels of Adaptability and Stress Management EI traits. These traits form part of the Compassion Stress Resiliency profile and relate to Perception of Personal Responsibility, which is possibly an additional conceptual variable of compassion stress, as discussed in the literature review.

17.8 Development of the Longevity Indicator Scale

The following exploratory analysis was based on the teacher demographic data, where significant differences were found in Self-Motivation between younger age groups/those with less than five years' experience and those who had been teaching longer. The researcher asserted that this is unlikely to be a result of EI developing as teachers' age, or become more experienced, because EI is considered to be theoretically stable and innate. Rather, what is being captured is an "effect of attrition". In other words, those teachers who commence their careers with lower levels of the trait Self-Motivation may end up leaving the profession earlier, and are therefore not captured in these later age/experience figures. This notion is also based on research that indicates most teachers tend to leave the profession within their first five years.

It would be interesting to determine that if younger teachers, who were lower in Self-Motivation, were removed from the data (or weren't hypothetically selected for teaching), whether these age patterns in EI would still be present. This notion was tested as a possible indicator for Longevity using the ASET tool.

Teachers aged 21-30 and who had between 0-5 years of experience, were selected from the data. It was assumed that some of these teachers would stay in the profession, while others may possibly leave. The lower Self-Motivation scorers were targeted in this group. It was unknown what levels of Self-Motivation would distinguish these two possible outcomes and so, using an exploratory method, the bottom 25% of scorers were separated to form a possible teacher 'drop-out' group. This created a cut-off criterion score of <4.2 for this group (Table 17.13).

Table 17.13

Percentiles of the 21-30 age group in relation to Self-Motivation trait levels.

Statistics

SELF MOTIVATION

N	Valid	44
	Missing	0
Mean		5.17
Std. Deviation		1.05
Percentiles	5	3.65
	15	3.95
	25	4.20
	50	5.20
	75	6.00
	85	6.45
	95	6.95

The top 75% of the 21-30 age group were placed back into the remaining teacher population for comparison. A significant difference was found between the two groups in relation to their Self-Motivation levels. This suggested that the selected 'drop-out' group (based on age and years teaching) were significantly lower in levels of Self-Motivation compared with the remaining sample across all age groups (Longevity group) (t(14.17)=-16.14, p<.001) (refer to Table 17.14 in Appendix D).

One-way ANOVA indicated that the Longevity group (remaining population) had consistent levels of Self-Motivation (F(4,248)=1.84, p=.122). This suggested that once the potential teacher 'drop outs' were identified and removed, the Self-Motivation trait remained stable across all age groups. ANOVA results also showed that there was no significant difference in Self-Motivation levels across years of experience, again indicating trait stability (F(4,248)=1.42, p=.219). Those teachers who were younger, had less years' experience and who had lower levels of Self-Motivation than the rest of the teacher population were identified, as anticipated. They were the group responsible for the significant differences found earlier in the age and experience demographic comparison data. The cut-off criteria score of <4.2 was found to be appropriate in distinguishing this potential 'drop-out' group from the Longevity group. This also makes sense theoretically, given the role that Self-Motivation plays in

determination and endurance. Tables 17.15 and 17.16 in Appendix D display the non-significant findings of the ANOVA across age and years of teaching experience.

The statistical procedure just demonstrated was also mimicked for the Pessimism trait as being a predictor of longevity. However, there were no statistical patterns or cut-off criteria identified that differentiated some of the teachers within their first five years teaching from the rest of the teacher population. Therefore, the significant effects of Pessimism found in the demographic data comparisons were not considered to be related to longevity.

17.9 Summary of Longevity Indicator

Teachers who were younger, had less years' experience and who had lower levels of Self-Motivation than the rest of the teacher population were identified in this analysis, as anticipated. The researcher asserted that these teachers, who commence their careers with lower levels of the trait Self-Motivation, may leave the profession early. They were the group responsible for the significant differences in Self-Motivation found earlier in comparing age and experience demographic data. This notion is also based on research that reports most teachers tend to leave the profession within their first five years. A calculated cut-off criterion score significantly distinguished this potential 'drop-out' group from the Longevity group through their levels of Self-Motivation and was therefore applied to the ASET tool. This will be discussed in the next chapter.

SECTION V – INTERPRETATION OF RESULTS

This section contains a summary, discussion and interpretation of statistical findings from the research reported herein as they relate to previous research and the relevant theoretical frameworks. Implications of the research project are also considered as they relate to theory, research and practice. Limitations of the study are discussed in relation to how they may have impacted on the results. Conclusions are drawn and future recommendations suggested.

Summary of Aims and Findings

The current study aimed to determine teacher Emotional Intelligence (EI) traits and other characteristics that predict supportive rather than punitive behaviours towards students with Emotional Behavioural Disorders (EBD), and that also relate to teachers' psychological well-being. This objective relates to the general research question as to whether some teachers are predisposed to discriminate against students with Emotional Behavioural Disorders. Trait EI is founded on assumptions underlying Personality Trait Theory that views personality as a set of traits possessed by a person that uniquely influences his or her cognitions, emotions and behaviours in various situations. It was explored whether an Attribution Model framework was able to assist in measuring and predicting these teacher behaviours towards students via a cognitive-affective process (Corrigan et al., 2000). The study also aimed to challenge the claim in the literature that it is a student's presentation or severity of behaviour that causes stigmatisation.

The main hypothesis was that there will be a relationship between teachers' levels of EI and their behavioural outcomes towards the student with an EBD. This was supported in that teachers who had higher EI reported less stigmatising and punitive intentions with the likelihood of greater helping behaviours. The researcher proposed a new EI Process Model of Stigmatisation (EPS-Model) as a way to measure these teacher reactions through an affective-cognitive-behavioural sequence, rather than a cognitive-affective-behavioural sequence as previously hypothesised. This study also found that teachers' EI levels related to their own levels of psychological distress and/or compassion stress in a

scenario of working with a student with an EBD, which also influenced likely helping or punitive outcomes.

It was also hypothesised in the current study that there will *not* be a significant relationship between severity of student behaviour and teacher helping behaviour. This was supported in that teachers higher in EI were still more likely to indicate supportive helping behaviours and teachers lower in EI were still more likely to reflect more punitive or discriminatory behaviours, despite the level of behavioural severity of the student with an EBD.

'Ideal' teacher EI traits were also specifically identified that should lead to greater helping and be advantageous and psychologically beneficial to both students and teachers. These results assisted in the development of an assessment tool (ASET – Assessment Screen for Emotionally Intelligent Teachers), which lays a sound foundation to enable schools and other institutions to profile teachers with respect to the extent they possess the 'qualities' required to effectively teach students; especially those with EBDs.

CHAPTER 18 – Discussion

Prior to addressing the general research questions regarding the predisposition of teachers' reactions towards students with EBDs, the findings from the statistical data are reported in relation to the specific hypotheses and descriptive questions before the broader literature is drawn upon to add context, confirmation and interpretation to the results. This discussion commences with the demographic findings of the sample population of teachers, followed by an understanding of a proposed Emotional Intelligence Process Model of Stigmatisation (EPS-Model) as a methodology for assessing the hypothesised processes, before examining the role of EI within this EPS-Model.

This discussion has been grouped into common concepts as a way of isolating the specific relationships and comparisons that were designed to be made within the Attribution Model framework and research questions. The grouped concepts also captured some additional and significant themes that will be relevant for future exploration.

18.1 Discussion of Overall Teacher Sample

18.1.1 Age and Experience and EI

All EI traits remained stable across all age groups, suggesting that EI is not something that increases or decreases with age, as claimed by some EI theorists. That is, with the exception of the Pessimism and Self-Motivation traits. The younger teachers tended to have significantly higher levels of Pessimism than the older teachers and significantly lower Self-Motivation trait. Despite these differences in trait EI between some age groups, the statistics suggested that these identified changes were only partially due to age (5%). In other words, there are other reasons, other than age, that would most likely explain these differences in trait across different age groups.

The findings could suggest a possible developmental or maturing turning point for teachers in relation to their EI trait levels, somewhere preceding the 20-30 age group. There was not a slight incline across the whole life span, however, this younger age group did stand out as being significantly lower in some EI trait areas. It could be generally assumed from these patterns that the Pessimism and

Self-Motivation EI traits could develop and reach maturity at a point in a person's life, or could merely be influenced by a teacher's environment or societal conditions. Such demographic comparisons have provided insight into the possibility of some EI trait levels not being fully developed in individuals until they reach an age of maturity (late 20s to early 30s). This idea could also be supported by the significant differences found in Pessimism and Self-Motivation across years of teaching experience and remaining in the profession.

Difference was found in EI between the newer teachers and those who had been teaching the longest. As an example, those teachers who had been teaching for more than 30 years had higher levels of Self-Motivation than the newer teachers (0-5 years of teaching). Those teachers who had been teaching for more than 30 years also had lower levels of Pessimism, higher levels of Emotional Expression regarding themselves and higher Self-Motivation than those teaching for only 6-9 years.

The difference between those teachers just starting out and those who were possibly at the end of their careers, provides useful insight. This once again demonstrates that there could be a sudden turning point in a teachers' career where particular traits such as Pessimism and Self-Motivation increase or mature. It is more likely from these results that those teachers who commence their careers with higher levels of Pessimism, and with a lower ability to self-motivate left the profession earlier, and are therefore not captured in these later age figures. The most useful finding here suggests that Self-Motivation levels may, in fact, be a predictor of longevity. Younger teachers may realise that they do not enjoy teaching or are unable to cope with the demands of teaching and leave the field. Statistics have suggested that most teachers tend to leave the profession within the first three to five years. It was discovered in the current study that when the younger teachers who were lowest in Self-Motivation were removed from the data (or weren't hypothetically selected for teaching) the Self-Motivation patterns initially identified across age and experience became stable.

The same patterns can also be seen in relation to likely punitive outcomes. Teachers within the 20-30 age bracket reported higher levels of likely punitive behaviour towards the hypothetical student

with an EBD than did all the older age groups. There was a large reduction in predicted punitive behaviour among teachers older than the 20-30 age group.

Dridan (2013) found a similar pattern in her earlier study where age was a predictor of the stigmatising and discriminatory behaviours of teachers towards students (with learning disabilities), as demonstrated through the attribution process. The older and more experienced teachers tended to report less blame and more sympathy for the hypothetical student than did the younger teachers. The younger teachers were less likely to want to help the student in certain situations.

One idea discussed by Dridan (2013) to explain this variance in age outcomes, was that the more experienced teachers were possibly more accepting or used to challenging presentations and had developed more effective coping strategies. Hastings and Remington (1994) and Grey et al. (2002) similarly discovered that participants' ability to manage their emotional responses was related to their experience and their job satisfaction. As found in the current study, however, these differences across age groups could have also been more a reflection of the 'type' of teachers who are able to remain in the field long-term versus the many different new teaching personalities who have not yet found their niche.

Bailey et al. (2006) suggested that older teachers may have become more complacent over their careers, leading to less generation of thought, or less stressful responsiveness to regularly encountered student characteristics. They may, however, be describing the visually overt behaviours of emotionally intelligent teachers. This is one convincing explanation for the reactions that younger teachers have (as a general group) towards special need student groups that can cause them to become more frustrated and potentially less helpful than their other colleagues.

These results do not appear to detract from the consistency and stability of EI traits, as compared with Personality Trait Theories. They do, however, show a pattern of the specific EI traits that are possibly important for teachers to possess that may assist them in being able to persist through their emotion-laden career. Therefore, Self-Motivation and Pessimism were important traits to include as part of the quality trait teacher assessment.

The stability of most EI traits across a teacher's life, further confirms the desirability for teacher selection as a method of improving Victoria's teaching quality, rather than attempting the impossible of trying to train or improve teacher skills. Such skills are more likely innate and do not respond to training. This demonstrates that the qualities and attributes that Government Education Departments and schools are looking for in teachers, cannot be made, but are rather bred. The teachers who possess these innate traits, need to be sourced and utilised.

The current study suggests that, as a starting point, the reliability of capturing a more emotionally intelligent teacher would be one who was approximately 10 years or more into their teaching career. This is because those less emotionally equipped may have left this profession by this stage. These demographics only provide a starting point in the early selection of teachers straight from university institutions. The trait of Self-Motivation was included as part of the recommended teacher selection criteria as it appeared relevant in predicting some of the teachers who may stay in the profession for the long haul.

18.1.2 Gender and EI

The general assumption that females naturally have higher EI than males has also been supported in the current study. Females in this study generally had significantly higher Global EI than males. When individual EI traits were compared, it told a story of two very different profiles of teachers. Female teachers were found to have higher Optimism, lower Pessimism, higher ability in Expressing their own and others' Emotions, higher Empathy, higher Emotion Perception and higher Self-Motivation.

It was difficult to statistically generalise results, based on EI, as personality constructs are reported to be unique to each individual. The differences by gender suggest possible differences in EI make-up. However, this does not suggest that a male cannot have higher EI than a female. The demographic discussions related to EI are very loose generalisations as each individual has their own unique profile of traits.

Males tended to view the student as having more control and responsibility over his presentation than did the females. Females tended to view themselves as having more personal responsibility over the student's presentation than did male teachers. These differences may be accounted for, more by the general differences in Global EI between males and females. The Pathway Model demonstrated that teachers' higher EI caused them to view the student as being less responsible for his presentation. If males have slightly lower EI then it would be expected that they would view the student as slightly more responsible or at fault.

It is not suggested that females are the best candidates for teaching, as the generalisability of this statement is incorrect in trait personality terms, but it may explain why the teaching profession is more female dominated. It also needs to be considered that the male sample in the current study could have been slightly under-represented, compared with the female sample. Although the males only comprised approximately 20% of the total sample (n=56), as a rule of thumb, the smallest subgroup should have at least 50 cases (Hoinville et al., 1977, p. 61). As this condition was satisfied, analyses contained herein are valid.

No difference was found in levels of EI across the different qualification levels of teachers, suggesting that cognitive or academic ability is independent of trait EI. Hence the advantage of an assessment tool that can independently assess these separate and distinct EI factors in a teacher.

18.1.3 Compassion

Higher compassion was reported amongst some teachers who were older (51-60 age group) and had been teaching longer. This could possibly place some of the older teachers at greater risk of compassion stress, given that the Pathway Model identified that some teachers who experienced extremely high compassion also reported extremely high negative affective states. This idea may fit with Allen's (2005) reports that attrition rates in teachers seem to increase after they have been in the profession for 25-30 years.

18.1.4. School Type and Level Taught

State school teachers were significantly higher in the Adaptability trait and had higher perceived self-Efficacy and experienced lower negative affective states, as compared with Independent school teachers.

Teachers from State schools also perceived the hypothetical student with an EBD to be more responsible or blameworthy for his presentation than did those teachers from Catholic schools. This could also be more a reflection of differences found between primary and secondary schools, as the Catholic school respondents represented primary schools and Independent school respondents were only sampled from secondary schools. Secondary school teachers also perceived the hypothetical student to be more responsible for his presentation compared with primary school teachers. This finding across school levels may relate to the perceived age of the hypothesised student. Secondary school teachers would be more likely to visualise a secondary school aged child. This may make a difference because as students become older, generally they do become more independent and are able to make choices for themselves. It is tentatively assumed that older students are more likely to have greater awareness of their behaviours than younger students, but this doesn't necessarily translate into them being able to have more control over their behaviour, especially if they have mental health problems. This may be a factor that needs to be assessed on a case by case basis, depending on the severity of a student's presentation or level of trauma.

Secondary school teachers also reported higher levels of the Assertiveness trait than primary school teachers. Research has suggested that there is a higher prevalence of physical violence at secondary school levels compared with younger levels (Feifer, 2009, in Prince, 2011; Horwitz et al., 1998) so perhaps teachers who are naturally more Assertive have been suited to secondary teaching and the challenges that come with this.

18.2 Relationships between Attribution Stages

Hypotheses five and six were developed with the premise that a directional sequence or order to the variables was anticipated in the Pathway Model, being consistent with the original theory by

Corrigan (2003). This theory suggested that behaviour will be influenced by a cognitive-affective process. A relationship was found between the cognitive, affective and helping variables. However, when path analysis was performed, the directionality of the hypothesised model was not supported in the way expected. The model required reviewing, using an exploratory method to make statistical and theoretical sense. In the current study's newly developed EI Process Model of Stigmatisation (EPS-Model), behaviour was found to be mediated by an affective-cognitive process. For this reason, the fifth hypothesis was only partially supported because its directional relevance to the hypothesised model's outcome was altered.

Hypothesis 5*:* There will be a relationship between teachers' perception about the level of responsibility and control and their affective response. Teachers who perceive the student to have higher responsibility and control over their presentation and perceive themselves to have less responsibility over the student's presentation will feel lower compassion and higher negative affect.

Teachers who felt higher compassion towards the student, tended to perceive the student as being less responsible or as having less control over his presentation. This was also true for those teachers who experienced lower negative affective states. They too perceived the student to be less responsible. Despite the unpredictable and final directional placement of variables in the model, hypothesis 6, on the other hand, was still supported.

Hypothesis 6: There will be a relationship between teachers' affective responses and helping behaviour. Specifically, those teachers who feel more compassion towards the student are more likely to use supportive helping behaviours; and those teachers who feel more negative affective states towards the student are more likely to use punitive or discriminatory behaviours. This hypothesis was supported as level of Compassion directly related to Likely Helping and Likely Punitive Behaviour, and level of Negative Affect had a direct relationship with Likely Punitive Behaviour. There was also an indirect path between the affective variables (Compassion and Negative Affect) and Likely Helping that will be discussed later in this chapter.

Overall, the findings suggested that, generally, cognition doesn't influence behaviour outcomes. Teachers' affective states were the stronger influence as they either bypassed or biased conscious thought processing.

18.2.1 Self-Directed and Other-Directed Emotions

It was originally hypothesised that the affective variables to be used in the current study and EPS-Model would be consistent with Poulou and Norwich's (2002) conceptualisation of self-directed and other-directed emotions. Following factor analysis, however, the affective variables had to be re-conceptualised and consequently labelled Compassion and Negative Affect.

The difference from the original prediction for these two scales was the placement of the anger-type emotion items. Anger, frustration and irritation were not found to be opposite emotions to sympathy/compassion (as other-directed emotions) and therefore did not fit on the other end of the continuum scale to sympathy, as predicted. Rather, they were independent and interrelated with the other more internal (self-directed) negative affective states of teachers. In applying these amended variables to Poulou and Norwich's notion, compassion/sympathy levels appeared to remain related to the student (as other-directed), whereas the negative affective states were statistically found to be more internal and self-directed.

18.2.2 The Attribution Process in Classrooms

Contrary to the Attribution Model Proposed by Corrigan (2003), the above findings suggest that teachers' affective states influence their cognitive and behavioural responses towards students. This current study no longer supports the theory that behaviour can be determined by a cognitive-emotional process, but rather an affective-cognitive process. One type of pathway in the EPS-Model demonstrated that teachers in the study affectively responded to the EBD student's behaviour, which led directly to helping behaviour. A second possible type of pathway saw teachers affectively responding to the EBD student's behaviour, leading to cognitions regarding how much control or responsibility the student had over his own presentation as well as the teacher's level of perceived capability (self-efficacy). Teachers' cognitive reactions were influenced by their preceding affective

states, and their likelihood of helping varied depending primarily on how they felt. How they felt was a direct product of their level of EI. The two types of pathways proposed in the EPS-Model are illustrated below in Figures 18.1 and 18.2:

Figure 18.1 Direct Pathway Sequences:
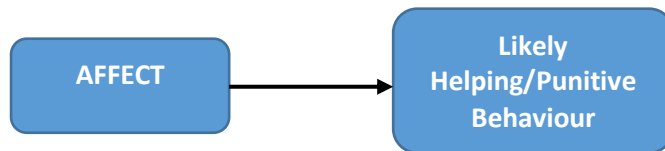
Figure 18.2 Indirect Pathway Sequences:

Despite the directional sequence of variables differing from the original Attribution Model, this study was still consistent with other attribution studies measuring helping behaviour. Some researchers claim that helping is determined by a perception that the target person is unable to help themselves (not responsible) due to their uncontrollable condition or illness (Schmidt & Weiner in Weiner, Perry, & Magnusson, 1988). What they failed to discover was that this perception was a likely result of affect and EI.

This study gives insight into the types of affective states that teachers may experience with their students and the underlying processes that could be operational in the classroom. In making a general conclusion based on the proposed EPS-Model, EI was associated with greater likelihood of teachers helping or discriminating.

The findings are not considered unusual as other researchers have found inconsistent results or partial support regarding the directionality or placement of variables in the Attribution Model (Willner & Smith, 2008). The variables within the model are still substantiated, in current and past models, as being part of the process, despite the order. Therefore, it can be stated that the newly developed

attribution EPS-Model can be applied more widely to student behaviours/presentations and not just to mental illness, or teacher expectations of students based on their test performances or failures.

The EPS-Model measured what it purported to measure within this specific educational context. That is, understanding the cognitive and affective factors of teachers that may play out as a reaction to challenging students. This study demonstrated the beginning of a possible pathway to either supportive or discriminatory outcomes for students. The following section reports on the presence and influence of EI on these newly established pathways.

18.3 EI and Helping

18.3.1 Emotional Intelligence Predicting Behaviour

Hypothesis 1: This first hypothesis was supported in that teachers with higher EI were more likely to use supportive helping behaviours, and those with lower EI were more likely to use punitive approaches. EI achieved predictive behavioural patterns in two ways, as already reported. The first way, through what the author labels 'Direct Pathways' (Figure 18.3), consists of an affective-behaviour process. The second, through "Indirect Pathways' (Figure 18.4), involves an affective-cognitive-behavioural process.

Figure 18.3 EI Direct Pathway Sequences:

Figure 18.4 EI Indirect Pathway Sequences:
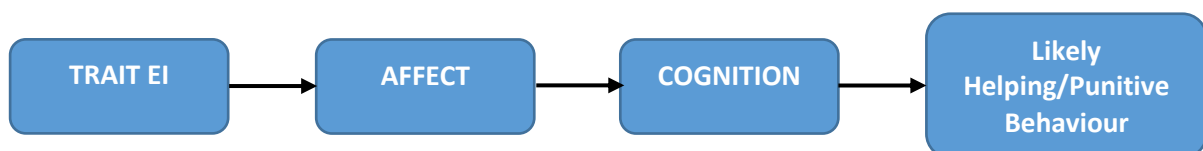
The direct pathways to behaviour suggest that the processes leading up to performing some behaviour may not always consist of cognitions or consciously reflective thoughts. Whilst the cognitive components were found to be statistically related to the affective components in the

proposed model, the affective states did not appear to be dependent on the cognitive factors to achieve the desired outcomes; or at least in this particular context. Teachers with higher EI reported higher compassion and lower negative affective states compared with teachers with lower EI. Both these affective states, in their described form, directly led to greater helping and/or lowered punitive type behaviours.

For the indirect pathways to behaviour, which took the cognitive factors into consideration, the final outcome or course of action did not appear to change from what was previously described. The behavioural outcomes, that were directly related to the teachers' perceptions (of the student's level of responsibility/control, their self-efficacy and level of perceived risk), all remained consistent with what the affective states had already predicted or mapped out through the 'direct' avenues (and without the cognitive link).

Whether the pathway included cognition or not, the results generally suggested that EI, through its resultant affective states, is the stronger influence of desirable helping outcomes and can either *bypass* or *bias* conscious thought processing. It has been well established in the research that emotions are a fundamental part of evaluative judgements. Especially when individuals attempt to draw judgments about social situations, they often refer to their emotions as clues to their opinions and thoughts (Rice & Richardson, 2013; p. 168). Research has also shown, similarly to the current study, that affective responses act as information on which to base decisions, as well as influencing behavioural responses (Parrot, 2001). In this way, affect has tended to direct thought content towards the way one is feeling. Emotions can also distort decision-making and evaluative processes (Mayer et al., 1992).

According to Trafimow et al. (2004), affect seems to be more important in determining some behaviours, whereas cognition seems to be more important for others. Their article discussed whether behaviours are more under affective or cognitive control. The existence of emotion and cognition as separate components has also been suggested (Zajonc, 1980). Research from an evolutionary perspective suggests that affect might be more important than cognition as a determinant of most

behaviours (Johnston, 1999). Johnston doesn't reject the importance of cognition but views affect as the motivational power for behaviours and that cognition, more so, increases behaviour flexibility. Like Johnston, the current research also suggests that affect, as the direct product of EI, is more important than cognition for predicting behavioural intentions.

Consistent with the findings of Perry and Ball (2007), the current study provided evidence to support their contention that the level of EI plays an important part in behavioural outcomes. Teachers with higher levels of EI responded differently than did teachers with lower levels of EI. As additionally reported by Perry and Ball (2007, p. 452), teachers with higher levels of EI were able to deal more constructively with negative situations by turning their responses into positive solutions. In the current study, teachers with higher EI were able to reflect upon negative challenging behaviour in their environment and still provide a positive helping response.

Figure 18.5 Trait EI Process Model of Stigmatisation (EPS-Model)
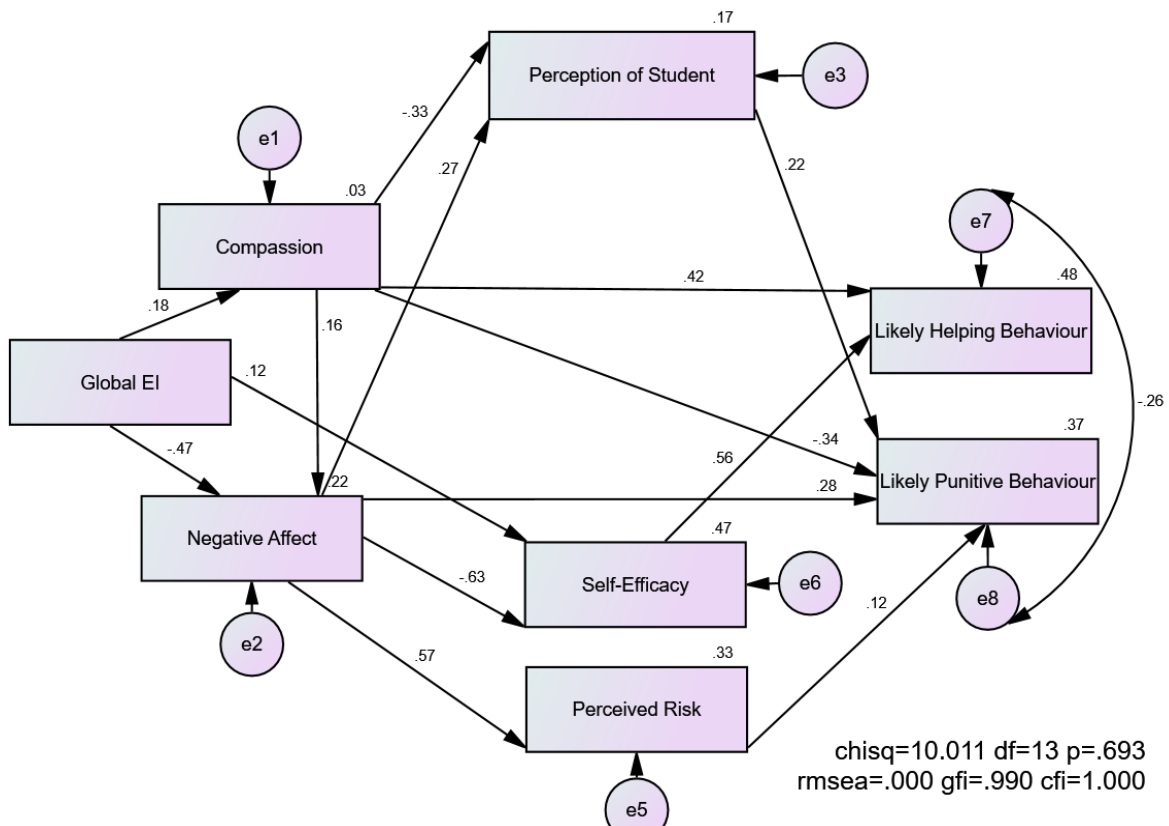
The final EI Process Model of Stigmatisation (EPS-Model) is visually presented in Figure 18.5 to assist comprehension of the following hypothesised relationships and interpretations.

18.4 Emotional Intelligence and Cognition

18.4.1 EI and Teachers' Perceptions of Responsibility

Hypothesis 2: A relationship between teachers' EI and their perception about level of responsibility and control was hypothesised. Specifically, teachers with higher EI will perceive the student to have less responsibility and control over his presentation and perceive themselves to have higher responsibility over the student's presentation; and those lower in EI will perceive the student to have more responsibility and control over his presentation and perceive themselves to have lower responsibility over the student's presentation.

This hypothesis was partially supported in that only an indirect relationship was found between EI and Perceptions of Responsibility. EI seemed to influence cognitions of responsibility indirectly through two affective states; level of Compassion and level of Negative Affect. The direct affective results of having higher EI are, specifically, higher compassion and lower levels of negative affective states.

Teachers who felt higher compassion, as a result of higher EI, tended to perceive the student as being less responsible or as having less control over his presentation. This was also true for those teachers who experienced lower negative affective states as a result of higher EI. They too perceived the student to be less responsible. This is similar to a finding of Dridan (2013) that higher sympathy (compassion) was related to lower perceived student responsibility/control. Inconsistent with Dridan's study, however, and also with Corrigan et al.'s (2003), is that the affective factors precede the cognitive factors. The inclusion of the independent EI variable may have changed the hypothesised course of the attribution pathway due to the fact that EI is theoretically more closely related to emotion than cognition.

The second test of hypothesis two related to EI and teacher's perception of personal Responsibility. Again, the EPS-Model showed that higher EI led to lower Negative Affect, which influenced teachers' perception of their own level of Personal Responsibility for the student's presentation. Perhaps higher negative states of stress and anxiety, for example, cause teachers to place more pressure on themselves and feel more responsible for their environment. This has been found to be true for some people experiencing stress or burnout, which can amplify or distort the way environments are perceived (American Psychological Association, 2015). The Compassion variable did not relate directly to how teachers perceived their level of responsibility in the situation. This may be because compassion is more relevant to feelings towards another person (other-directed) than about oneself. These patterns are explored further when teachers' well-being is discussed.

In summary, teachers who had lower negative affective states (as a result of higher EI) perceived themselves to have less personal responsibility for the student and the student to also be less responsible for his presentation. Perhaps higher EI and lower negative affect enables teachers to look for a solution and solve problems rather than focus solely on the individuals within the context and try to decide who is responsible or to blame. Whether this is true or not, teachers' thoughts about their own level of responsibility in the situation was not a factor that assisted the current study in understanding helping behaviour.

18.4.2 Perception of Self and Behaviour Outcomes

As has just been shown, lower negative affective states were positively related to teachers seeing themselves as having less personal responsibility over the student's presentation (refer to Model 4 in section 15.3). Perception of Self (Personal Responsibility) was the only variable that was unable to predict or influence any helping or punitive outcome for the student. This was the rationale for deciding not to include this variable in the final proposed model.

This Perception of Self variable may have shown unexpected or no behaviour outcomes due to the fact that there was no connection or interplay between the levels of responsibility teachers perceived the student to have compared with the level of responsibility they perceived themselves to

have. It was originally assumed that the level of responsibility or blame placed on the student would reduce the level of responsibility that teachers placed on themselves, and vice versa. Factor analysis clearly separated responsibility into two scales, of Perception of Student Responsibility and Perception of Personal Responsibility. This suggested that perception of personal responsibility is completely independent of how teachers see students, or perhaps teachers remove themselves completely from the equation. More research is needed into differences in teachers' perceived responsibility. Perceived personal responsibility was not found to relate to teacher helping behaviour. The other affective and cognitive variables measured were considered more important in the overall process, despite a handful of studies pointing to perceived levels of personal responsibility to be an important determinant of helping another (Figley, 1995; Poulou & Norwich, 2002).

18.4.3 Emotional Intelligence and Self-Efficacy

Hypothesis 3: A relationship between teachers' EI and self-efficacy was predicted. Specifically, teachers with higher EI will perceive themselves to have higher self-efficacy in dealing with the student with an EBD; and those lower in EI will perceive themselves to have lower self-efficacy in dealing with the student with an EBD. This hypothesis was supported as there were direct, as well as indirect relationships between EI and SE. It has already been well established in the literature that EI is closely linked to SE (Ciarrochi, Deane, & Anderson, 2002). The current study's results show that teachers' higher in EI have more self-efficacy in their teaching capacity and in managing difficult behaviours than teachers lower in EI. Self-efficacy is a dominant factor related to perceived ability in handling difficult behaviours (Almog & Shechtman, 2007; Emmer & Stough, 2001; Ross & Bruce, 2007).

Some researchers have even operationalised SE as being a form of EI. These theories come from the EI ability measures and models that have already been rebutted in the introductory chapter. In opposition to this argument, there was a direct statistically significant relationship between EI and SE, but the strength of the relationship was weak. SE was considered a cognitive variable in this study rather than as an EI or affective trait. Statistically, Self-Efficacy (SE) was still more strongly

influenced by its affective mediator (Negative Affect) as opposed to the direct influence of EI; supporting the original decision to place SE with the other cognitive variables. The lower the negative affective state experienced, the higher teachers' perceived ability in managing the student. This is an almost perfect demonstration of how teachers refer to their emotions as clues to their opinions and thoughts about themselves or the situation (Rice & Richardson, 2013; p. 168).

18.4.4 Emotional Intelligence and Perceived Risk

Hypothesis 4: A relationship between teachers' EI and their perception of a student's level of dangerousness was hypothesised. Specifically, teachers higher in EI will perceive the student to have a lower violence propensity; and those lower in EI will perceive the student to have a higher violence propensity. This hypothesis was partially supported in that there was an indirect link between EI and Perceived Risk that was strongly mediated by the level of Negative Affective state. Again, the proposed EPS-Model illustrated how a teachers' affective state, as a result of their EI, can influence how they view their environment or circumstances. Teachers who experienced lower negative affective states perceived the student to be less dangerous or threatening. The less threat perceived, the less avoidance or punitive behaviours were predicted. This is consistent with previous studies that have identified that when there is a perceived risk associated with helping another person, this interferes with the decision to help.

The predictability of helping behaviour can also sometimes vary, as stated in the literature, and is considered to be an exception to the general predictable pattern of helping behaviour. This study adds another layer to this relationship and strongly suggests that a teachers' level of EI can, in fact, generate predictability as to the level of risk a person may perceive, thus predicting helping behaviour (unless of course there is literally a realistic physical threat).

When a person feels stressed and anxious or has poor mental health (such as experiencing high levels of negative affective states) they are likely to feel more vulnerable and overwhelmed and possibly perceive situations to be more negative, harmful and amplified than what they actually are. As already suggested, affective states can distort decision-making and evaluative processes. This idea

of EI being the driving force behind perceived risk is further demonstrated when the two teacher groups, who were hypothetically exposed to two different levels of behaviour severity in the current research, were compared by their perceptions of their environment.

18.5 Severity of Student Behaviour and Teacher Helping Behaviour

Hypothesis 7*:* This hypothesis stated that there will *not* be a significant relationship between severity of student behaviour and teacher helping behaviour. Teachers higher in EI are still more likely to use supportive helping behaviours and those lower in EI are still more likely to use more punitive or discriminatory behaviours, despite the level of behavioural severity of the student with an EBD.

This prediction was supported in that, when the teachers who responded to the high behavioural severity vignette were compared with those who responded to the low behavioural severity vignette, no differences were found in their levels of likely helping behaviour. Teachers' likelihood of helping the EBD student was not dependant on how severe or challenging the student's behaviour may have presented.

Visibility was considered one of the most important determinants of reactions to the stigmatised by Crocker et al. (1998). However, teachers who were presented with the physically violent student in the current study, did not discriminate against the student any more or less than those teachers who were not aware of the physically violent component. The teachers, who were not informed of the violent component, were no more likely to want to help or punish the student than the informed group.

As predicted, the outcome was significantly dependant on the teachers' levels of EI, not on the student's presentation. Teachers who had higher EI were more likely to want to supportively help the student, whereas those with lower EI were more likely to want to resort to avoidance or punitive type measures (through the EPS-Model).

There was an interesting twist to this notion when differences were explored between the two teacher groups in relation to the individual attribution variables. The results suggested that whilst there

were no discriminatory teacher behavioural outcomes, as a result of the student's presentation, there were split reactions in relation to teachers' self-efficacy, perceived student risk and level of compassion. The High Behavioural Severity teacher group reported lower levels of self-efficacy. They saw themselves as being significantly less capable of managing the student's presentation than the Lower Behaviour Severity teacher group. This could be expected given the increased challenge presented to them in the scenario, which could cause them to question their confidence or skill set. However, the newly developed Attribution Model of EI (EPS-Model) continued to reinforce that, despite the increase in environmental challenges for teachers, it was their level of EI that finally helped to bring about effective behavioural outcomes. This concept of EI is also consistent for the level of risk perceived and compassion felt by teachers, as a similar effect was detected. This will be discussed as the next points in this chapter.

No significant differences were found between the two behaviour severity groups in relation to the causal factors they attributed to the student's behaviour. The student's behaviour did not seem to affect teacher cognitions about the origins of the behaviour. This also supports the idea that student presentation has less effect on stigmatisation and judgements than the innate levels of EI.

Willner and Smith (2008) claimed that Attribution Theory was intended to be used with lower frequency behaviours and may not be applicable to more regular and frequent behaviours, such as a student with EBD. The current study challenges that view by its success in using the Attribution Model for frequently challenging behaviour. This is because the problem being addressed appears to be located in a teacher's EI, more so than in the behavioural presentation.

18.5.1 Perceived Risk and Helping Behaviour

Hypothesis 8 stated that there will be a relationship between teachers' perceived risk of student dangerousness and their helping behaviour. Teachers who perceive the student to be a higher violence risk will be more likely to use punitive and discriminatory approaches; and those who perceived the student to be a lower violence risk will be more likely to use supportive helping behaviours.

The High Behaviour Severity teacher group, quite expectedly, perceived the student to be a significantly greater risk than those teachers from the Low Severity group. Firstly, this demonstrates success in controlling for variance between the two behaviour severity scenarios, suggesting that there was a significantly measurable and observable difference between the two behaviour severity variables as planned. This further validates the findings in that the two teacher groups clearly perceived different severity in levels of behaviour. However, this did not lead them to discriminate, any more or less, based on these observations of the student. Secondly, to help further validate this notion, when teachers' levels of EI and their individual EI traits were compared across the two teacher behaviour severity groups, no statistically significant differences were found between the two groups in relation to any of their EI levels. Therefore, the differences that were discovered when teachers were presented with the different scenarios were not coincidental. Despite perceiving varying levels of risk, the likely punitive behaviour outcome towards the student still remained consistent with EI levels.

When the proposed Model of Stigmatisation (EPS-Model) was applied separately to the two behaviour severity groups, it was revealed that the 'perceived risk' pathway to discrimination was only present and relevant when a physical risk was indicated from the student (as was the presented difference between the two scenarios). Higher severity behaviour may trigger teachers to be more consciously aware of the physical risk and therefore rate the level of perceived risk with more thought and certainty, compared with the low perceived risk teacher group who could view such a question of threat as less important or irrelevant to the mild behaviour. This demonstrates that the Perceived Risk variable is mainly applicable in the EPS-Model where a students' behaviour presentation is severe and consists of a physical risk of violence. Despite the student's high behaviour severity having the greatest effect on the relationship between teachers' perception of risk and their likely punitive behaviour, it still depended on teachers' level of EI as to their level of punitive actions towards the student.

18.5.2 Compassion and Behaviour Severity

Teachers, who responded to the high behaviour severity vignette, also reported higher compassion for the student. This appears conflicting to what may be expected. Research indicates that compassion for another person is likely to be reduced if they are perceived to be a threat, or are seen to be the cause or have control over their behaviour (Brophy, Rohrkemper, & Ball, 1981; Corrigan, 2000; Crandall & Moriarty, 1995; Panek & Jungers, 2008; Weiner, 1979). In this current case, the more challenging or violent the behaviour presented, the more compassion was generated. This is not suggesting that the Low Behaviour Severity group are stigmatisingly low in compassion, but rather the situation probably isn't as emotionally intense or provoking to react to.

An alternative explanation is that perhaps the more extreme negative behaviour displays more obvious evidence to teachers that the student has a possible emotional disorder compared with more subtle behavioural presentations. Perhaps a hierarchy does still exist in the stigmatisation of presentations, as already identified in the literature (Chambres et al., 2008; Gillman, 2000). If a child is identified as having a diagnosed problem or disorder, they are less stigmatised than those who do not display clear-cut explanations for their behaviour. Those with more obvious 'clinical disorders' are more likely to be pitied due to their perceived lack of cause for their own condition (Chambres et al., 2008; Dridan, 2013; Goffman, 1963; Gray, 1993, 2002a). Perhaps students with EBDs with overt behaviours do not fit as highly within the stigmatised hierarchy as assumed from the literature (Chambres et al., 2008; Martin et al., 2007).

The direction of the proposed EPS-Model did not support teacher compassion as being a result of teachers' perceived level of student control, as hypothesised, so the notion of compassion and level of student responsibility/control were explored through other theoretical perspectives in this chapter. When causal attribution factors were introduced, they provided better context as to what teachers generally thought about the student and also gave insight into causation, control, fault and reasons for possibly feeling higher compassion. The specific causal attribution factors identified by teachers generally confirmed the view that the student is only minimally seen as causing his own presentation

compared with other external or environmental factors (factors outside of the student such as family or school-systems). The external factors, which were rated most highly by teachers suggested that teachers saw the student as having less control over his presentation. This fits with the research that purports compassion/sympathy would be increased if teachers saw that the student did not have control over his behaviours (Corrigan, 2000; Poulou & Norwich, 2000).

This questions the mental illness research on stigmatisation that purports that the stigmatisers generally view the individual as having more control and responsibility over their presentation (Corrigan, 2000; Panek & Jungers, 2008). Perhaps the higher stigmatisation levels recorded in the literature towards those with a mental disorder may be more applicable to adults than children. Children may be seen as more influenced or damaged by their home environment, for example, when they are still a child. This may continue to be the cause attributed to a person with a mental disorder as they continue into adulthood. However, once they reach an age of independence, their presentations are perhaps perceived differently. Adults are seen to have more choices in their behaviours and actions. This may include whether an adult tries to seek help or remove themselves from the original source of the trauma or stimulus. Whether this is realistic or not, adults do have a different level of responsibility and choices that could be made for their behaviour and lives compared with children. The decisions that adults 'should' make (as a stigmatised judgement), whether they are affected by mental health problems or not, may change the way they are viewed compared with children.

The differences in compassion levels, arising as a result of the severity levels of the student's behaviour, are interpreted further. When the proposed EPS-Model of Stigmatisation was applied separately to the two behaviour severity groups, it revealed that teachers who had higher compassion levels, as a result of the physically threatening students' behaviour (High Behaviour Severity group), were also more likely to experience higher levels of negative affect. This directional relationship to negative affect did not exist for the Low Behaviour Severity group of teachers. This suggests that while the stigmatisation levels may not be as high as predicted for the more severe student presentations (based on levels of teacher compassion), these presentations seem to put teachers at higher risk of being emotionally or psychologically affected. In other words, the higher the

compassion that teachers within this group had for the student, the more they were placed at risk of experiencing higher levels of negative affect and possibly other negative psychological or mental health problems, compared with teachers exposed to lower severity behaviours. This confirms the link between student behaviour and teacher stress and burnout. In this demonstration, it appears that the 'severity of behaviour' variable impacted more on the teacher than the student. This notion, however, is expanded on, once the 'ripple effects' of this are explored further.

The effects just discussed demonstrate that the relationship pathway between Compassion and Negative Affect in the EPS-Model are mainly applicable to students' behavioural presentations that are more severe and consist of a physical risk of violence. At least this is the overt and provoking requirement needed to be able to measure such effects. In making these assumptions, these group comparisons do not allow for, nor measure, the individual differences found in teachers' reported variable levels Therefore, the ongoing discussions of EI provide more insight into these individual differences within and across the two behaviour severity groups.

18.5.3 EI as the Dominant Predictor of Behaviour

The previous section revealed that student behaviour severity does induce differing levels of reactions in teachers, but does this affect teachers' overall levels of helping outcomes? No significant differences were found between helping or punitive behaviour outcomes for both teacher experimental groups despite these recognised effects of student behaviour severity. This suggests that despite teachers' initial reactions, which would be expected to vary depending on their exposure, other underlying processes occurring within teachers possibly help them to regulate or direct their reactions towards more effective, or dysfunctional, outcomes.

The student's severity of behaviour did not affect the perceived level of control or responsibility that the teachers thought the student had, nor did it change the way teachers viewed their own level of responsibility towards the student. Teachers' levels of negative affective states were also consistent across the two groups and only varied depending on teacher EI levels. This again challenges theories that purport that it is the student's behaviour that causes greatest stigmatisation. Cognitive or

information-processing processes are evident, as demonstrated by the differences just explored. However, the affective component of EI still dominates the helping outcome by often disregarding these thoughts.

18.6 Causal Attribution Factors

This part of the investigation relates specifically to one of the study's descriptive questions, which asks, '*What do teachers contribute to being the cause of the student's EBD?*' This helps to give insight into the type of thoughts or cognitions that possibly were contextually present in the back of teachers' minds during the attribution process. The previous section introduced some brief insight into the role of causal attribution factors on teacher perception, but their responses are more specifically detailed below.

18.6.1 External Attribution Perceptions

Family factors were perceived by teachers to be a significantly greater cause of the student's behaviour than Teacher, Student and School factors. School factors were also perceived to be a significantly greater cause of the student's behaviour than Student and Teacher factors. Student and Teacher factors were perceived to be the least perceived causes for the student's behaviour.

Both the first two higher choice ratings (Family and School factors), attributed by teachers, seemed to relate to the student having less choice or control over his presentation; classifying the causes as external to the student. Family factors and School factors were also generally considered to be outside the teacher's control and possibly influential role. These factors are even outside the immediate classroom environment. If causal factors do have a significant impact on a teacher's response towards a student, as theories suggest, then this may explain why the level of teacher responsibility variable did not reveal any significant link to helping behaviour. If teachers are viewing the student's problems as outside their immediate classrooms then a large portion of responsibility is removed from them. Or is it more the view that the issue is so large-scale that teachers are feeling too overwhelmed to consider their role in being able to influence change within a student with an EBD or

circumstance in some way? So then, is there already a level and sense of hopelessness among teachers who deal with students with EBDs?

18.6.2 Specific Causal Attribution Factors

Causal factors rated most highly by teachers were 'dysfunctional parent unit' and 'poor attachment between parent and child', which were categorised as Family causal factors. This was followed by School causal factors, with the highest rated being 'lack of resources and services for EBD children' and 'bad school experiences of the child (e.g., rejection by peers)'. More Family factors, including 'parents' low socioeconomic status' and 'lenient parental discipline' followed this.

Some Child factors rated next highest in the list of perceived causal factors included the 'child's innate personality/temperament', the 'student wanting to attract attention', and the 'student disliking school'. While these were rated fairly highly, they appeared to be more secondary effects found in the student as a consequence of the first six highest- rated causes. The results showed that there was no direct blame placed onto the student. 'The student is being purposely manipulative', for example, was rated much lower compared with the previously mentioned factors. Teacher factors also rated slightly lower than the previously mentioned factors, and included 'inappropriate manner towards the student from previous teachers' and a 'teacher's inappropriate manner, such as ignoring the student'.

The causal factors rated by teachers are partially consistent with the bulk of causal research that confirms that Child or Family factors are usually attributed to students with behavioural difficulties. Some studies recognised the importance of Teacher factors as primary contributors to the problematic behaviour, however, the majority of studies attributed factors external to the teachers themselves, as was evidenced here. This raises a question as to how these reported factors relate to the study and model.

18.7 Causal Attribution Factors and Perceived Responsibility/Control

Causal attributions were not included in the newly developed EPS-Model, as they did not add any statistical significance. Rather, they were deemed more useful in gathering further descriptive information relating to the cognitive components of the model (Perceived Student and Personal Responsibility), based on correlational relationships found between only some of the causal attribution factors. No relationship was found between any of the causal attribution factors and EI traits.

The causal attribution factors appeared to be independent of the overall process of helping. It appears that teachers having background information, judgements or education about what causes a student to behave the way that they do is irrelevant to their likely course of action. This corresponds with research that also found teachers' knowledge of a particular condition did not translate into behaviour change (Dridan, 2013; Poulou & Norwich, 2002). Perhaps this is because knowing the problem does not guarantee a solution. It does, however, provide insight into where teachers place themselves in relation to the problem behaviour, as discussed previously. To what extent are teachers likely to help a student if they perceive the causes of the problem to be external to themselves and even outside of their immediate environment? This section assists with responding to the research question in, '*How do teachers' perceptions about the cause of a student's presentation relate to their perception about how much responsibility the student, as well as themselves, have over the student's presentation*?'

Teachers' perceptions of the student's level of control/responsibility for his presentation significantly related to a number of perceived Student-focused causal attribution factors. The strongest causal factor link seemed to be that the student was being purposely manipulative. Some weaker, yet related teacher perceptions were also that the student wanted to attract others' attention. The higher these 'intentional student behaviour' type thoughts, the more teachers saw the student as having higher control over his behaviour. This outcome fits with research on causation which generally posits that if the cause of a situation is attributed to factors within the individual's control, the person is likely to be negatively judged as responsible and causing their behaviour. Alternatively, if the situation is

attributed to factors outside of the individual's control they are viewed more favourably and less responsible (Coleman et al., 2009, p. 950; Martin et al., 2000). Despite this relationship, the EPS-Model did not appear to show these causal factors to be relevant in the overall pathway as, statistically, they did not add any additional influence or weight to helping outcomes. The identified pathways were still primarily dominated by EI and affect. This may also be because Student factors were not teachers' first priority in thinking about the cause of the student's presentation. Other background factors were considered to be more significant causes by teachers, as already discussed.

Teacher perceptions of their personal responsibility were found to be significantly related to the causal attributions of 'teaching style', 'teacher personality', 'teachers' inappropriate manner towards the student' and 'poor disciplinary systems'. The more these factors were associated with being a cause of the student's behaviour, the higher the amount of personal responsibility perceived by teachers. Poulou and Norwich (2002) similarly found that those teachers who attributed Teacher factors as a cause of the student's presentation, also felt that they had more responsibility over the student's presentation and were therefore able to treat it. This led to increased responsibility in teachers finding an effective solution for the student. In the current study, however, this may mean greater pressure and responsibility in finding a solution for the student, with negative psychological consequences for teachers.

Despite Teacher factors relating to the level of responsibility that teachers perceived themselves to have, there was no link to likely behavioural outcomes. Perhaps this was due to the reasons mentioned earlier in this discussion that, while there was a link between Teacher causal attribution factors and personal responsibility, Teacher causal factors were rated much lower than the external factors of Family and School. Whilst a relationship was found, it was not relevant to the context of helping. This may explain why most original Models of Attribution, unlike Poulou and Norwich's (2002), have not considered personal responsibility as a factor related to helping, since a link has rarely been found to exist.

Despite different ways of thinking about a student, and whether or not teachers' cognitions involve a broad, narrow, internal or external view of the range of factors possibly causing the student's behaviours, no effect was evident on helping behaviours. It appears that causal factors do not influence the process involving perceived student or self-responsibility, leading to helping behaviour. Helping outcomes still appear to be driven by EI and affective states, irrespective of the perception of cause. This may demonstrate the strength of the unconscious processes of EI over environmental influences or the already developed cognitive/stigma beliefs relating to particular presentations.

18.7.1 Teacher Responsibility versus Teacher Self-Efficacy

So far it has been demonstrated that teachers' perception of their own levels of responsibility over the student is not relevant to behavioural outcomes. It is more teachers' self-efficacy or cognitive evaluative judgements about their own coping and ability that appears relevant to helping. When it comes to their own self-perceptions and role in a difficult helping situation, teachers tend to focus more on their own skills and competencies rather than their levels of responsibility towards the student. For example, self-efficacy was shown in the EPS-Model to be directly influenced by a teachers' EI, as well as their affective state and was the strongest predictor of helping behaviour. Therefore, causal factors relating to level of perceived personal responsibility are less significant than perceived capacity.

18.8 Teacher Psychological Consequences and Stigmatisation

Hypotheses 9: That there will be a relationship between teachers' psychological distress and/or compassion stress and likely helping behaviour. Those teachers who indicate the experience of psychological distress and/or compassion stress will be lower in likely supportive helping behaviours.

In order to test this hypothesis and respond to the corresponding descriptive question as to *whether teachers' own levels of psychological distress and compassion stress form part of a stigmatisation process towards students*, it needed to be shown that the variables that purported to relate to psychological distress and compassion stress were present within the newly proposed EPS-Model. To reiterate, the indicators of psychological distress were the variable relationship patterns of

low Self-Efficacy, high Perception of Student Responsibility and high Negative Affect. The EPS-Model supported these same variable patterns expected to signify psychological distress, which revealed that high levels of Negative Affect influenced both Low Self-Efficacy and high Perception of Student Responsibility.

The indicators of compassion stress were the variable relationship patterns of high Compassion, high Negative Affect and high Perception of Personal Responsibility. The final EPS-Model did not comprise the Perception of Personal Responsibility variable due to its lack of connection with behaviour outcomes. The former pathway model, Model 4 (found in Section 15.3), which was also found to be a statistically significant and valid model, enabled these relationships to be explored. The only variance between pathway Model 4 and the final EPS-Model 5 (Section 15.4) was the presence and absence of the Perception of Personal Responsibility variable. Model 4 supported the presence of the variable patterns of compassion stress, where high Compassion levels influenced high levels of Negative Affect, which influenced high levels of Perception of Personal Responsibility.

Both psychological distress and compassion stress patterns were evident within the newly proposed EPS-Model, as illustrated below in Figures 18.6 and 18.7:

Figure: 18.6 *Psychological Distress variable patterns found within new Attribution Pathway Model*
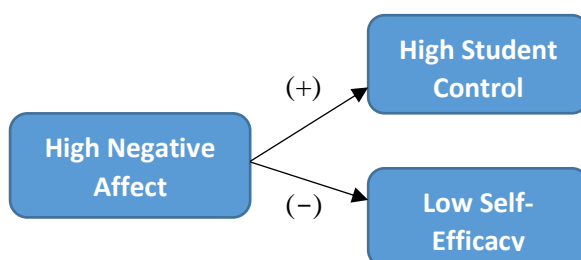
Figure: 18.7 *Compassion Stress variable patterns found within a former Attribution Pathway Model*
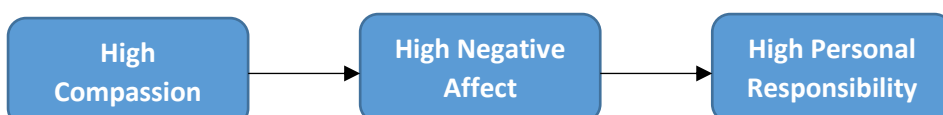
Predicted cognitive and affective patterns were found in the EPS-Model that indicated the likely presence and vulnerability to psychological distress and compassion stress in some teachers. This suggests that some teachers show signs of psychological consequences as a response to working with students with EBDs. These conditions were explored in relation to their impact on students; that is, their levels of discrimination.

Teachers who experienced the affective and cognitive consequences of psychological distress were more likely to resort to punitive behaviours and less likely to provide supportive helping behaviours compared with those who did not experience effects of psychological distress. Teachers who experienced the consequences of compassion stress were also higher in likely punitive behaviour. This supported the hypothesis that teacher psychological distress and compassion stress impact on teachers' ability to provide supportive helping behaviours for students. This also indicates that, in relation to student misbehaviour, some teachers become emotionally exhausted from trying to deal with these challenging presentations.

18.8.1 Psychological Distress and Discrimination

Teachers' psychological distress captured the affective and cognitive reactions found in the research that relate to the general consequences of burnout and emotional exhaustion. Similar to Kokkinos' (2007) theory on burnout, psychological distress was also associated with cognitive perceptions of misbehaviour, negative affective states and teachers' low perceived self-efficacy in being able to deal with challenging behaviour. These results helped explain how levels of psychological distress can affect propensity to help, or ways in which teachers cope with distress.

The type of discrimination that results from psychological distress is characteristically unintentional, but, rather, teachers lose the emotional capacity and self-perceived ability to meet the needs of their students. This can lead to a reduction in helping. Teachers may become avoidant, for example, or use more punitive or 'quick fix' approaches to avoid the source of the stress or their internal negative affective states. Given the level of anger also measured within the Negative Affect variable, this seems a likely cause of the higher levels of punitive behavioural intentions. A link

between high anger and discriminatory behaviour is well documented in previous attribution studies. Teachers' cynical and negative attitudes towards students are also established as a result of exhaustion. These results show that students miss out on quality teaching and support when a teacher is suffering from psychological distress. Research supports that teachers may even leave the profession, as a result of this distress, or continue to struggle with their mental health if they choose to stay. The rate of attrition in the teaching profession is large. The effects of psychological distress appear to be detrimental to both teachers and students, which is why it is important to understand the factors that contribute to teachers developing psychological distress, so that resilience factors can also be identified.

There may be some clues to teacher resiliency and well-being in the following patterns. The study results were also consistent with literature that claimed that while the environmental stress factors remain common to teachers across various contexts, their reactions still vary. If distress and burnout were related purely to the teaching profession and environment, then teacher reactions would not differ. As already demonstrated, teachers' levels of psychological distress and likely helping outcomes varied, even when they were exposed to the same stimulus or student behaviour severity group. This continues to support the idea that variability in teacher reactions lies somewhere within the individual teacher. Such patterns are identified in the current study as to why, under similar environmental circumstances, some teachers experience psychological distress and others do not.

18.8.2 Compassion Stress and Discrimination

Some teachers showed signs of possible compassion stress as a result of 'caring too much' for a student or the student's problems. This more 'extreme' caring can lead teachers to experience psychological consequences. This makes sense given the external factors that teachers attributed to the student's behaviour, which were predominantly related to his home life. The group of teachers who were exposed to the more severe violent student behaviour, expressed higher levels of compassion. Compassion has positive outcomes in the proposed model as it suggestibly leads to helping behaviour. However, high caring for some teachers can lead to negative psychological consequences, depending

on the level of pressure and responsibility that teachers place on themselves to care for and help the student, as well as them being unable to regulate the emotional drain that comes with this.

Student behaviour severity contributed to increasing teachers' compassionate affective response towards the student. However, student behaviour was unable to predict which teachers' compassion would develop into unhealthy compassion stress. The effects of compassion stress started becoming evident in a previous section of this thesis, when the link between compassion and negative affect was discussed. It was found, however, that not all teachers in the High Behaviour Severity group experienced high negative affect or were burdened by lack of relief from high perceived levels of personal responsibility, as additional determinants of compassion stress.

Teachers' experience of high negative affect, as a result of high compassion, seemed to have greatest influence on potentially higher punitive outcomes for students. Levels of personal responsibility related more to teacher consequences than student consequences. Teachers who did not experience high levels of negative affect, as a result of high compassion, were more likely to indicate supportive help for the student and not take as much personal responsibility. Cerney (1995) believed that these type of people have better ability to maintain appropriate boundaries with those they help by not taking on unrealistically high responsibility levels for them. Such teachers care about students but are not 'rescuers' at the expense of their own mental health.

So far, it has been demonstrated that challenging student behaviour can influence different cognitive or affective reactions in teachers and contribute to their vulnerability of developing psychological distress and/or compassion stress, but it has not yet explained the variability in teachers developing these conditions, nor the variability in the discriminatory consequences of this.

18.8.3 EI and Well-Being

Compassion stress was not found to occur in all teachers. Teachers who had high compassion for the student with an EBD differed in their ability to manage their feelings and thoughts towards the student. By identifying the profile of teachers from within the extremely high compassion and extremely high negative affect category, this study was able to develop a picture of what 'healthy'

compassion should, and should not, look like. When analysed, the difference between the 'healthy', and the not so healthy, emotions within teachers was determined by their levels of EI within specific traits. It is not necessarily the older teachers who were identified as being at greater risk of burnout, as previously suggested, but rather those teachers with lower levels of EI in particular traits. These specific traits are presented in a later section of this discussion.

The current study found that, teachers who had higher levels of EI had greater chance of their high compassion resulting in negative affective states being avoided. Those with higher EI were also lower in perceived personal responsibility. Having lower negative affective states, as a result of higher EI, helped teachers view their level of personal responsibility towards the student more realistically.

EI levels also predicted whether or not a teacher experienced psychological distress. It is not the cognitive and affective reactions of teachers to the differing severities of student behaviour that determines teacher and student outcomes, but rather their level of EI underlying these reactions.

These outcomes are consistent with those reported in the literature regarding EI. Teachers higher in trait EI would be less vulnerable to psychological consequences because they are better able to regulate their emotions and use their emotional competencies to guide more adaptive action (Greenberg, 2002). Przybylska (2014) also suggested that teachers higher in EI would be better at balancing emotional costs in challenging environments as well as manage emotions as a way of preserving well-being. Teachers with higher levels of EI were more resilient at coping and managing their emotional reactions towards students with EBDs as a way of producing more effective and healthy outcomes.

Therefore, as already proposed by many researchers, employing teachers higher in EI helps reduce the prevalence of burnout, emotional exhaustion, compassion fatigue, mental illness, teacher attrition, and increases occupational longevity. Teachers' well-being, as a result of higher EI, also likely reduces stigmatisation and discrimination towards the student through their natural and innate supportive approaches. Higher EI can break the negative student-teacher interactional cycles of

habitual and quick-fix reactions, assist with longer-term emotional change for the student, reduce the number or severity of meltdowns and develop healthier and respectful relationships.

18.9 Teacher Selection and EI

The results and factors just discussed provide the rationale for including EI traits as part of teacher employment or pre-training selection methods. Pre-teachers receiving the right ATAR score, or having a high IQ, does not translate into their ability to effectively teach students, generate better academic or emotional outcomes or develop appropriate relationships with students. The current selection criteria into teaching do not guarantee that teachers will be able to handle the emotional demands of the job or last in the profession. Higher EI indicates greater resiliency when faced with constant environmental challenges, such as student behaviour. Higher EI has been demonstrated to predict effective results for both students' and teachers' well-being. Therefore, teachers' EI traits should most desirably be considered part of the Victorian teacher selection process.

What the most conducive traits are, and how these traits could be identified in teachers, is proposed through their measurement by use of the Assessment Screen for Emotionally Intelligent Teachers (ASET Tool). Numerous 'ideal' traits are discussed in the following sections, which in addition to the common academic abilities and skills of teachers, would make the 'ideal' teacher, and lead to the most effective outcomes for teachers and students. Many of the EI traits, identified in the current study, relate to those in the literature that were considered by teachers to be effective.

18.10 EI Traits leading to greater Supportive or Discriminatory Behaviours

The discussion thus far has demonstrated many pathways, relationships and variables related to helping and punitive behaviour, as well as considering environmental and other teacher personal factors within these findings. When all this is tied together, statistically and theoretically, what role does trait EI play in these identified processes leading to helping behaviour? This section is in response to one of the primary research questions, '*Which teacher EI traits lead to greater supportive or discriminatory behaviours?*'

Only one proposed attribution pathway EPS-Model was created in relation to Global EI, which did not incorporate all the trait facets, in order to keep the number of models produced to a practical minimum. The second reason was that, following statistical exploration, all the trait factors could be individually placed into the proposed model and all indicated significant results. This inclusive method did not help to determine or separate which traits were the most significant in producing positive helping outcomes. Therefore, an alternative statistical method was used that involved analysing each model pathway individually, as shown below. Identifying the significant traits, responsible for each directional pathway to helping, assisted in answering the research question as to which EI traits lead to greater supportive or discriminatory behaviours.

18.10.1 EI Trait Clusters

The researcher discovered that it is not individual EI traits alone that produce the most effective outcomes, but rather a combination or cluster of EI traits that interact and work together to produce the most desired outcomes. 'Ideal' teacher profiles were created based on trait clusters or groups of combined traits. This method is considered common in psychology in understanding a person's personality as a whole and how different traits may complement each other to reveal a person's true presentation, symptomology or functioning. As an example, two teachers may have similar levels of Self-Esteem, but if one was low in other important traits, such as Empathy and Assertiveness, this teacher may not be able to handle the emotional demands of a situation as well as another teacher who has higher EI. Searching for just a few ideal traits or characteristics now appears too simplistic. To think that a solitary trait or single variable could have such significant effects on students and classroom outcomes is unrealistic. In reality, humans are multi-faceted. EI, like personality, is much more complex in nature when referring to its behavioural effects. In human psychology, the same behavioural outcomes are not always accomplished or reached the same way by every individual. There are often different personality 'codes' or trait combinations that could lead to similar actions or consequences.

As a point of reference for the following discussions, the six different variable pathways to likely behaviour, as determined through the proposed EPS-Model, are summarised below. The EI trait combinations (known as EI trait profiles) are then presented within the context of each pathway.

Direct Pathways (EI → Affect → Behaviour):

- *Pathway 1* = EI → Negative Affect → Likely Punitive behaviour

- *Pathway 2* = EI → Compassion → Likely Helping and Punitive behaviour

Indirect Pathways (EI → Affect → Cognitive → Behaviour):

- *Pathway 3* = EI → Compassion → Perception of Student Responsibility → Likely Punitive

- *Pathway 4* = EI → Negative Affect → Self-Efficacy → Likely Helping Behaviour

- *Pathway 5* = EI → Negative Affect → Perceived Risk → Likely Punitive Behaviour

- *Pathway 6* = EI → Negative Affect → Perception of Student Responsibility → Likely

Punitive Behaviour

18.10.2 EI Trait Profile Descriptions

In responding to the research question as to which EI traits tend to lead to greater helping behaviour and lower punitive behaviour, the specific trait *combination* profiles are summarised below:

18.10.2.1 EI Trait Profile 1

The results identified a number of traits that were significantly influential in relation to teachers experiencing lower levels of Negative Affect and Punitive Behaviour. Teachers who reported lower levels of Negative Affect and Punitive Behaviour generally tended to have higher trait levels of Self-Esteem, Optimism, Empathy, Emotion Perception, Assertiveness, Emotion Management in Others, Stress Management, Self-Motivation, and Adaptability. They were also significantly lower in Pessimism.

For those teachers who were within the 'ideal' trait range, Profile One's cluster of traits were able to predict significantly lower Perception of Student Responsibility, higher Self-Efficacy, higher Compassion and higher Likely Helping Behaviour.

18.10.2.2 EI Trait Profile 2

The EI traits that were identified as being significantly influential in relation to higher Compassion, higher Helping and lower Punitive Behaviour were teachers generally higher in Optimism, Emotion Expression of self, Empathy, Emotion Perception, Stress Management, Self-Motivation and Adaptability, as well as lower Pessimism. For those teachers who were within the 'ideal' trait range, Profile Two's cluster of traits were able to predict significantly lower Perception of Student Responsibility for his presentation, higher Self-Efficacy, lower Perceived Risk and lower Negative Affect.

18.10.2.3 EI Trait Profile 3

The EI traits that were identified as being significantly related to higher Compassion, lower Student Responsibility and lower Punitive Behaviour were teachers higher in trait Self-Esteem, Emotion Expression of self, Empathy, Emotion Perception, Stress Management, Self-Motivation and Adaptability. They were also significantly lower in Pessimism. For those teachers who were within the 'ideal' trait range, Profile Three's cluster of traits were able to predict significantly higher Self-Efficacy, lower Perceived Risk, lower Negative Affect, and higher Likely Helping Behaviour.

18.10.2.4 EI Trait Profile 4

The EI traits identified as being significantly important in relation to lower Negative Affect, higher Self-Efficacy and higher Helping Behaviour were teachers higher in Emotion Expression (of self), Empathy, Emotion Perception, Emotion Expression (of others), Assertiveness, Stress Management, Self-Motivation and Adaptability. For teachers who were within the 'ideal' trait range, Profile Four's cluster of traits were able to predict significantly lower Perception of Student Responsibility, lower Perceived Risk, higher Compassion, and lower Likely Punitive Behaviour.

18.10.2.5 EI Trait Profile 5

The EI traits that were identified as being significantly related to lower Negative Affect, lower Perceived Risk and lower Punitive Behaviour were teachers higher in Self-esteem, Optimism, Assertiveness, Emotion Management of others, Stress Management and Adaptability. For teachers who were within the 'ideal' trait range, Profile Five's cluster of traits were able to predict significantly lower Perception of Student Responsibility, higher Self-Efficacy, higher Compassion, and higher Likely Helping Behaviour.

18.10.2.6 EI Trait Profile 6

The EI traits that were identified as being significantly related to lower Negative Affect, lower Perceived Student Responsibility and lower Punitive Behaviour were teachers lower in Pessimism, and higher in Empathy, Emotion Management (in others) and Stress Management. For teachers who were within the 'ideal' trait range, Profile Six's cluster of traits were able to predict significantly higher levels of Self-Efficacy, lower Perceived Risk, higher Compassion, and higher Likely Helping Behaviour.

18.10.2.7 Teacher Resiliency Indicator to Psychological Distress

The EI trait levels found within all six of the previously described 'ideal' teacher profiles, also predicted higher teacher resiliency to experiencing or developing psychological distress or burnout. This outcome is based on the EI trait combinations producing lower Negative Affective states, lower Student Responsibility Perceptions and higher Self-Efficacy, which are the variables theorised to define psychological distress in the current study.

18.10.2.8 Compassion Stress Resilience Profile

The EI traits that were identified as being significantly related to effective and 'healthy' levels of compassion (balanced levels that do not result in compassion stress) and lower levels of negative affect were teachers who were significantly higher in levels of Assertiveness, Emotion Management (in others), Stress Management and Adaptability. These traits that indicated higher compassion stress

resiliency in teachers, also predicted significantly lower Perception of Student Responsibility, higher Self-Efficacy, lower Perceived Risk, and lower Likely Punitive Behaviour.

18.10.2.9 Teacher Longevity Profile

It was also unexpectedly discovered, when analysing the teacher age and teaching experience demographic data, that higher levels of Self-Motivation were possibly related to likely longevity in the teaching profession. An increase of this trait level across some teacher age groups was found, as discussed earlier, whereby mainly the younger or newer teachers had lower levels in this EI trait. This pattern that was observed, was interpreted to be an 'Effect of Teacher Attrition', whereby over the course of their career, teachers who were lower in Self-Motivation were the personalities who were most likely to drop-out of the profession, thus increasing the trait EI average group mean scores as teachers remained in their careers, leaving only those more motivated teachers over the longer-term. Therefore, high Self-Motivation was considered an important trait indicator of longevity in the teacher workforce. This is consistent with studies reporting that a high prevalence of teachers tend to drop out of their career within the first three to five years of teaching. This was demonstrated in research reviews of teacher stress and burnout (Allen, 2005; Chang, 2009b; Goddard, 2006).

18.11 'Ideal' Teacher EI Traits as Practical Application

The response to the previously discussed research question, has provided relevant information required to respond to the most significant research question below, that is, '*What are the 'ideal' teacher Emotional Intelligence traits that would be required for a teacher to effectively teach a student with an Emotional Behavioural Disorder?'* By developing the teacher trait EI profiles above, the question was able to be easily answered. The following section relates to the practical application of the results through the development of the ASET tool (Appendix E).

The ideal traits are defined in the current study as those EI traits that have been found to lead teachers to higher levels of likely helping behaviour. It is these innate psychological attributes underlying likely helping that are expected to create the most appropriate learning environment for any student. These psychological attributes, known as trait EI, are conducive to the classroom environment

for the reason that they work to eliminate likely stigmatising attitudes and discriminatory behaviour which then helps to promote better teacher-student relationships, student-wellbeing, teacher-well-being, student academic achievement and reduced behavioural problems (as shown in the literature). Ideal EI traits that were found relate to higher levels of teacher self-efficacy and to lower levels of perceived student responsibility/control, which have been proven in research to relate to more positive student outcomes. These ideal EI traits also enable teachers to perceive students in more compassionate ways whilst keeping their feelings in balance. Through the challenges faced with students with EBDs, teachers selected with these 'ideal' traits should be more able to regulate their emotions as a way to keep their own experience of negative affective states at a minimum and avoid longer term stress and burnout. These factors also help to keep teachers teaching.

The question relating to the 'ideal' teacher traits was designed as the first step in the development of the ASET tool, so it is not so much the theoretical discussion that is important here, but the practical application of the information. By identifying the significant EI trait cluster profiles, as earlier revealed, the researcher has been able to effectively propose the ASET tool. Criterion cut-off scores were created for each cluster of EI traits as a way to capture those teachers who possess adequate or higher levels of the 'ideal' traits. The cut-off scores were created via judicious selection of ideal traits within the sample teacher data. The 'least ideal' scores were first identified and removed from the general data as they were considered to be the 'clinical profiles groups' or 'extreme' response groups that evidentially had poorer or more negative outcomes for students as well as teachers.

Put more simply, those teachers who didn't meet the ideal cut-off criterion scores were found to be more associated with higher negative affective states, higher risk of mental health problems, higher risk of compassion stress, lower perceived self-efficacy, lower helping, and higher likely student stigmatisation and discrimination. These claims were based on the research literature that had already established links between the current variables and such outcomes.

18.12 Emotion Regulation

As a result of developing these new EI trait profiles, a new view of the definition of emotion regulation is proposed by the researcher that is recommended for use in future studies. During factor analysis of Petrides' TEIQue items, his Emotion Regulation trait was removed from the current study's analysis. This was because his Emotion Regulation items were related to, and crossed over into, many of his other proposed trait scales. This suggests that effective emotion regulation is present across a person's *combinations* of traits. To have control over one's emotions (self-regulation) in this study's context is to not discriminate (whether intentionally or not). The ability to not discriminate is driven by a specific group of EI traits working together to take charge of a behavioural outcome. Therefore, emotion regulation is thought to be concerned with how a person manages their way through situations, just like that found in the EI trait pathways, as a process of *regulation* across affective, cognitive and behavioural levels. Emotion regulation cannot be determined by asking teachers directly whether they can control their emotions, like Petrides' TEIQue does, but rather it is the overall effects and outcomes of the measured processes that indicate who can and cannot effectively regulate. Further to this, there were other points of interest regarding Petrides' TEIQue which are discussed in the next section.

18.13 Critique of TEIQue (Petrides, 2009)

The Trait Emotional Intelliegence Questionnaire (TEIQue) was investigated in relation to its psychometric properties. Some statistical problems with the TEIQue, as raised by Petrides, needed to first be examined so that other approaches could be considered in overcoming such issues. Justification was required in using FA of the TEIQue for this project so that the outcome of this could be seen as being more statistically and theoretically valid.

Petrides (2001) cautioned against the individual trait facets of the TEIQue being perceived in a statistical sense. The TEIQue individual trait facets faced the same issues as many other personality measures, in that they were highly correlated. Petrides emphasised that the TEIQue should not be analysed at the item level. The current study required thorough investigation of the individual trait

facets as they presented in teachers, and no other instrument was able to provide the comprehensiveness and essential factors to cater for this. The current study found a way to overcome some of these statistical flaws with the TEIQue, resulting in facets that were more specific and meaningful to what was purportedly being measured.

The TEIQue was successfully transformed into a more statistically valid measure of individual trait facets whilst holding as much of its strong theoretical foundations as possible (based on the many years work of Petrides). Exploratory factor analyses performed at the item-level demonstrated that the TEIQue could yield satisfactory factors suitable for individual trait facet clinical profiling. The current study only utilised the individual EI trait facets and the global EI scores of the TEIQue, as these were the elements that carried the most meaning in relation to answering the research questions and provided the most relevant and specific information.

The main problem with Petrides' TEIQue was that it seemed to measure too many different theoretical constructs within one scale or trait facet. The concepts within each trait were closely related, but they needed to be measured separately for more specific interpretation. Relieving ambiguity of the item pool was achieved in the current study, by extracting more interpretable variables from these items, through factor analysis. Examination of the TEIQue items determined the number and nature of the items that existed within each individual facet for the teacher sample population.

Three methods were attempted as ways of producing trait facets from the TEIQue that were relevant to the literature and investigation. As demonstrated, there were numerous issues encountered and exposed regarding the TEIQue items and facets.

The first factor analytical method, which included incorporating all Petrides' individual trait items to be analysed together, resulted in too much reliance on statistical relationships rather than theoretical framework. The outcome did not appear to be highly conceptually meaningful. Many important EI trait facets were eliminated as their items correlated too highly with many other trait

items. Emotion Perception, for example, was not produced as a trait facet in this initial factor analysis, yet the research strongly argues for its significance in effective teaching.

Many groups of items claiming to have high consistency, as a result of this first FA method, were found to be unrelated at face value 9or theoretically). Analyses of the empirically developed scale revealed 'messy' factor structures where many of the derived factors did not resemble the original construct claimed. Some items seemed to be unrelated to others and made little contribution to the construct claiming to be measured.

Eight residual trait facets were identified from this first method, that included Happiness, Optimism, Emotion Expression (which was divided into Emotion Expression regarding self and Emotion Expression regarding others), Emotion Regulation, Empathy, Emotion Management in others and Self-Esteem. Due to these results, other analytical methods were explored to produce as close to Petrides' initially proposed 15 theoretically defined factors as was possible.

As part of the 'best fit' exploration, a factor analysis was performed on Petrides' (2009) TEIQue 30 item short form. Each primary factor was analysed separately using its corresponding items. This instrument was very quickly abandoned. The data could not be used for further interpretation or analysis as the results suggested that the scales were too broad. For example, the Sociability factor extracted three independent factors, and the Emotionality factor comprised two factors. At face value, many items did not relate to other items within factors. Statistically and theoretically, the research data did not fit with the instrument.

The final method involved a face validity selection process to allocate the 153 items into 15 factors. This process was justified through selecting the items that related to Petrides' (2009) theoretical descriptions of the trait EI facets. This method also helped to control for problems identified with the original scale of the TEIQue, such as the ambiguity of scale items.

A more statistically valid scale was developed that could also be more meaningfully interpreted. This method was able to capture the full breadth of trait EI, but merely arranged the factors differently. The nature of some of the scales unpredictably changed where the Happiness trait,

for example, appeared to blend into the Optimism trait. Interpretively, this suggested that Happiness is more likely a component of Optimism.

Revision led to discovery of new trait facets, such as Pessimism, which was originally considered to be on the same continuum as Optimism. This facet was found to be independent to Optimism and conceptually related more strongly to the negative outlook beliefs about one's life in general. This scale appeared to theoretically relate to the general personality trait Pessimism, so it was labelled accordingly.

Two scales statistically emerged from the Emotion Expression facet. The first was associated with Emotion Expression regarding self, whereas the second component consisted of items relating to Emotion Expression regarding others. The first scale tended to reflect people's belief in being able to emotionally express themselves in relation to their own feelings, and the latter reflected people's belief in their ability to emotionally express their feelings about another person. This suggested that there may be a difference as to whether people are capable of expressing their emotions to others about how they generally feel, or expressing emotions about how they feel towards another person. The idea of Emotion Expression having specific and independent sub-traits may be an area that requires further exploration and research. These facets were given new labels, for the current study, namely Emotion Expression regarding self and Emotion Expression regarding others.

Emotion Perception similarly comprised two sub-scales, the first reflecting one's belief in being able to perceive emotions within themselves, and the latter reflecting one's belief in their ability to perceive emotions in others. The findings from this analysis may suggest that there is a difference as to whether people are capable of perceiving their own or another person's emotions. Perception of others was not retained as its concept was more related to Empathy. Perhaps this is because a person needs to be able to read and perceive others to be able to understand and feel what they are experiencing.

Severe problems were found with the primary Sociability factor and its traits, as most social-type items blended into the other established EI traits. Some items which did suggest 'Social

Awareness' were deemed to represent practical social skills rather than 'Social Awareness' traits as related to EI. The social items were questioned as to whether they even form part of the trait EI concept, as they were either practical ability-based self-judgements or were the product of other EI traits in use.

Emotion Regulation, an important theoretical EI trait, was found to consist of two or possibly three independent scales. The first reflected one's belief in being able to emotionally regulate *positive* affective states, and the latter reflected one's belief in their ability to regulate or control their own emotions in general. The findings from this analysis may suggest that it depends on the *type* of emotion as to whether teachers are able to regulate themselves. A *negative* emotion self-regulation theme started to emerge, suggesting that this could also be considered a third and separate trait. There were not enough relevant items to make this third potential scale clear. However, the idea of Emotion Regulation having specific affective sub-traits may be an underdeveloped theoretical area that requires further exploration and research. Finally, the Self-Regulation items tended to 'disappear' as a result of its items cross-loading with other scales such as Emotion Management. Emotion Management and Emotion Regulation seemed to both be measuring teachers' same abilities in dealing with their emotions.

Some traits were revealed to only consist of two items. These were rejected due to the low number of items and low scale reliabilities. Many statistical cross-loadings were found across traits leading to the overall number of items to be reduced, which was expected.

This final revised TEIQue method retaining the most facets (12 facets), had appropriate and reliable internal consistency levels, and kept more of its original conceptual validity compared with the other methods. Significant correlations were found between Petrides' original trait facets and the newly adapted trait facets, suggesting the revised instrument closely related to Petrides' conceptual content. The revised traits with the strongest correlations (above 0.8) included Optimism, Pessimism, Self-Esteem, Empathy, Emotional Expression regarding self, Emotional Expression regarding others,

Assertiveness, Stress Management, Self-Motivation and Adaptability, with Emotion Perception regarding self and Emotion Management in others revealing moderate to strong relationships.

These results clearly showed that Petrides' (2009) TEIQue can be used to thoroughly measure the general concept of trait EI, but it cannot be used to specifically measure individual traits as they too closely relate to each other. The current study found independent scales amongst the many items that were more distinctly able to measure the differences between teachers. There were generally moderate correlational relationships found between the revised instrument's traits, which were still needed, to relate to the overall concept of EI within a personality-style measure.

In summary, Petrides' items within the TEIQue have reasonable application but are not consistent due to lack of discreet factor loading. There was too much cross-loading of items, and at face-value, many items were not relevant to the theorised measure/trait facet. Sixty five items from the original TEIQue were used in the revised TEIQue as they seemed to make the most significant contribution to the 12 key EI traits which emerged from factor analysis of this teacher data.

18.14 Implications

18.14.1 Practical Application:

Current educational practice does not currently incorporate assessment of teachers' EI prior to entering university teaching courses or as part of the teacher employment process, despite the recent call by the Victorian Education Minister to increase teacher quality in schools. The ASET tool was developed as a practical response to the suggestion that teachers be selected into teaching courses on the basis of other qualities such as their EI, not just on their education and experience. This proposal would ally recent moves by the Victorian Institute of Teaching which has implemented a policy of cut-off scores in English' and Maths' academic achievement for all students entering teacher education programs. The current study reported some 'ideal' EI trait profiles that relate to effective outcomes for students' as well as teachers' well-being, and presents a new practical method for assessing these quality EI traits in teachers. It is recommended that the ASET tool be utilised by universities to assess

and measure pre-teachers at the teaching course administration stage or for school principals to screen and profile teachers as part of their employment recruitment process. It could also be beneficial using the ASET tool to help ascertain or identify which special education teachers have optimal EI trait qualities desired to effectively teach students with EBDs or special needs.

18.14.2 Implications of Research and Theory

The aim of the current study was to build upon the existing research base in relation to trait EI, Attribution Theory, discrimination in special education, students with EBDs, teacher effectiveness, psychological well-being and teacher attrition. The topic and concept of EI is still in its infancy, which suggests that the findings herein should help the concept to expand further. It should also assist researchers in appreciating the concept, and understanding its possible functions and context applications more thoroughly.

This study makes an important contribution to the existing literature on stigmatisation and discrimination against students with special needs within educational contexts. A new notion on the issue of stigmatisation has demonstrated that students' behaviours and teachers' cognitive processing alone are not necessarily the primary sources of stigmatisation and discrimination. The shift in focus to teachers' innate EI traits as the primary influence behind stigmatisation and discrimination has created a new direction and novel interpretation of the processes behind stigma. This project fills a knowledge gap in this area as it is a perspective that is rare to find within education discriminatory studies.

This study also lends important evidence to the role of EI in predicting teacher behaviour and performance through a directional model. In particular, this may be one of the first studies to demonstrate that teacher EI traits, within a personality framework, can actually predict discrimination via an affective-cognitive attribution pathway. It is apparent that the study of teacher EI has a role to play in developing understanding of teacher behaviour towards students and should become a part of ongoing research endeavours.

New, as well as existing, factors found in the literature helped to explain links between selected teacher factors and student misbehaviour. This assisted in establishing new connections

between teacher characteristics and desirable classroom outcomes for all students, including those with EBDs.

This study presented and suggests a new methodology as a way to capture and assess 'invisible' (teacher) contributors to teacher performance, as well as the unconscious processes of stigmatisation towards students. One major implication of this study is that the EPS-Model can serve as an effective framework from which to study and statistically assess the directionality of EI as a predictor of behaviour. To determine the conceptual generalisability of the EPS-Model, further studies need to be conducted. This will also help to support the model's validity.

The current study assisted in recognising existing as well as new predictors of teachers' psychological well-being and occupation longevity and identified specific EI traits as resiliency factors to teacher psychological distress, compassion stress, poor mental health and attrition. As far as the researcher is aware, the psychological consequences of teachers is a new train of thought in relation to its role within the Attribution Model of Stigmatisation.

This research project promotes and advocates for the practical implementation of a highly desirable criterion for teachers to be selected on the basis of their level of EI, not just on their experience, education and performance. This study determined new factors that are considered important in quality teaching and also proposes and presents a new practical method of assessing for these factors.

As this study is positioned within the Federal Government's 'teacher selection' or 'teacher effectiveness' controversy and the State Government's attempts to implement a consistent policy in Victorian schools, it can be used as a response to some of the queries that have been made by the Victorian Education Minister. The Education Department can assist universities and principals further with the important task of selecting 'effective' teachers and the consequences of this. They can also help to promote or facilitate the use of the ASET tool, or present the advanced findings of what an 'ideal' teacher should look like. The current study can help to improve the standards of teachers and reduce inequality in classrooms.

The current study can provide a basic awareness to teachers and principals of the dynamics and processes that may occur in classrooms and that could easily go un-noticed. Being aware of inequalities, what inequalities look like, and the consequences of this on students will be an important first step in reducing this prevalence. The study advances and enhances teacher understanding of EI and how it can influence their reactions to classroom situations.

Teacher training is likely to be ineffective for improving a teachers' EI, as it is considered an innate trait, hence the easiest and most effective solution is an initial selection process. Depending on a current teachers' EI profile, they may benefit from being placed in roles to which they are more suited. This may mean being placed with students who may be the least affected by teacher negative reactions or whose behaviour does not trigger stress or negative reactions in teachers. Such students would need to be emotionally and socially well-adjusted, resilient to stress and anxiety and not easily influenced by the emotions of others. Teachers' lower in EI may benefit from non-challenging or demanding students in their classes, if possible. It would also be beneficial for teachers and principals to be cognizant of the powerful impact that EI, in conjunction with the classroom environment, can have on teachers' psychological health. Early identification of those teachers most vulnerable to psychological distress and/or compassion stress can encourage monitoring, reflection and early mental health intervention strategies to help improve or maintain well-being.

The current study demonstrated the numerous benefits and limitations of Petrides' TEIQue. It also provided researchers with additional considerations and options regarding the statistical use of the TEIQue and its contextual application.

18.15 Methodological Limitations

This section explores the potential limitations within the current study that need to be taken into account when interpreting the results and the validity of the findings. Throughout the study and construction of instruments, threats to validity, reliability, and generalizability were carefully considered and several steps were taken to try to reduce them.

The first limitation relates to the study's teacher sample response rate, which is only a very small representation of the actual teacher population in Victoria. Whether a higher proportionate sample of teachers is needed is debatable, as EI traits are purported to be unique to each individual or 'mapped on' to the individual rather than contexts. As trait EI exists within a personality framework, it can assume the same validly accepted generalizability across contexts as scientifically developed personality inventories (Schimdt & Hunter, 1977, 1998; Petrides, 2009, p. 7). Petrides proposed, "as a measure of emotion-related self-perceptions, the TEIQue can provide vital and consistent cross-situational information about an individual's personality and behaviour… The TEIQue transcends the arbitrary boundaries that restrict the utility of inventories assuming that people's personality changes from context to context" (2009, p. 7).

The next limitation relates to the size of the questionnaire. There was no statistically-sound way to reduce Petrides' 153-item TEIQue before this study was performed. A pilot test could have been performed. However, this would have reduced the experimental group even further, by removing more willing participants.

Personalities could vary across professions in that some could be drawn to, or be more suited to particular occupations. Certain EI traits may inadvertently cluster, or be more prevalent in teachers than other professions such as accounting, for example. At this stage, the 'ideal' traits identified can only be assumed to be significant to the teaching context. Other contexts may identify other more relevant, or applicable, traits.

Although all state, Catholic and independent non-government schools in Victoria were invited to join the study, there was a recruitment-related issue that may have contributed to the lower response rate. This was the fact that it was determined by the Principal of each school as to whether or not teachers were provided with access to the research surveys. Further to this, two Regional Directors from an educational system denied access to schools and principals, as they may have misconstrued the project title, as did the exminers. This narrowed the catchment even further, making it difficult to predict the representativeness of the population of teachers who participated in the survey. This

recruitment approach could not have been improved, due to the ethical procedures required for research in Australian schools.

Despite this perspective, some schools included completion of the survey as part of their professional development. This meant that teachers who may not have initially been interested in the study, or in completing surveys, still provided their permission and completed the questionnaire. This could have been an advantage to the study as this method may have captured a different population of teachers who don't normally volunteer to complete surveys. According to Whitley, Kite, and Adams (2013), people who volunteer to participate in research may be different from those who do not volunteer, and so are not representative of the population. It could also be assumed that those who are more inclined to help, may participate in more surveys. Given the current study relates to helping behaviour, it would be an advantage to have non-inclined helping teachers participating to reduce such respondent bias.

There was a large percentage of surveys that could not be used for further analysis as they were not fully completed. The most viable explanation for this high incompletion rate relates to the length of the survey. In addition to the researcher's attribution questions, the TEIQue comprised of 153 items, which could very likely lead teachers to lose interest or motivation, run out of available time or become fatigued. Even though there was the option for teachers to return to the survey at a later time, as a way of solving the fatigue or time-restraint problem, they may not have returned to it as intended. The instrument could not have been shortened as it required a comprehensive trait analysis for the current study's goals, which is a limitation of most personality assessment measures.

The advantages and problems with the use of vignettes in research is well documented. Vignettes are only hypothetical abstractions from "real life" experiences (Link et al., 2004) suggesting that teachers are not in the presence of a 'real' student or situation. Teachers were not able to consider and respond to other student cues, such as the student's physical appearance or other non-verbal signals. The hypothetical scenarios relied on teachers' cognitive schema to be able to respond to the

questions. This may not have necessarily depicted or translated into teachers' actual reactions or been as emotionally provocative as being in the real situation.

Willner and Smith (2008) proposed that future research should address the issues of the limited reliability of the vignette-based methodology commonly used in attribution studies, as they believe there is a discrepancy between reported behaviour and actual behaviour. Reported plans are not always consistently followed through with as intended (Poulou &Norwich, 2002). However, Ajzen (1991) and Orbell et al. (1997) support the position that intentional behaviour is closely associated with actual behaviours and have a high degree of acceptable predictive ability. As a way to minimise this methodological concern, the researcher chose to operationalise helping behaviour as 'likely' helping behaviour, to allow for a small probability of a teacher not following through with an intended action. Observational methods could have been utilised to assess teachers' actual behaviours rather than reported behaviours, however, teachers' cognitions or EI traits needed to be measured through self-reporting, as the teachers themselves were the only ones who could access this type of information. The research was primarily about teachers' subjective and individual experiences.

It is not denied that survey and Likert scale methods have their limitations that are common to those who choose to use a scientific approach. Self-report measures are problematic due to social desirability, response set patterns and lack of self-awareness. These factors may limit the ability to accurately measure EI. It is presented that the lower an individual's EI is, the more inaccurate judgement they are likely to have of their emotional abilities (Cherniss, 2010). It is challenged, however, that another person's subjective experiences cannot be objectively judged by others. This self-report debate in relation to trait EI is a grey area, but is acknowledged.

Where social desirability bias is operative, the data may underestimate the true extent of stigmatisation in the study's findings (Link et al., 2004). Teachers may not want to appear uncaring or angry, as these are not necessarily socially appropriate responses. They may deny their likely punitive behaviours in order to be viewed as more favourable. The punitive question items were most likely obvious and predictive to teachers in what they were measuring. Therefore, results from this study

were most informative in identifying characteristics of 'out' groups to compare with the 'regular' teachers.

In relation to the ASET Tool, existing teachers or pre-teachers may feel pressured into selecting socially-desirable responses due to the nature of the ASET Tool testing situation. If the tool is used for recruitment training purposes or if respondents are competing for job positions, they would most likely want to appear to be someone who is optimistic, for example, or who can constructively deal with their emotions in the classroom.

Conceptually, the current study could have used specific validated measures of burnout and compassion fatigue to statistically confirm a link between teacher burnout, trait EI and stigmatisation, rather than just relying on the literature to draw assumptions and make connections between these characteristics.

18.16 Recommendations

Although there is a need for further research in this area, lessons identified in this study can provide valuable direction and guidance to Education Departments, universities, principals, teachers and researchers alike, who want to increase teacher effectiveness, well-being and reduce student inequality.

Given the numerous gaps in the existing body of knowledge, there are many ways that researchers can pursue research in this field. Future research should continue to investigate psychological mechanisms that underpin relationships between EI, teacher and student outcomes. The limitations of this study should provide guidance for methodological considerations.

It is highly recommended that Education Departments, universities and principals consider the importance of EI in selecting 'effective' teachers and the positive consequences of this 'ideal' teacher. They can also help promote or facilitate the use of the ASET tool, which was designed to be practically utilised as part of pre-teacher selection or teacher recruitment.

The ASET tool has not been validated within the teacher population outside the current study's data and would benefit from further testing for consistency. It is also suggested for future studies wishing to replicate the current study, that validated measures of burnout and compassion fatigue be used to statistically confirm the link between teacher burnout, trait EI and stigmatisation. More studies are also required to further validate the EPS-Model developed in this study.

Future research could test the ASET for its direct relationship with other personality and psychological measurements, so that the instrument can have its own theoretical validity rather than relying on the original TEIQue.

CHAPTER 19 – Conclusion

A student's formal learning environment is largely influenced and shaped by the student's teacher (Jennings & Greenberg, 2009). Teachers' emotional interactions with students is just as important, if not more so, than academic knowledge and good instruction skills. Teachers need to have the capacity to create the 'right' kind of environment so students can receive the type of emotional and educational support that they require (Cooper, 2011). This greatly emphasises the importance of teachers effectively meeting the emotional needs of students with EBDs. These students are generally placed in mainstream classes and are considered to be one of the most challenging groups to teach.

Students with EBDs form one group of special needs students who can be stigmatised and discriminated against. Students with EBDs can receive varying amounts of help and support from their teachers as a result of how teachers perceive them (Sutherland et al., 2008). Some researchers believe that this is because of the observed nature of the students' challenging presentation and the extent of their problematic behaviours (Taylor et al., 2010).

Teachers can experience psychological consequences of stress or burnout as a result of working with students with EBDs, which means they may no longer have the emotional capacity or self-perceived ability to meet students' needs. This is another way unequal outcomes for students can possibly transpire. The quality of education diminishes when teachers choose to stay in the profession despite being burnt out (Moore-Johnson, 2006); and, inversely, education suffers if teachers keep leaving the profession.

These were some of the concerns of the Victorian Education Minister, James Merlino (2016), who proposed that entry standards into teacher training courses should reflect the traits and qualities of effective teachers, not just academic ability. He called for a system-wide suitability selection approach into teacher training to help overcome some of these issues. The current study proposed teachers' EI to be a predisposing 'quality' that influences positive educational and emotional outcomes for students and teachers. The Emotional Intelligence (EI) of teachers can predict supportive rather than punitive

behaviours towards students with Emotional Behavioural Disorders (EBD). EI can also predict the general psychological well-being of teachers.

The current study investigated how students with EBDs would be perceived and treated by teachers based on teachers' level of EI and whether teachers' level of EI increases or decreases stigmatisation. Those teachers who had higher EI were more supportive and helpful towards the EBD student and those teachers who had lower levels of EI tended to ideate more stigmatising and punitive attitudes towards the student.

The current study explored how teachers' EI levels related to their own levels of psychological distress and/or compassion stress as a result of working with students with EBDs. It was found that teachers' EI levels predicted their levels of psychological distress and/or compassion stress, which also formed part of the stigmatisation process towards student outcomes. Those teachers who had higher EI, were lower in psychological distress, which predicted higher supportive and helping behaviours. Teachers lower in EI were higher in psychological distress, which predicted higher likely discriminatory behaviours such as avoidance.

The current study also determined whether a teacher's EI is the greatest influence over how student with EBDs are perceived and treated, or whether there are stronger indications, such as a student's presentation (e.g. violent behaviour), that has the greatest influence over stigmatisation. It was found that a teacher's likelihood of helping a student with an EBD was not dependent on how severe or challenging the student's behaviour presented. A student's presentation or severity of behaviour contributed to teachers' stigmatising reactions, such as how teachers perceived and felt about the student. However, for those teachers who had higher levels of EI, the possibility of any discriminatory behavioural outcome was still likely to be low. A teacher's EI still proved to be the primary predictor of positive behavioural outcomes, regardless of a student's level of problematic behaviour or a teacher's reaction to this environmental challenge.

The results of the study showed that irrespective of teachers' initial reactions, which would be expected to vary depending on their environmental exposures, there are other underlying processes

occurring within teachers that possibly help them to regulate or direct these reactions into either more effective or dysfunctional outcomes. These unconscious processes represent each teacher's EI.

A new pathway model, the EI Process Model of Stigmatisation (EPS-Model), was developed and proposed as an alternative to traditional Attribution Models (Corrigan, 2000). The EPS- Model purports that behaviour is mediated by an affective-cognitive process rather than a cognitive-affective process. In this model, behaviour was predicted through 'Direct' pathways and consisted of an affective-behaviour process. The second prediction was through 'Indirect' pathways and involved an affective-cognitive-behavioural process. It is asserted that, affect, as the direct product of EI, is more important than cognition for predicting behavioural intentions. It is generally suggested that EI, through its resultant affective states, is a stronger influence of desirable helping outcomes and can either *bypass* or *bias* conscious thought processing. The EPS-Model helped to understand the cognitive and emotive factors of teachers that may transpire in classrooms as a reaction to challenging students. The Model demonstrated the possibilities of a teacher either supporting or discriminating against students. The current study also demonstrated that Attribution Models can be used with higher frequency behaviours and can be applied to more regular and frequent behaviours, such as students with EBDs. Attribution Models can also be used to measure EI processes within a personality framework.

Causal attributions were not included in the proposed EI Process Model of Stigmatisation, as they were not found to add any statistical significance. Teachers having background information, judgements, or education, about what causes a student to behave the way that they do, was found to be irrelevant in their likely course of action. This suggests that despite having knowledge of a problem, it does not guarantee a solution. Helping outcomes were still driven by EI and affect, irrespective of the perception of cause, or who may be more responsible or to blame. The current study demonstrated many pathways, relationships and variables related to helping and punitive behaviour, whilst considering environmental and other teacher factors within these findings.

Higher EI showed the greatest teacher resiliency when faced with constant environmental challenges such as student behaviour. Higher EI has been demonstrated to predict positive and effective results for both students' and teachers' well-being. Therefore, teachers' EI traits should be seriously considered part of the Victorian teacher selection process. What the most conducive traits are, and how these traits could be identified in teachers is proposed through the measurement and use of the newly developed Assessment Screen for Emotionally Intelligent Teachers (ASET Tool). The ASET tool could be used by universities as part of their pre-teacher training course requisite criterion or by principals as part of their employment process.

The numerous 'ideal' EI traits identified for the ASET were derived from the current study's revision of Petrides' (2001) Trait Emotional Intelligence Questionnaire (TEIQue). Through this process, it was discovered that it is not individual EI traits alone that produce the most 'ideal' or effective outcomes, but rather the combination or cluster of EI traits that interact and work together to produce the desired outcomes. Many studies search for a few singular ideal traits or characteristics, however, this appears too simplistic, as in reality, humans are multi-faceted. EI, like personality, is much more complex in nature when referring to predicting its behavioural effects. In addition to the common academic abilities and skills of teachers, it is these identified EI trait profiles that would make the 'ideal' teacher, and lead to the most effective outcomes for teachers and students. It was also re-defined and proposed from the current study's findings that effective emotion regulation is present across a person's *combination* of traits rather than as an independent and sole trait. Emotion regulation refers to how a person copes with, or manages their way emotionally through, situations, just like that found in the new EPS-Model, as a *process* of regulation across affective, cognitive and behavioural levels.

EI is conducive to the classroom environment for the reason that it can eliminate stigmatising attitudes and discriminatory behaviour. EI helps to promote better teacher-student relationships, student wellbeing, teacher well-being, student academic achievement and reduced behavioural problems. The 'ideal' EI trait profiles proposed are found to relate to higher levels of teacher self-efficacy and to lower levels of perceived student fault and blame, resulting in more positive student

outcomes. The trait profiles also relate to teachers perceiving the student to be less dangerous and threatening and feel more compassionate whilst keeping their feelings in balance. Through the challenges faced with students with EBDs, teachers selected with these 'ideal' traits should be more able to regulate their emotions as a way to keep their own experience of negative affective states at a minimum and avoid longer term stress and burnout. These factors also help to keep teacher attrition rates low.

The current study concludes that teachers' EI is a predisposition that can predict supportive and helping behaviours towards students with EBDs. It is recommended that the newly developed ASET tool be practically applied for teacher selection or recruitment processes in universities and schools. Future studies should utilise the ASET and the EPS-Model to test for and increase their validity. Finally, it is recommended that the current study's methodological framework and instrument be investigated within other contexts and tested for its relationships with other psychological measurements.

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APPENDIX A

Demographic Background Data Tables

The following ANOVA, t-test and descriptive data tables relate to Chapter 12 – Demographic Background Data.

Table 12.7
Significant mean differences detected across age groups in relation to (Low) Pessimism and Self-Motivation traits

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
PESSIMISM (Low)	Between Groups	12.38	4	3.10	2.62	.04
	Within Groups	302.90	256	1.18		
	Total	315.28	260			
SELF MOTIVATION	Between Groups	11.81	4	2.95	3.21	.01
	Within Groups	235.57	256	.92		
	Total	247.38	260			

Group Statistics

	Age	N	Mean	Std. Deviation
PESSIMISM (Low)	20-30	56	5.28	1.06
	31-40	72	5.55	1.08
	41-50	57	5.59	1.09
	51-60	59	5.86	1.13
	61+	17	5.96	1.04
	Total	261	5.60	1.10
SELF MOTIVATION	20-30	56	5.15	1.05
	31-40	72	5.44	.94
	41-50	57	5.36	.98
	51-60	59	5.77	.87
	61+	17	5.58	.93
	Total	261	5.44	.98

Table 12.8.

Significant mean differences found in (Low) Pessimism and Self-Motivation trait levels between the 20-30 and 51-60 age groups

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
PESSIMISM (Low)	Equal variances assumed	.54	.47	-2.86	113	.005
SELF MOTIVATION	Equal variances not assumed	4.84	.03	-3.43	106.85	.001

Group Statistics

	Age	N	Mean	Std. Deviation
PESSIMISM (Low)	20-30	56	5.28	1.06
	51-60	59	5.86	1.13
SELF MOTIVATION	20-30	56	5.15	1.05
	51-60	59	5.77	.87

Table 12.9

Significant mean differences found in (Low) Pessimism Trait levels between the 20-30 and 61+ age groups

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
PESSIMISM (Low)	Equal variances assumed	.01	.92	-2.34	71	.022

Group Statistics

	Age	N	Mean	Std. Deviation
PESSIMISM	20-30	56	5.28	1.06
	61+	17	5.96	1.04

Table 12.10
Significant mean differences found in Self-Motivation Trait EI levels between the 31-40 and 51-60 age groups

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
SELF MOTIVATION	Equal variances assumed	.99	.32	-2.06	129	.042

Group Statistics

	Age	N	Mean	Std. Deviation
SELF MOTIVATION	31-40	72	5.44	.94
	51-60	59	5.77	.87

Table 12.11
Significant mean differences found in Self-Motivation Trait EI levels between the 41-50 and 51-60 age groups

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
SELF MOTIVATION	Equal variances assumed	1.11	.29	-2.39	114	.02

Group Statistics

	Age	N	Mean	Std. Deviation
SELF MOTIVATION	41-50	57	5.36	.98
	51-60	59	5.77	.87

Table 12.12
Significant mean differences found in Global EI levels between males and females

Independent Samples Test		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Global EI	Equal variances assumed	3.13	.08	-2.08	259	.04

Group Statistics

	Gender	N	Mean	Std. Deviation
Global EI	Male	56	64.85	9.22
	Female	205	67.45	8.02

Table 12.13

Significant mean differences found in Optimism, Pessimism, Emotion Expression (Re: Self), Empathy, Emotion Perception, Emotion Expression (Re: Others) and Self-Motivation Trait EI levels between Males and Females

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
OPTIMISM	Equal variances not assumed	8.08	.01	-2.00	73.03	.05
PESSIMISM	Equal variances assumed	1.13	.29	-2.38	259	.02
EMOTION EXPRESSION RE SELF	Equal variances not assumed	2.74	.10	-2.63	77.10	.01
EMPATHY	Equal variances not assumed	9.82	.00	-2.52	71.84	.01
EMOTION PERCEPTION	Equal variances not assumed	4.81	.03	-2.56	77.20	.01
EMOTION EXPRESSION RE OTHERS	Equal variances assumed	.88	.35	-2.51	259	.01
SELF MOTIVATION	Equal variances assumed	2.70	.10	-2.89	259	.00

Group Statistics

	Gender	N	Mean	Std. Deviation
OPTIMISM	Male	56	5.51	1.08
	Female	205	5.82	.81
PESSIMISM	Male	56	5.29	1.20
	Female	205	5.68	1.06
EMOTION EXPRESSION RE SELF	Male	56	4.72	1.32
	Female	205	5.23	1.10
EMPATHY	Male	56	4.82	1.11
	Female	205	5.21	.81
EMOTION PERCEPTION	Male	56	5.43	1.26
	Female	205	5.90	1.05
EMOTION EXPRESSION RE OTHERS	Male	56	4.77	1.45
	Female	205	5.27	1.25
SELF MOTIVATION	Male	56	5.11	1.07
	Female	205	5.53	.93

Table 12.14
Significant differences detected across female age groups in relation to Self-Motivation Trait levels

ANOVA

SELF MOTIVATION

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	8.76	4	2.19	2.60	.04
Within Groups	168.25	200	.84		
Total	177.02	204			

Group Statistics

Age	N	Mean	Std. Deviation
20-30	47	5.25	.99
31-40	56	5.53	.87
41-50	43	5.47	.99
51-60	48	5.83	.85
61+	11	5.75	.74
Total	205	5.53	.93

Table 12.15
Significant mean differences found in Self-Motivation Trait EI levels of Females between the 20-30 and 51-60 age groups

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
SELF MOTIVATION	Equal variances assumed	2.12	.15	-3.07	93	.00

Group Statistics

	Age	N	Mean	Std. Deviation
SELF MOTIVATION	20-30	47	5.2511	.99168
	51-60	48	5.8333	.85486

Table 12.16
Significant differences detected for Pessimism, Emotion Expression (Re: Self), Emotion Perception and Self-Motivation Trait levels for Years of Teaching Experience.

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
PESSIMISM	Between Groups	19.02	5	3.80	3.28	.01
	Within Groups	296.26	255	1.16		
	Total	315.28	260			
EMOTION EXPRESSION RE SELF	Between Groups	15.16	5	3.03	2.29	.05
	Within Groups	337.06	255	1.32		
	Total	352.22	260			
SELF MOTIVATION	Between Groups	10.62	5	2.12	2.29	.05
	Within Groups	236.77	255	.93		
	Total	247.38	260			

Group Statistics

	Experience	N	Mean	Std. Deviation
PESSIMISM	0-2	25	5.30	.98
	3-5	32	5.57	1.04
	6-9	56	5.23	1.05
	10-19	62	5.80	1.08
	20-29	39	5.55	1.10
	30+	47	5.98	1.16
	Total	261	5.60	1.10
EMOTION EXPRESSION RE SELF	0-2	25	5.12	.97
	3-5	32	5.21	1.23
	6-9	56	4.72	1.06
	10-19	62	5.29	1.19
	20-29	39	5.00	1.21
	30+	47	5.40	1.17
	Total	261	5.12	1.16
EMOTION PERCEPTION	0-2	25	5.73	.87
	3-5	32	5.95	1.13
	6-9	56	5.42	1.19
	10-19	62	6.04	.96
	20-29	39	5.79	.95
	30+	47	5.87	1.34
	Total	261	5.80	1.11

SELF MOTIVATION	0-2	25	5.21	1.01
	3-5	32	5.16	1.01
	6-9	56	5.35	.98
	10-19	62	5.58	.96
	20-29	39	5.36	.99
	30+	47	5.76	.86
	Total	261	5.44	.98

Table 12.17: *Significant mean differences found in Pessimism and Self-Motivation Trait levels between 0-2 and 30+ years of teaching experience*

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
PESSIMISM	Equal variances assumed	1.28	.26	-2.47	70	.016
SELF MOTIVATION	Equal variances assumed	.27	.60	-2.42	70	.018

Group Statistics

	Experience	N	Mean	Std. Deviation
PESSIMISM	0-2	25	5.30	.98
	30+	47	5.98	1.16
SELF MOTIVATION	0-2	25	5.21	1.01
	30+	47	5.76	.86

Table 12.18
Significant mean differences found in Pessimism and Self-Motivation Trait levels between 3-5 and 10-19 years of teaching experience

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
SELF MOTIVATION	Equal variances assumed	1.97	.16	-2.01	92	.05

Group Statistics

	Experience	N	Mean	Std. Deviation
SELF MOTIVATION	3-5	32	5.16	1.01
	10-19	62	5.58	.96

Table 12.19
Significant mean differences found in Self-Motivation Trait levels between 3-5 and 30+ years of teaching experience

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
SELF MOTIVATION	Equal variances assumed	3.25	.08	-2.83	77	.01

Group Statistics

	Experience	N	Mean	Std. Deviation
SELF MOTIVATION	3-5	32	5.16	1.01
	30+	47	5.76	.86

Table 12.20
Significant mean differences found in Pessimism, Emotion Expression (Re: Self) and Emotion Perception Trait levels between 6-9 and 10-19 years of teaching experience

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
PESSIMISM	Equal variances assumed	.05	.82	-2.88	116	.01
EMOTION EXPRESSION RE SELF	Equal variances assumed	1.19	.28	-2.72	116	.01
EMOTION PERCEPTION	Equal variances assumed	3.68	.06	-3.16	116	.00

Group Statistics

	Experience	N	Mean	Std. Deviation
PESSIMISM	6-9	56	5.23	1.05
	10-19	62	5.80	1.08
EMOTION EXPRESSION RE SELF	6-9	56	4.72	1.06
	10-19	62	5.29	1.19
EMOTION PERCEPTION	6-9	56	5.42	1.19
	10-19	62	6.04	.96

Table 12.21

Significant mean differences found in Pessimism, Emotion Expression (Re: Self) and Self-Motivation Trait levels between 6-9 and 30+ years of teaching experience

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
PESSIMISM	Equal variances assumed	.63	.43	-3.42	101	.00
EMOTION EXPRESSION RE SELF	Equal variances assumed	.34	.56	-3.07	101	.00
SELF MOTIVATION	Equal variances assumed	1.89	.17	-2.22	101	.03

Group Statistics

	Experience	N	Mean	Std. Deviation
PESSIMISM	6-9	56	5.23	1.05
	30+	47	5.98	1.16
EMOTION EXPRESSION RE SELF	6-9	56	4.72	1.06
	30+	47	5.40	1.17
SELF MOTIVATION	6-9	56	5.35	.98
	30+	47	5.76	.86

Table 12.22

Significant mean differences found in Self-Motivation Trait levels between 20-29 and 30+ years of teaching experience

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
SELF MOTIVATION	Equal variances assumed	2.56	.11	-1.97	84	.05

Group Statistics

	Experience	N	Mean	Std. Deviation
SELF MOTIVATION	20-29	39	5.36	.99
	30+	47	5.76	.86

Table 12.23

Significant difference detected in Adaptability Trait between State, Independent and Catholic Schools using One Way ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
ADAPTABILITY	Between Groups	5.11	2	2.55	3.17	.04
	Within Groups	206.29	256	.81		
	Total	211.40	258			

Group Statistics

		N	Mean	Std. Deviation
ADAPTABILITY	State/Government	200	5.27	.88
	Independent/Private	25	4.79	1.02
	Catholic	34	5.19	.93
	Total	259	5.21	.91

Table 12.24

Significant difference found in Adaptability Trait levels between State and Independent Schools

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
ADAPTABILITY	Equal variances assumed	1.76	.19	2.53	223	.01

Group Statistics

	School Type	N	Mean	Std. Deviation
ADAPTABILITY	State/Government	200	5.27	.88
	Independent/Private	25	4.79	1.02

Table 12.25

Significant difference found in Assertiveness Trait levels across Primary and Secondary teachers

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
ASSERTIVENESS	Equal variances assumed	.91	.34	-2.29	247	.02

Group Statistics

	Type of School	N	Mean	Std. Deviation
ASSERTIVENESS	Primary	97	4.14	1.03
	Secondary	152	4.47	1.14

Table 12.26
Significant mean differences found between males and females in their levels of Perceived Student Responsibility

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Student		5.17	.02			
	Equal variances not assumed			2.56	114.14	.01

Group Statistics

	Gender	N	Mean	Std. Deviation
Perception of Student	Male	56	9.80	2.55
	Female	205	8.74	3.41

Table 12.27

Significant mean differences found between males and females in their levels of Perceived Personal Responsibility

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Self	Equal variances assumed	.14	.71	-2.34	259	.02

Group Statistics

	Gender	N	Mean	Std. Deviation
Perception of Self	Male	56	5.96	2.39
	Female	205	6.90	2.71

Table 12.28

Significant differences indicated in Compassion levels across age groups using ANOVA

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Compassion	Between Groups	98.23	4	24.56	3.36	.01
	Within Groups	1844.24	252	7.32		
	Total	1942.47	256			

Group Statistics

	Age	N	Mean	Std. Deviation
Compassion	20-30	54	15.62	2.74
	31-40	72	16.07	2.68
	41-50	57	16.30	2.56
	51-60	57	17.40	2.69
	61+	17	16.18	3.23
	Total	257	16.33	2.75

Table 12.29

Significant differences found in Compassion levels between the 20-30 and 51-60 age group

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Compassion	Equal variances assumed	.11	.74	-3.46	109	.00

Group Statistics

	Age	N	Mean	Std. Deviation
Compassion	20-30	54	15.62	2.74
	51-60	57	17.40	2.69

Table 12.30

Significant differences found in Compassion levels between the 31-40 and 51-60 age group

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Compassion	Equal variances assumed	.21	.65	-2.81	127	.01

Group Statistics

	Age	N	Mean	Std. Deviation
Compassion	31-40	72	16.07	2.68
	51-60	57	17.40	2.69

Table 12.31

Significant differences found in Compassion levels between the 41-50 and 51-60 age group

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Compassion	Equal variances assumed	1.54	.22	-2.25	112	.03

Group Statistics

	Age	N	Mean	Std. Deviation
Compassion	41-50	57	16.30	2.56
	51-60	57	17.40	2.69

Table 12.32

Significant differences indicated in Likely Punitive Behaviour levels across age groups using ANOVA

ANOVA

Likely Punitive Behaviour

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	245.43	4	61.36	3.79	.01
Within Groups	4142.19	256	16.18		
Total	4387.62	260			

Group Statistics

Age	N	Mean	Std. Deviation
20-30	56	10.43	4.47
31-40	72	8.50	3.39
41-50	57	9.44	4.70
51-60	59	7.76	3.81
61+	17	8.12	3.10
Total	261	8.93	4.11

Table 12.33

Significant differences found in levels of Likely Punitive Behaviour between the 20-30 and 31-40 age groups

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Likely Punitive Behaviour		5.46	.02			
	Equal variances not assumed			2.69	99.71	.01

Group Statistics

	Age	N	Mean	Std. Deviation
Likely Punitive Behaviour	20-30	56	10.43	4.47
	31-40	72	8.50	3.39

Table 12.34

Significant differences found in levels of Likely Punitive Behaviour between the 20-30 and 51-60 age groups

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Likely Punitive Behaviour	Equal variances assumed	3.08	.08	3.45	113	.00

Group Statistics

	Age	N	Mean	Std. Deviation
Likely Punitive Behaviour	20-30	56	10.43	4.47
	51-60	59	7.76	3.81

Table 12.35

Significant differences found in levels of Likely Punitive Behaviour between the 20-30 and 61+ age groups

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Likely Punitive Behaviour	Equal variances assumed	3.23	.08	1.99	71	.05

Group Statistics

	Age	N	Mean	Std. Deviation
Likely Punitive Behaviour	20-30	56	10.43	4.47
	61+	17	8.12	3.10

Table 12.36

Significant differences found in levels of Likely Punitive Behaviour between the 41-50 and 51-60 age groups

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Likely Punitive Behaviour	Equal variances assumed	1.31	.26	2.11	114	.04

Group Statistics

	Age	N	Mean	Std. Deviation
Likely Punitive Behaviour	41-50	57	9.44	4.70
	51-60	59	7.76	3.81

Table 12.37

Significant differences indicated in Compassion levels across years of teaching experience using ANOVA

ANOVA

COMPASSION	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	96.68	5	19.34	2.63	.02
Within Groups	1845.79	251	7.35		
Total	1942.47	256			

Group Statistics

Experience	N	Mean	Std. Deviation
0-2	24	16.27	2.31
3-5	32	15.91	3.02
6-9	55	15.58	2.66
10-19	62	16.11	2.76
20-29	38	17.16	2.42
30+	46	17.15	2.88
Total	257	16.33	2.75

Table 12.38

Significant differences found in levels of Compassion between 6-9 and 20-29 years of experience

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Compassion	Equal variances assumed	.68	.41	-2.91	91	.01

Group Statistics

	Experience	N	Mean	Std. Deviation
Compassion	6-9	55	15.58	2.66
	20-29	38	17.16	2.42

Table 12.39

Significant differences found in levels of Compassion between 6-9 and 30+ years of experience

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Compassion	Equal variances assumed	1.71	.19	-2.84	99	.01

Group Statistics

	Experience	N	Mean	Std. Deviation
Compassion	6-9	55	15.58	2.66
	30+	46	17.15	2.88

Table 12.40

Significant mean differences found between State and Catholic Schools in their levels of Perceived Student Responsibility

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Student	Equal variances assumed	.20	.65	2.18	232	.03

Group Statistics

	School Type	N	Mean	Std. Deviation
Perception of Student	State/Government	200	9.16	3.24
	Catholic	34	7.82	3.58

Table 12.41

Significant mean differences found between State and Independent Schools in their levels of Self-Efficacy

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Self-Efficacy	Equal variances assumed	.64	.42	2.03	223	.04

Group Statistics

	School Type	N	Mean	Std. Deviation
Self-Efficacy	State/Government	200	19.91	5.49
	Independent/Private	25	17.52	5.89

Table 12.42

Significant mean differences found in reported levels of Negative Affect between State and Independent Schools

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Negative Affect	Equal variances assumed	.43	.52	-2.54	223	.01

Group Statistics

	School Type	N	Mean	Std. Deviation
Negative Affect	State/Government	200	31.12	11.53
	Independent/Private	25	37.24	9.98

Table 12.43

Significant mean differences found in levels of Perceived Student Responsibility between Primary and Secondary School Teachers

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Student	Equal variances assumed	1.43	.23	-2.53	247	.01

Group Statistics

	Type of School	N	Mean	Std. Deviation
Perception of Student	Primary	97	8.27	3.47
	Secondary	152	9.34	3.11

APPENDIX B

Statistical and Descriptive Results Tables

The following ANOVA, t-test and descriptive data tables relate to Chapter 14 – Statistical Results.

Table 14.12

No significant differences found in EI trait between experimental groups (Mann-Whitney U Test)

	SELF ESTEEM	OPTIMISM	PESSIMISM	EMOTION EXPRESSION RE SELF	EMPATHY	EMOTION PERCEPTION	EMOTION EXPRESS RE OTHERS
Mann-Whitney U	8058.0	7986.00	8167.00	8154.00	7671.50	7798.00	8432.50
Wilcoxon W	15198.00	18139.00	15307.00	18307.00	17824.50	14938.00	15572.50
Z	-.65	-.77	-.47	-.49	-1.28	-1.08	-.03
Asymp. Sig. (2-tailed)	.52	.45	.64	.63	.20	.28	.98

Table continued…

ASSERTIVENESS	EMOTION MANAGEMENT IN OTHERS	STRESS MANAGEMENT	SELF MOTIVATION	ADAPTABILITY	Global EI
8124.00	8023.00	8244.50	8446.50	7952.50	8297.00
18277.00	18176.00	18397.50	18599.50	18105.50	18450.00
-.54	-.70	-.34	-.00	-.82	-.25
.59	.48	.74	1.00	.41	.80

Mean Ranks

	Scenario: Behaviour Severity	N	Mean Rank	Sum of Ranks
SELF ESTEEM	High Behaviour Severity	142	133.75	18993.00
	Low Behaviour Severity	119	127.71	15198.00
OPTIMISM	High Behaviour Severity	142	127.74	18139.00
	Low Behaviour Severity	119	134.89	16052.00
PESSIMISM	High Behaviour Severity	142	132.99	18884.00
	Low Behaviour Severity	119	128.63	15307.00
EMOTION EXPRESSION RE SELF	High Behaviour Severity	142	128.92	18307.00
	Low Behaviour Severity	119	133.48	15884.00
EMPATHY	High Behaviour Severity	142	125.52	17824.50
	Low Behaviour Severity	119	137.53	16366.50
EMOTION PERCEPTION	High Behaviour Severity	142	135.58	19253.00
	Low Behaviour Severity	119	125.53	14938.00
EMOTION EXPRESSION RE OTHERS	High Behaviour Severity	142	131.12	18618.50
	Low Behaviour Severity	119	130.86	15572.50
ASSERTIVENESS	High Behaviour Severity	142	128.71	18277.00
	Low Behaviour Severity	119	133.73	15914.00
EMOTION MANAGEMENT IN OTHERS	High Behaviour Severity	142	128.00	18176.00
	Low Behaviour Severity	119	134.58	16015.00
STRESS MANAGEMENT	High Behaviour Severity	142	129.56	18397.50
	Low Behaviour Severity	119	132.72	15793.50
SELF MOTIVATION	High Behaviour Severity	142	130.98	18599.50
	Low Behaviour Severity	119	131.02	15591.50
ADAPTABILITY	High Behaviour Severity	142	127.50	18105.50
	Low Behaviour Severity	119	135.17	16085.50
Global EI	High Behaviour Severity	142	129.93	18450.00
	Low Behaviour Severity	119	132.28	15741.00
	Total	261		

Table 14.14
Exploration of significant mean differences in EI traits between the Low and High Behaviour Severity (Experimental) Groups using Independent T tests

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
SELF ESTEEM		4.72	.03			
	Equal variances not assumed			.72	237.89	.47
OPTIMISM	Equal variances assumed	.24	.62	-.72	259	.47
PESSIMISM	Equal variances assumed	2.85	.09	.12	259	.91
EMOTION EXPRESSION RE SELF	Equal variances assumed	.12	.73	-.31	259	.76
EMPATHY	Equal variances assumed	.67	.42	-.71	259	.48
EMOTION PERCEPTION	Equal variances assumed	.04	.84	.99	259	.32
EMOTION EXPRESSION RE OTHERS	Equal variances assumed	.00	.95	.13	259	.90
ASSERTIVENESS	Equal variances assumed	.07	.79	-.42	259	.68
EMOTION MANAGEMENT IN OTHERS	Equal variances assumed	.24	.63	-.42	259	.67
STRESS MANAGEMENT	Equal variances assumed	.37	.54	-.28	259	.78
SELF MOTIVATION	Equal variances assumed	.35	.55	-.18	259	.86
ADAPTABILITY	Equal variances assumed	.00	.96	-.75	259	.46
Global EI	Equal variances assumed	.86	.36	-.21	259	.84

Table 14.15

Exploration of significant mean differences in Attribution variables between the Low and High Behaviour Severity (Experimental) Groups using Independent T tests

Independent Samples Test

| | | Levene's Test for Equality of Variances | | | | |
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Student	Equal variances assumed	1.16	.28	-.99	255	.33
Perception of Self	Equal variances assumed	3.82	.05	.19	259	.85
Self-Efficacy		10.14	.00			
	Equal variances not assumed			-2.62	249.36	.01
Perceived Risk	Equal variances assumed	.618	.43	4.37	255	.00
Negative Affect	Equal variances assumed	1.30	.26	1.77	255	.08
Compassion	Equal variances assumed	.55	.46	3.64	255	.00
Likely Helping Behaviour	Equal variances assumed	.61	.44	-.17	255	.87
Likely Punitive Behaviour	Equal variances assumed	.04	.84	1.19	255	.24

Table 14.19

Comparison of Causal Attribution Factors across Experimental Groups using Independent T-tests

Independent Samples Test

| | | Levene's Test for Equality of Variances | | | | |
		F	Sig.	t	df	Sig. (2-tailed)
Family Factors	Equal variances assumed	3.09	.08	-.99	259	.32
Student Factors	Equal variances assumed	1.02	.32	-.59	259	.55
Teacher Factors	Equal variances assumed	1.94	.16	-.88	259	.38
School Factors	Equal variances assumed	1.09	.30	-.13	259	.90

Group Statistics

	Scenario: Behaviour Severity	N	Mean	Std. Deviation
Family Factors	High Behaviour Severity	142	3.43	.97
	Low Behaviour Severity	119	3.54	.71
Student Factors	High Behaviour Severity	142	3.03	.87
	Low Behaviour Severity	119	3.09	.75
Teacher Factors	High Behaviour Severity	142	2.93	1.07
	Low Behaviour Severity	119	3.04	.90
School Factors	High Behaviour Severity	142	3.30	1.01
	Low Behaviour Severity	119	3.31	.83

APPENDIX C

New Model Development Tables

The following Regression Weight Tables relate to Chapter 15 – Development of a new EI Model of Stigmatisation.

Table 15.1
Regression Weights of Model 1: (Group number 1 - Default model) *** = p < .001

			Estimate	S.E.	C.R.	P
AffectBURN_TOTAL	<---	CogSTUDENT_TOTAL	.79	.16	4.84	***
AffectCOMPASS_TOTAL	<---	CogSTUDENT_TOTAL	-.04	.06	-.57	.57
AffectBURN_TOTAL	<---	CogSELF_TOTAL	-.28	.21	-1.35	.18
AffectBURN_TOTAL	<---	CogSELFEFFICACY_TOTAL	-.68	.10	-6.83	***
AffectBURN_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	1.87	.18	10.19	***
PUNITIVE_TOTAL	<---	AffectBURN_TOTAL	.15	.02	7.41	***
HELP_TOTAL	<---	AffectBURN_TOTAL	.09	.03	3.44	***
PUNITIVE_TOTAL	<---	AffectCOMPASS_TOTAL	-.33	.06	-5.47	***
HELP_TOTAL	<---	AffectCOMPASS_TOTAL	.89	.07	13.20	***
PUNITIVE_TOTAL	<---	CogSTUDENT_TOTAL	.40	.07	5.90	***
PUNITIVE_TOTAL	<---	CogSELFEFFICACY_TOTAL	.09	.04	2.18	.03
HELP_TOTAL	<---	CogSELFEFFICACY_TOTAL	.69	.04	15.63	***
HELP_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	-.09	.10	-.96	.34

Table 15.2
Regression Weights of Model 2: (Group number 1 - Default model) *** = p < .001

			Estimate	S.E.	C.R.	P
CogSELFEFFICACY_TOTAL	<---	GLOBAL_EI	.27	.04	6.78	***
CogPERCEIVEDRISK_TOTAL	<---	GLOBAL_EI	-.08	.02	-3.73	***
AffectBURN_TOTAL	<---	CogSTUDENT_TOTAL	.73	.15	4.72	***
AffectCOMPASS_TOTAL	<---	CogSTUDENT_TOTAL	-.13	.06	-2.28	.02
AffectBURN_TOTAL	<---	CogSELFEFFICACY_TOTAL	-.50	.10	-5.32	***
AffectBURN_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	1.84	.17	10.71	***
AffectCOMPASS_TOTAL	<---	CogSELF_TOTAL	-.21	.07	-3.02	.00
AffectCOMPASS_TOTAL	<---	CogSELFEFFICACY_TOTAL	.16	.03	4.89	***
AffectCOMPASS_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	.40	.06	6.40	***
AffectBURN_TOTAL	<---	GLOBAL_EI	-.24	.07	-3.66	***
PUNITIVE_TOTAL	<---	AffectBURN_TOTAL	.10	.02	4.50	***
HELP_TOTAL	<---	AffectBURN_TOTAL	.08	.02	3.47	***
PUNITIVE_TOTAL	<---	AffectCOMPASS_TOTAL	-.36	.06	-5.78	***
HELP_TOTAL	<---	AffectCOMPASS_TOTAL	.88	.07	12.55	***
PUNITIVE_TOTAL	<---	CogSTUDENT_TOTAL	.39	.06	6.14	***
HELP_TOTAL	<---	CogSELFEFFICACY_TOTAL	.69	.05	15.49	***
PUNITIVE_TOTAL	<---	CogSELF_TOTAL	-.33	.08	-4.43	***
PUNITIVE_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	.20	.08	2.32	.02
PUNITIVE_TOTAL	<---	GLOBAL_EI	-.01	.03	-.47	.64

Table 15.3

Regression Weights of Model 4: (Group number 1 - Default model) *** = p < .001

			Estimate	S.E.	C.R.	P
AffectCOMPASS_TOTAL	<---	GLOBAL_EI	.06	.02	2.95	.00
AffectNEG_TOTAL	<---	GLOBAL_EI	-.63	.08	-8.26	***
AffectNEG_TOTAL	<---	AffectCOMPASS_TOTAL	.65	.23	2.80	.01
CogPERCEIVEDRISK_TOTAL	<---	AffectNEG_TOTAL	.15	.01	11.19	***
CogSELFEFFICACY_TOTAL	<---	AffectNEG_TOTAL	-.29	.02	-12.34	***
CogSTUDENT_TOTAL	<---	AffectNEG_TOTAL	.07	.02	4.68	***
CogSTUDENT_TOTAL	<---	AffectCOMPASS_TOTAL	-.37	.07	-5.69	***
CogSELFEFFICACY_TOTAL	<---	GLOBAL_EI	.07	.03	2.32	.02
PUNITIVE_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	.16	.08	2.03	.04
PUNITIVE_TOTAL	<---	CogSTUDENT_TOTAL	.29	.07	4.18	***
PUNITIVE_TOTAL	<---	AffectCOMPASS_TOTAL	-.50	.08	-6.50	***
HELP_TOTAL	<---	AffectCOMPASS_TOTAL	.80	.09	9.38	***
PUNITIVE_TOTAL	<---	AffectNEG_TOTAL	.10	.02	4.60	***
HELP_TOTAL	<---	CogSELFEFFICACY_TOTAL	.55	.04	12.63	***
CogSELF_TOTAL	<---	AffectNEG_TOTAL	.05	.01	3.79	***

Table 15.5

Regression Weights of Final Model 5: (Group number 1 - Default model) *** = p < .001

			Estimate	S.E.	C.R.	P
AffectCOMPASS_TOTAL	<---	GLOBAL_EI2	.06	.02	2.95	.00
AffectNEG_TOTAL	<---	GLOBAL_EI2	-.63	.08	-8.26	***
AffectNEG_TOTAL	<---	AffectCOMPASS_TOTAL	.65	.23	2.80	.01
CogPERCEIVEDRISK_TOTAL	<---	AffectNEG_TOTAL	.15	.01	11.19	***
CogSELFEFFICACY_TOTAL	<---	AffectNEG_TOTAL	-.29	.02	-12.34	***
CogSTUDENT_TOTAL	<---	AffectNEG_TOTAL	.07	.02	4.68	***
CogSTUDENT_TOTAL	<---	AffectCOMPASS_TOTAL	-.37	.07	-5.69	***
CogSELFEFFICACY_TOTAL	<---	GLOBAL_EI2	.07	.03	2.32	.02
PUNITIVE_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	.16	.08	2.03	.04
PUNITIVE_TOTAL	<---	CogSTUDENT_TOTAL	.29	.07	4.18	***
PUNITIVE_TOTAL	<---	AffectCOMPASS_TOTAL	-.50	.08	-6.50	***
HELP_TOTAL	<---	AffectCOMPASS_TOTAL	.80	.09	9.38	***
PUNITIVE_TOTAL	<---	AffectNEG_TOTAL	.10	.02	4.60	***
HELP_TOTAL	<---	CogSELFEFFICACY_TOTAL	.55	.04	12.63	***

Table 15.7

*Regression Weights of Model 6: (Group number 1 - Default model) *** = p < .001*

			Estimate	S.E.	C.R.	P
AffectCOMPASS_TOTAL	<---	GLOBAL_EI2	.06	.02	2.95	.00
AffectNEG_TOTAL	<---	GLOBAL_EI2	-.63	.08	-8.26	***
AffectNEG_TOTAL	<---	AffectCOMPASS_TOTAL	.65	.23	2.80	.01
CogPERCEIVEDRISK_TOTAL	<---	AffectNEG_TOTAL	.15	.01	11.19	***
CogSELFEFFICACY_TOTAL	<---	AffectNEG_TOTAL	-.29	.02	-12.34	***
CogSTUDENT_TOTAL	<---	AffectNEG_TOTAL	.07	.02	4.68	***
CogSTUDENT_TOTAL	<---	AffectCOMPASS_TOTAL	-.37	.07	-5.69	***
CogSELFEFFICACY_TOTAL	<---	GLOBAL_EI2	.07	.03	2.32	.02
PUNITIVE_TOTAL	<---	CogPERCEIVEDRISK_TOTA	.16	.08	2.03	.04
PUNITIVE_TOTAL	<---	CogSTUDENT_TOTAL	.29	.07	4.18	***
PUNITIVE_TOTAL	<---	AffectCOMPASS_TOTAL	-.50	.08	-6.50	***
HELP_TOTAL	<---	AffectCOMPASS_TOTAL	.80	.09	9.38	***
PUNITIVE_TOTAL	<---	AffectNEG_TOTAL	.10	.02	4.60	***
HELP_TOTAL	<---	CogSELFEFFICACY_TOTAL	.55	.04	12.63	***
CogSELF_TOTAL	<---	AffectNEG_TOTAL	.06	.01	4.80	***
CogSELF_TOTAL	<---	TFTotal	.74	.15	5.00	***

Table 15.9

*Regression Weights of Model 7: (Group number 1 - Default model) *** = p < .001*

			Estimate	S.E.	C.R.	P
AffectCOMPASS_TOTAL	<---	GLOBAL_EI2	.07	.03	2.49	.01
AffectNEG_TOTAL	<---	GLOBAL_EI2	-.50	.11	-4.54	***
AffectNEG_TOTAL	<---	AffectCOMPASS_TOTAL	.08	.34	.24	.81
CogPERCEIVEDRISK_TOTAL	<---	AffectNEG_TOTAL	.14	.02	7.31	***
CogSELFEFFICACY_TOTAL	<---	AffectNEG_TOTAL	-.24	.03	-7.93	***
CogSTUDENT_TOTAL	<---	AffectNEG_TOTAL	.08	.02	3.28	.00
CogSTUDENT_TOTAL	<---	AffectCOMPASS_TOTAL	-.29	.09	-3.13	.00
CogSELFEFFICACY_TOTAL	<---	GLOBAL_EI2	.07	.04	1.79	.07
PUNITIVE_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	-.05	.12	-.36	.72
PUNITIVE_TOTAL	<---	CogSTUDENT_TOTAL	.35	.10	3.60	***
PUNITIVE_TOTAL	<---	AffectCOMPASS_TOTAL	-.51	.11	-4.68	***
HELP_TOTAL	<---	AffectCOMPASS_TOTAL	.73	.12	6.02	***
PUNITIVE_TOTAL	<---	AffectNEG_TOTAL	.12	.03	3.88	***
HELP_TOTAL	<---	CogSELFEFFICACY_TOTAL	.66	.07	8.82	***

Table 15.11

*Regression Weights of Model 8: (Group number 1 - Default model) *** = p < .001*

			Estimate	S.E.	C.R.	P
AffectCOMPASS_TOTAL	<---	GLOBAL_EI2	.07	.03	2.49	.01
AffectNEG_TOTAL	<---	GLOBAL_EI2	-.49	.11	-4.60	***
CogSELFEFFICACY_TOTAL	<---	AffectNEG_TOTAL	-.26	.03	-9.25	***
CogSTUDENT_TOTAL	<---	AffectNEG_TOTAL	.08	.02	3.27	.00
CogSTUDENT_TOTAL	<---	AffectCOMPASS_TOTAL	-.29	.09	-3.12	.00
CogPERCEIVEDRISK_TOTA	<---	AffectNEG_TOTAL	.14	.02	7.31	***
PUNITIVE_TOTAL	<---	CogSTUDENT_TOTAL	.35	.10	3.59	***
PUNITIVE_TOTAL	<---	AffectCOMPASS_TOTAL	-.52	.11	-4.71	***
HELP_TOTAL	<---	AffectCOMPASS_TOTAL	.73	.12	6.02	***
PUNITIVE_TOTAL	<---	AffectNEG_TOTAL	.12	.03	4.35	***
HELP_TOTAL	<---	CogSELFEFFICACY_TOTAL	.66	.07	8.82	***

Table 15.13

Regression Weights for Model 9 (Group number 1 - Default model) *** = p < .001

			Estimate	S.E.	C.R.	P
AffectCOMPASS_TOTAL	<---	GLOBAL_EI2	.05	.03	1.84	.07
AffectNEG_TOTAL	<---	GLOBAL_EI2	-.73	.10	-7.02	***
AffectNEG_TOTAL	<---	AffectCOMPASS_TOTAL	1.03	.33	3.14	.00
CogPERCEIVEDRISK_TOTAL	<---	AffectNEG_TOTAL	.15	.03	8.24	***
CogSELFEFFICACY_TOTAL	<---	AffectNEG_TOTAL	-.33	.04	-9.18	***
CogSTUDENT_TOTAL	<---	AffectNEG_TOTAL	.08	.02	3.48	***
CogSTUDENT_TOTAL	<---	AffectCOMPASS_TOTAL	-.43	.10	-4.54	***
CogSELFEFFICACY_TOTAL	<---	GLOBAL_EI2	.08	.05	1.67	.10
PUNITIVE_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	.22	.11	1.96	.05
PUNITIVE_TOTAL	<---	CogSTUDENT_TOTAL	.24	.09	2.60	.01
PUNITIVE_TOTAL	<---	AffectCOMPASS_TOTAL	-.55	.11	-4.83	***
HELP_TOTAL	<---	AffectCOMPASS_TOTAL	.87	.13	6.91	***
PUNITIVE_TOTAL	<---	AffectNEG_TOTAL	.09	.03	3.05	.00
HELP_TOTAL	<---	CogSELFEFFICACY_TOTAL	.50	.06	9.16	***

Table 15.14

Regression Weights for Model 10: (Group number 1 - Default model) *** = p < .001

			Estimate	S.E.	C.R.	P
AffectCOMPASS_TOTAL	<---	GLOBAL_EI2	.05	.03	1.84	.07
AffectNEG_TOTAL	<---	GLOBAL_EI2	-.73	.10	-7.02	***
AffectNEG_TOTAL	<---	AffectCOMPASS_TOTAL	1.03	.33	3.14	.00
CogPERCEIVEDRISK_TOTAL	<---	AffectNEG_TOTAL	.15	.02	8.24	***
CogSELFEFFICACY_TOTAL	<---	AffectNEG_TOTAL	-.35	.03	-11.26	***
CogSTUDENT_TOTAL	<---	AffectNEG_TOTAL	.08	.02	3.48	***
CogSTUDENT_TOTAL	<---	AffectCOMPASS_TOTAL	-.43	.10	-4.54	***
PUNITIVE_TOTAL	<---	CogPERCEIVEDRISK_TOTAL	.22	.11	1.96	.05
PUNITIVE_TOTAL	<---	CogSTUDENT_TOTAL	.24	.09	2.60	.01
PUNITIVE_TOTAL	<---	AffectCOMPASS_TOTAL	-.55	.11	-4.83	***
HELP_TOTAL	<---	AffectCOMPASS_TOTAL	.87	.13	6.90	***
PUNITIVE_TOTAL	<---	AffectNEG_TOTAL	.09	.03	3.05	.00
HELP_TOTAL	<---	CogSELFEFFICACY_TOTAL	.50	.06	9.14	***

APPENDIX D

Profile Group Development Tables

The following ANOVA, t-test and descriptive data tables relate to Chapters 16 and 17 – Profile Group Development.

Table 16.2

Significant mean differences found for Pathway 1 Attribution Model variables between EPG1 and remaining teacher population using Independent T-test

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Negative Affect		10.54	.00			
	Equal variances not assumed			12.83	44.15	.00
Perception of Student	Equal variances assumed	1.84	.18	5.48	255	.00
Self-Efficacy	Equal variances assumed	.05	.82	-3.96	255	.00
Perceived Risk	Equal variances assumed	1.91	.17	3.14	255	.00
Likely Helping Behaviour	Equal variances assumed	.95	.33	-2.18	255	.03
Likely Punitive Behaviour	Equal variances assumed	2.05	.15	8.24	255	.00

Group Statistics

	Pathway 1 Comparison Groups	N	Mean	Std. Deviation
Negative Affect	Group 1 = High Negative Affect/High Punitive	24	47.42	5.36
	Group 2 = Remaining Population	233	30.82	10.52
Perception of Student	Group 1 = High Negative Affect/High Punitive	24	12.23	3.42
	Group 2 = Remaining Population	233	8.79	2.88
Self-Efficacy	Group 1 = High Negative Affect/High Punitive	24	16.04	4.85
	Group 2 = Remaining Population	233	20.39	5.15
Perceived Risk	Group 1 = High Negative Affect/High Punitive	24	9.04	2.63
	Group 2 = Remaining Population	233	7.12	2.87
Likely Helping Behaviour	Group 1 = High Negative Affect/High Punitive	24	31.04	4.80
	Group 2 = Remaining Population	233	33.45	5.20
Likely Punitive Behaviour	Group 1 = High Negative Affect/High Punitive	24	14.75	3.01
	Group 2 = Remaining Population	233	8.48	3.60

Table 16.3

Significant differences found for Pathway 1 Attribution Model variables between EPG1 and remaining teacher population using Mann-Whitney U Test

Nonparametric Test

	Perception of Student	Self-Efficacy	Perceived Risk	Negative Affect	Likely Helping Behaviour	Likely Punitive Behaviour
Mann-Whitney U	1229.50	1472.00	1754.00	405.00	1932.50	432.50
Wilcoxon W	28490.50	1772.00	29015.00	27666.00	2232.50	27693.50
Z	-4.54	-3.83	-3.02	-6.90	-2.50	-6.85
Asymp. Sig. (2-tailed)	.00	.00	.00	.00	.01	.00

Ranks

	Pathway 1 Comparison Groups	N	Mean Rank	Sum of Ranks
Perception of Student	Group 1 = High Negative Affect/High Punitive	24	194.27	4662.50
	Group 2 = Remaining Population	233	122.28	28490.50
Self-Efficacy	Group 1 = High Negative Affect/High Punitive	24	73.83	1772.00
	Group 2 = Remaining Population	233	134.68	31381.00
Perceived Risk	Group 1 = High Negative Affect/High Punitive	24	172.42	4138.00
	Group 2 = Remaining Population	233	124.53	29015.00
Negative Affect	Group 1 = High Negative Affect/High Punitive	24	228.63	5487.00
	Group 2 = Remaining Population	233	118.74	27666.00
Likely Helping Behaviour	Group 1 = High Negative Affect/High Punitive	24	93.02	2232.50
	Group 2 = Remaining Population	233	132.71	30920.50
Likely Punitive Behaviour	Group 1 = High Negative Affect/High Punitive	24	227.48	5459.50
	Group 2 = Remaining Population	233	118.86	27693.50

Table 16.4

Significant differences found in EI Traits for Pathway 1 between EPG1 and remaining teacher population using Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
SELF ESTEEM	Equal variances assumed	.41	.52	-3.48	255	.00
OPTIMISM	Equal variances assumed	.75	.39	-2.60	255	.01
PESSIMISM	Equal variances assumed	1.52	.22	-4.07	255	.00
EMPATHY	Equal variances assumed	1.86	.17	-2.85	255	.01
EMOTION PERCEPTION	Equal variances assumed	.04	.84	-2.77	255	.01
ASSERTIVENESS	Equal variances assumed	2.79	.10	-2.54	255	.01
EMOTION MANAGEMENT IN OTHERS	Equal variances not assumed	5.37	.02	-3.23	34.06	.00
STRESS MANAGEMENT	Equal variances not assumed	3.86	.05	-4.82	31.32	.00
SELF MOTIVATION	Equal variances assumed	.088	.77	-2.73	255	.01
ADAPTABILITY	Equal variances assumed	.10	.75	-3.59	255	.00
Global EI	Equal variances assumed	2.47	.12	-4.48	255	.00

Table 16.4 continued…

Group Statistics

	Pathway 1 Comparison Groups	N	Mean	Std. Deviation
SELF ESTEEM	Group 1 = High Negative Affect/High Punitive	24	4.35	1.20
	Group 2 = Remaining Population	233	5.13	1.03
OPTIMISM	Group 1 = High Negative Affect/High Punitive	24	5.32	1.10
	Group 2 = Remaining Population	233	5.80	.85
PESSIMISM	Group 1 = High Negative Affect/High Punitive	24	4.76	1.27
	Group 2 = Remaining Population	233	5.69	1.05
EMPATHY	Group 1 = High Negative Affect/High Punitive	24	4.65	1.09
	Group 2 = Remaining Population	233	5.19	.86
EMOTION PERCEPTION	Group 1 = High Negative Affect/High Punitive	24	5.21	1.10
	Group 2 = Remaining Population	233	5.86	1.10
ASSERTIVENESS	Group 1 = High Negative Affect/High Punitive	24	3.78	.79
	Group 2 = Remaining Population	233	4.37	1.12
EMOTION MANAGEMENT IN OTHERS	Group 1 = High Negative Affect/High Punitive	24	4.25	.68
	Group 2 = Remaining Population	233	4.75	1.00
STRESS MANAGEMENT	Group 1 = High Negative Affect/High Punitive	24	4.30	.82
	Group 2 = Remaining Population	233	5.17	1.04
SELF MOTIVATION	Group 1 = High Negative Affect/High Punitive	24	4.93	.98
	Group 2 = Remaining Population	233	5.50	.97
ADAPTABILITY	Group 1 = High Negative Affect/High Punitive	24	4.60	.93
	Group 2 = Remaining Population	233	5.29	.89
Global EI	Group 1 = High Negative Affect/High Punitive	24	59.92	7.08
	Group 2 = Remaining Population	233	67.68	8.18

Table 16.5

Significant differences found in EI Traits for Pathway 1 between EPG1 and remaining teacher population using Mann-Whitney U Test

Nonparametric Test

	SELF ESTEEM	OPTIMISM	PESSIM	EMPATHY	EMOTION PERCEP	ASSERTIV	EMOTION MGT IN OTHERS
Mann-Whitney U	1736.50	2003.50	1588.00	1867.00	1767.50	1842.50	1827.50
Wilcoxon W	2036.50	2303.50	1888.00	2167.00	2067.50	2142.50	2127.50
Z	-3.06	-2.29	-3.49	-2.68	-2.99	-2.75	-2.80
Asymp. Sig. (2-tailed)	.00	.02	.00	.01	.00	.01	.01

Table 16.5 continued…

	SELF		
STRESS MGT	MOTIVATION	ADAPTABILITY	Global EI
1426.50	1856.50	1662.00	1322.00
1726.50	2156.50	1962.00	1622.00
-3.95	-2.72	-3.28	-4.25
.00	.01	.00	.00

Ranks

	Pathway 1 Comparison Groups	N	Mean Rank	Sum of Ranks
SELF ESTEEM	Group 1 = High Negative Affect/High Punitive	24	84.85	2036.50
	Group 2 = Remaining Population	233	133.55	31116.50
OPTIMISM	Group 1 = High Negative Affect/High Punitive	24	95.98	2303.50
	Group 2 = Remaining Population	233	132.40	30849.50
PESSIMISM	Group 1 = High Negative Affect/High Punitive	24	78.67	1888.00
	Group 2 = Remaining Population	233	134.18	31265.00
EMPATHY	Group 1 = High Negative Affect/High Punitive	24	90.29	2167.00
	Group 2 = Remaining Population	233	132.99	30986.00
EMOTION PERCEPTION	Group 1 = High Negative Affect/High Punitive	24	86.15	2067.50
	Group 2 = Remaining Population	233	133.41	31085.50
ASSERTIVENESS	Group 1 = High Negative Affect/High Punitive	24	89.27	2142.50
	Group 2 = Remaining Population	233	133.09	31010.50
EMOTION MANAGEMENT IN OTHERS	Group 1 = High Negative Affect/High Punitive	24	88.65	2127.50
	Group 2 = Remaining Population	233	133.16	31025.50
STRESS MANAGEMENT	Group 1 = High Negative Affect/High Punitive	24	71.94	1726.50
	Group 2 = Remaining Population	233	134.88	31426.50
SELF MOTIVATION	Group 1 = High Negative Affect/High Punitive	24	89.85	2156.50
	Group 2 = Remaining Population	233	133.03	30996.50
ADAPTABILITY	Group 1 = High Negative Affect/High Punitive	24	81.75	1962.00
	Group 2 = Remaining Population	233	133.87	31191.00
Global EI	Group 1 = High Negative Affect/High Punitive	24	67.58	1622.00
	Group 2 = Remaining Population	233	135.33	31531.00

Table 16.7

Significant mean differences found for Pathway 2 Attribution Model variables between EPG2 and remaining teacher population using Independent T-test

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Perception of Student	Equal variances assumed	3.65	.06	2.95	253	.00
Self-Efficacy		5.43	.02			
	Equal variances not assumed			-4.52	16.02	.00
Compassion		12.83	.00			
	Equal variances not assumed			-15.33	31.68	.00
Likely Helping Behaviour		5.75	.02			
	Equal variances not assumed			-11.68	16.39	.00
Likely Punitive Behaviour	Equal variances assumed	3.56	.06	6.20	253	.00

Group Statistics

	Pathway 2 Comparison Groups	N	Mean	Std. Deviation
Perception of Student	Group 1 = Low Compassion/Low Help/High Punitive	13	11.46	1.76
	Group 2 = Remaining Population	242	8.93	3.06
Self-Efficacy	Group 1 = Low Compassion/Low Help/High Punitive	13	16.00	3.11
	Group 2 = Remaining Population	242	20.19	5.30
Compassion	Group 1 = Low Compassion/Low Help/High Punitive	13	12.38	.77
	Group 2 = Remaining Population	242	16.57	2.65
Likely Helping Behaviour	Group 1 = Low Compassion/Low Help/High Punitive	13	24.15	2.73
	Group 2 = Remaining Population	242	33.74	4.86
Likely Punitive Behaviour	Group 1 = Low Compassion/Low Help/High Punitive	13	15.23	2.90
	Group 2 = Remaining Population	242	8.69	3.74

Table 16.8

Significant differences found for Pathway 2 Attribution Model variables between EPG2 and remaining teacher population using Mann-Whitney U Test

Nonparametric Test

	Perception of Student	Self-Efficacy	Compassion	Likely Helping Behaviour	Likely Punitive Behaviour
Mann-Whitney U	727.50	726.50	193.00	155.00	226.50
Wilcoxon W	30130.50	817.50	284.00	246.00	29629.50
Z	-3.28	-3.27	-5.36	-5.48	-5.22
Asymp. Sig. (2-tailed)	.00	.00	.00	.00	.00

Ranks

	Pathway 2 Comparison Groups	N	Mean Rank	Sum of Ranks
Student Responsibility	Group 1 = Low Compassion/Low Help/High Pun	13	193.04	2509.50
	Group 2 = Remaining Population	242	124.51	30130.50
Self-Efficacy	Group 1 = Low Compassion/Low Help/High Pun	13	62.88	817.50
	Group 2 = Remaining Population	242	131.50	31822.50
Compassion	Group 1 = Low Compassion/Low Help/High Pun	13	21.85	284.00
	Group 2 = Remaining Population	242	133.70	32356.00
Likely Helping Behaviour	Group 1 = Low Compassion/Low Help/High Pun	13	18.92	246.00
	Group 2 = Remaining Population	242	133.86	32394.00
Likely Punitive Behaviour	Group 1 = Low Compassion/Low Help/High Pun	13	231.58	3010.50
	Group 2 = Remaining Population	242	122.44	29629.50

Table 16.9

Significant differences found in EI Traits for Pathway 2 between EPG2 and remaining teacher population using Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
OPTIMISM	Equal variances assumed	.11	.75	-3.89	253	.00
PESSIMISM	Equal variances assumed	1.49	.22	-4.23	253	.00
EMOTION EXP RE SELF	Equal variances assumed	3.33	.07	-2.80	253	.01
EMPATHY	Equal variances assumed	1.31	.25	-2.66	253	.01
EMOTION PERCEPTION	Equal variances assumed	.57	.45	-3.87	253	.00
STRESS MANAGEMENT	Equal variances assumed	3.70	.06	-2.14	253	.03
SELF MOTIVATION	Equal variances assumed	.11	.75	-2.72	253	.01
ADAPTABILITY	Equal variances assumed	3.39	.07	-3.31	253	.00
Global EI	Equal variances assumed	.87	.35	-3.63	253	.00

Group Statistics

	Pathway 2 Comparison Groups	N	Mean	Std. Deviation
OPTIMISM	Group 1 = Low Compassion/Low Help/High Pun	13	4.86	.93
	Group 2 = Remaining Population	242	5.81	.85
PESSIMISM	Group 1 = Low Compassion/Low Help/High Pun	13	4.38	.89
	Group 2 = Remaining Population	242	5.68	1.08
EMOTION EXPRESS RE SELF	Group 1 = Low Compassion/Low Help/High Pun	13	4.25	.75
	Group 2 = Remaining Population	242	5.18	1.17
EMPATHY	Group 1 = Low Compassion/Low Help/High Pun	13	4.50	.79
	Group 2 = Remaining Population	242	5.17	.90
EMOTION PERCEPTION	Group 1 = Low Compassion/Low Help/High Pun	13	4.67	.89
	Group 2 = Remaining Population	242	5.87	1.10
STRESS MANAGEMENT	Group 1 = Low Compassion/Low Help/High Pun	13	4.48	.68
	Group 2 = Remaining Population	242	5.12	1.06
SELF MOTIVATION	Group 1 = Low Compassion/Low Help/High Pun	13	4.74	.85
	Group 2 = Remaining Population	242	5.49	.98
ADAPTABILITY	Group 1 = Low Compassion/Low Help/High Pun	13	4.42	.55
	Group 2 = Remaining Population	242	5.27	.91
Global EI	Group 1 = Low Compassion/Low Help/High Pun	13	58.93	6.86
	Group 2 = Remaining Population	242	67.41	8.27

Table 16.11

Significant mean differences found for Pathway 3 Attribution Model variables between EPG3 and remaining teacher population using Independent T-test.

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Perception of Student		4.23	.04			
	Equal variances not assumed			8.15	20.23	.00
Compassion		10.27	.00			
	Equal variances not assumed			-11.48	21.08	.00
Likely Helping Behaviour	Equal variances assumed	.27	.61	-5.97	255	.00
Likely Punitive Behaviour	Equal variances assumed	.07	.79	8.07	255	.00

Group Statistics

	Pathway 3 Comparison Groups	N	Mean	Std. Deviation
Perception of Student	Group 1 = Low compass/high student respons/ high punitive	15	12.73	1.67
	Group 2 = Remaining Population	242	8.88	3.02
Compassion	Group 1 = Low compass/high student respons/ high punitive	15	12.13	1.36
	Group 2 = Remaining Population	242	16.59	2.61
Likely Helping Behaviour	Group 1 = Low compass/high student respons/ high punitive	15	25.93	4.27
	Group 2 = Remaining Population	242	33.68	4.91
Likely Punitive Behaviour	Group 1 = Low compass/high student respons/ high punitive	15	16.27	3.94
	Group 2 = Remaining Population	242	8.62	3.54

Table 16.12

Significant differences found in EI Traits for Pathway 3 between EPG3 and remaining teacher population using Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tail)
SELF ESTEEM	Equal variances assumed	.17	.68	-2.05	256	.04
PESSIMISM	Equal variances assumed	3.27	.07	-3.82	256	.00
EMOTION EXPR RE SELF	Equal variances assumed	1.41	.24	-3.02	256	.00
EMPATHY	Equal variances assumed	.02	.90	-3.31	256	.00
EMOTION PERCEPTION	Equal variances assumed	.27	.60	-3.16	256	.00
STRESS MANAGEMENT		9.39	.00			
	Equal variances not assumed			-2.51	21.70	.02
SELF MOTIVATION	Equal variances assumed	.12	.73	-2.83	256	.01
ADAPTABILITY	Equal variances assumed	2.19	.14	-2.41	256	.02
Global EI	Equal variances assumed	1.35	.25	-3.29	256	.00

Group Statistics

	Pathway 3 Comparison Groups	N	Mean	Std. Deviation
SELF ESTEEM	Group 1 = Low compass/high student fault/ high punitive	15	4.51	1.22
	Group 2 = Remaining Population	243	5.09	1.05
PESSIMISM	Group 1 = Low compass/high student fault/ high punitive	15	4.57	.75
	Group 2 = Remaining Population	243	5.67	1.09
EMOTION EXPRESSION RE SELF	Group 1 = Low compass/high student fault/ high punitive	15	4.26	.90
	Group 2 = Remaining Population	243	5.18	1.16
EMPATHY	Group 1 = Low compass/high student fault/ high punitive	15	4.40	.97
	Group 2 = Remaining Population	243	5.18	.88
EMOTION PERCEPTION	Group 1 = Low compass/high student fault/ high punitive	15	4.93	1.18
	Group 2 = Remaining Population	243	5.86	1.09
STRESS MANAGEMENT	Group 1 = Low compass/high student fault/ high punitive	15	4.71	.54
	Group 2 = Remaining Population	243	5.10	1.07
SELF MOTIVATION	Group 1 = Low compass/high student fault/ high punitive	15	4.76	.89
	Group 2 = Remaining Population	243	5.49	.97
ADAPTABILITY	Group 1 = Low compass/high student fault/ high punitive	15	4.68	.59
	Group 2 = Remaining Population	243	5.26	.92
Global EI	Group 1 = Low compass/high student fault/ high punitive	15	60.15	6.50
	Group 2 = Remaining Population	243	67.35	8.31

Table 16.14

Significant mean differences found for Pathway 4 Attribution Model variables between EPG4 and remaining teacher population using Independent T-test

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Self-Efficacy	Equal variances assumed	.85	.36	-7.62	255	.00
Perceived Risk	Equal variances assumed	2.04	.15	2.98	255	.00
Negative Affect		5.11	.03			
	Equal variances not assumed			10.87	24.15	.00
Likely Helping Behaviour		4.36	.04			
	Equal variances not assumed			-9.76	23.05	.00
Likely Punitive Behaviour	Equal variances assumed	.40	.53	3.27	255	.00

Group Statistics

	Pathway 4 Comparison Groups	N	Mean	Std. Deviation
Self-Efficacy	Group 1 = High Neg Affect/Low SE/ Low Help	17	11.47	3.78
	Group 2 = Remaining Population	240	20.58	4.82
Perceived Risk	Group 1 = High Neg Affect/Low SE/ Low Help	17	9.29	2.47
	Group 2 = Remaining Population	240	7.16	2.88
Negative Affect	Group 1 = High Neg Affect/Low SE/ Low Help	17	48.47	5.90
	Group 2 = Remaining Population	240	31.23	10.64
Likely Helping Behaviour	Group 1 = High Neg Affect/Low SE/ Low Help	17	26.12	2.93
	Group 2 = Remaining Population	240	33.73	4.95
Likely Punitive Behaviour	Group 1 = High Neg Affect/Low SE/ Low Help	17	12.06	4.10
	Group 2 = Remaining Population	240	8.85	3.90

Table 16.15

Significant differences found in EI Traits for Pathway 4 between EPG4 and remaining teacher population using Independent T-test

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
EMOTION EXPRESSION RE SELF	Equal variances assumed	.00	.99	-2.46	255	.02
EMPATHY	Equal variances assumed	.68	.41	-2.53	255	.01
EMOTION PERCEPTION	Equal variances assumed	1.25	.26	-3.03	255	.00
EMOTION EXPRE RE OTHERS	Equal variances assumed	.91	.34	-2.29	255	.02
ASSERTIVENESS	Equal variances assumed	2.00	.16	-2.74	255	.01
STRESS MANAGEMENT	Equal variances assumed	.24	.63	-3.22	255	.00
SELF MOTIVATION	Equal variances assumed	1.65	.20	-2.27	255	.02
ADAPTABILITY	Equal variances assumed	.02	.90	-2.69	255	.01
Global EI	Equal variances assumed	.76	.38	-3.46	255	.00

Group Statistics

	Pathway 4 Comparison Groups	N	Mean	Std. Deviation
EMOTION EXPRESSION RE SELF	Group 1 = High Neg Affect/Low SE/ Low Help	17	4.46	1.15
	Group 2 = Remaining Population	240	5.18	1.16
EMPATHY	Group 1 = High Neg Affect/Low SE/ Low Help	17	4.61	1.08
	Group 2 = Remaining Population	240	5.17	.88
EMOTION PERCEPTION	Group 1 = High Neg Affect/Low SE/ Low Help	17	5.02	1.26
	Group 2 = Remaining Population	240	5.86	1.09
EMOTION EXPRESSION RE OTHERS	Group 1 = High Neg Affect/Low SE/ Low Help	17	4.47	1.18
	Group 2 = Remaining Population	240	5.22	1.31
ASSERTIVENESS	Group 1 = High Neg Affect/Low SE/ Low Help	17	3.62	.89
	Group 2 = Remaining Population	240	4.37	1.10
STRESS MANAGEMENT	Group 1 = High Neg Affect/Low SE/ Low Help	17	4.30	1.02
	Group 2 = Remaining Population	240	5.14	1.04
SELF MOTIVATION	Group 1 = High Neg Affect/Low SE/ Low Help	17	4.93	1.10
	Group 2 = Remaining Population	240	5.48	.96
ADAPTABILITY	Group 1 = High Neg Affect/Low SE/ Low Help	17	4.66	.91
	Group 2 = Remaining Population	240	5.26	.90
Global EI	Group 1 = High Neg Affect/Low SE/ Low Help	17	60.31	8.09
	Group 2 = Remaining Population	240	67.43	8.22

Table 16.17

Significant mean differences found for Pathway 5 Attribution Model variables between EPG5 and remaining teacher population using Independent T-test

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Self-Efficacy	Equal variances assumed	.51	.48	-4.38	255	.00
Perceived Risk		9.68	.00			
	Equal variances not assumed			11.62	22.86	.00
Negative Affect		5.41	.02			
	Equal variances not assumed			11.43	20.76	.00
Likely Punitive Behaviour	Equal variances assumed	2.67	.10	4.43	255	.00

Group Statistics

	Pathway 5 Comparison Groups	N	Mean	Std. Deviation
Self-Efficacy	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	14.40	5.65
	Group 2 = Remaining Population	242	20.33	5.06
Perceived Risk	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	11.47	1.30
	Group 2 = Remaining Population	242	7.05	2.77
Negative Affect	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	49.67	5.64
	Group 2 = Remaining Population	242	31.29	10.61
Likely Punitive Behaviour	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	13.33	2.79
	Group 2 = Remaining Population	242	8.80	3.90

Table 16.18

Significant differences found in EI Traits for Pathway 5 between EPG5 and remaining teacher population using Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
SELF ESTEEM	Equal variances assumed	2.64	.11	-2.17	255	.03
OPTIMISM	Equal variances assumed	.61	.44	-2.61	255	.01
ASSERTIVENESS		4.81	.03			
	Equal variances not assumed			-3.37	19.70	.00
EMOTION MANAGEMENT IN OTHERS	Equal variances assumed	1.47	.23	-2.49	255	.01
STRESS MANAGEMENT	Equal variances assumed	2.95	.09	-2.47	255	.01
ADAPTABILITY	Equal variances assumed	.30	.59	-2.37	255	.02
Global EI	Equal variances assumed	.13	.72	-2.83	255	.01

Group Statistics

	Pathway 5 Comparison Groups	N	Mean	Std. Deviation
SELF ESTEEM	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	4.48	1.47
	Group 2 = Remaining Population	242	5.09	1.04
OPTIMISM	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	5.19	1.16
	Group 2 = Remaining Population	242	5.79	.86
ASSERTIVENESS	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	3.74	.64
	Group 2 = Remaining Population	242	4.35	1.12
EMOTION MANAGEMENT IN OTHERS	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	4.09	.79
	Group 2 = Remaining Population	242	4.74	.98
STRESS MANAGEMENT	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	4.44	.84
	Group 2 = Remaining Population	242	5.12	1.06
ADAPTABILITY	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	4.69	1.00
	Group 2 = Remaining Population	242	5.26	.90
Global EI	Group 1 = High Neg Affect/ High Risk/ High Punitive	15	61.10	8.40
	Group 2 = Remaining Population	242	67.32	8.26

Table 16.20

Significant mean differences found for Pathway 6 Attribution Model variables between EPG6 and remaining teacher population using Independent T-test

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Perception of Student	Equal variances assumed	1.20	.27	6.79	255	.00
Teacher Responsibility	Equal variances assumed	.00	.97	2.00	255	.05
Self-Efficacy	Equal variances assumed	.000	1.00	-3.75	255	.00
Negative Affect		7.21	.01			
	Equal variances not assumed			10.27	25.22	.00
Likely Helping Behaviour	Equal variances assumed	.24	.63	-2.83	255	.01
Likely Punitive Behaviour	Equal variances assumed	.03	.86	6.51	255	.00

Group Statistics

	Pathway 6 Comparison Groups	N	Mean	Std. Deviation
Perception of Student	Group 1 = High Neg Affect/ High Student Respons/High Pun	17	13.65	2.42
	Group 2 = Remaining Population	240	8.79	2.88
Teacher Responsibility	Group 1 = High Neg Affect/ High Student Respons/High Pun	17	7.59	2.27
	Group 2 = Remaining Population	240	6.45	2.27
Self-Efficacy	Group 1 = High Neg Affect/ High Student Respons/High Pun	17	15.47	5.14
	Group 2 = Remaining Population	240	20.30	5.14
Negative Affect	Group 1 = High Neg Affect/ High Student Respons/High Pun	17	47.12	5.66
	Group 2 = Remaining Population	240	31.32	10.80
Likely Helping Behaviour	Group 1 = High Neg Affect/ High Student Respons/High Pun	17	29.82	5.81
	Group 2 = Remaining Population	240	33.47	5.08
Likely Punitive Behaviour	Group 1 = High Neg Affect/ High Student Respons/ High Pun	17	14.71	3.69
	Group 2 = Remaining Population	240	8.67	3.70

Table 16.21

Significant differences found in EI Traits for Pathway 6 between EPG6 and remaining teacher population using Independent T-tests

Independent Samples Test

| | | Levene's Test for Equality of Variances | | | | |
		F	Sig.	t	df	Sig. (2-tailed)
PESSIMISM	Equal variances assumed	.38	.54	-3.03	255	.00
EMPATHY	Equal variances assumed	2.84	.09	-2.87	255	.00
EMOTION MANAGEMENT IN OTHERS	Equal variances assumed	.63	.43	-2.56	255	.01
STRESS MANAGEMENT		4.92	.03			
	Equal variances not assumed			-2.96	21.48	.01
Global EI	Equal variances assumed	1.07	.30	-2.87	255	.00

Group Statistics

	Pathway 6 Comparison Groups	N	Mean	Std. Deviation
PESSIMISM	Group 1 = High Neg Affect/High Student Respons/High Pun	17	4.84	1.23
	Group 2 = Remaining Population	240	5.66	1.08
EMPATHY	Group 1 = High Neg Affect/High Student Respons/High Pun	17	4.54	1.17
	Group 2 = Remaining Population	240	5.18	.86
EMOTION MANAGEMENT IN OTHERS	Group 1 = High Neg Affect/ High Student Respons/High Pun	17	4.12	.84
	Group 2 = Remaining Population	240	4.74	.98
STRESS MANAGEMENT	Group 1 = High Neg Affect/ High Student Respons/High Pun	17	4.57	.71
	Group 2 = Remaining Population	240	5.12	1.07
Global EI	Group 1 = High Neg Affect/High Student Responsib/High Pun	17	61.40	7.09
	Group 2 = Remaining Population	240	67.35	8.34

Table 16.32
High and Low Trait EI Profile Group Comparisons across Attribution Model Variables using Independent T-tests for Pathway 1

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Student	Equal variances assumed	3.41	.07	2.61	255	.01
Self-Efficacy	Equal variances assumed	1.15	.28	-3.65	255	.00
Negative Affect	Equal variances assumed	2.11	.15	3.66	255	.00
Compassion	Equal variances assumed	1.15	.28	-3.23	255	.00
Likely Helping Behaviour	Equal variances assumed	1.35	.25	-3.91	255	.00
Likely Punitive Behaviour	Equal variances assumed	.58	.45	2.96	255	.00

	EPG1 Criteria	N	Mean	Std. Deviation
Perception of Student	Below Criteria Cut-off	50	10.12	2.44
	Above Criteria Cut-off	207	8.86	3.19
Perception of Self	Below Criteria Cut-off	50	6.80	2.10
	Above Criteria Cut-off	211	6.67	2.79
Self-Efficacy	Below Criteria Cut-off	50	17.60	4.61
	Above Criteria Cut-off	207	20.56	5.27
Perceived Risk	Below Criteria Cut-off	50	8.02	2.73
	Above Criteria Cut-off	207	7.13	2.92
Negative Affect	Below Criteria Cut-off	50	37.46	9.96
	Above Criteria Cut-off	207	31.14	11.20
Compassion	Below Criteria Cut-off	50	15.22	3.01
	Above Criteria Cut-off	207	16.60	2.63
Likely Helping Behaviour	Below Criteria Cut-off	50	30.72	5.32
	Above Criteria Cut-off	207	33.84	5.00
Likely Punitive Behaviour	Below Criteria Cut-off	50	10.54	4.38
	Above Criteria Cut-off	207	8.71	3.81

Table 16.33
High and Low Trait EI Profile Group Comparisons across Attribution Model Variables using Independent T-tests for Pathway 2

Independent Samples Test

| | | Levene's Test for Equality of Variances | | | | |
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Student	Equal variances assumed	.43	.51	3.59	255	.00
Self-Efficacy	Equal variances assumed	.86	.35	-4.10	255	.00
Perceived Risk	Equal variances assumed	1.66	.20	2.30	255	.02
Negative Affect	Equal variances assumed	.89	.35	4.18	255	.00
Compassion	Equal variances assumed	.45	.50	-3.75	255	.00
Likely Helping Behaviour	Equal variances assumed	2.46	.12	-4.43	255	.00
Likely Punitive Behaviour	Equal variances assumed	1.62	.20	4.43	255	.00

	EPG2 Criteria	N	Mean	Std. Deviation
Perception of Student	Below Criteria Cut-off	53	10.43	2.79
	Above Criteria Cut-off	204	8.76	3.08
Perception of Self	Below Criteria Cut-off	55	6.96	2.99
	Above Criteria Cut-off	206	6.63	2.58
Self-Efficacy	Below Criteria Cut-off	53	17.42	4.77
	Above Criteria Cut-off	204	20.65	5.20
Perceived Risk	Below Criteria Cut-off	53	8.11	2.79
	Above Criteria Cut-off	204	7.09	2.89
Negative Affect	Below Criteria Cut-off	53	37.94	10.54
	Above Criteria Cut-off	204	30.92	10.98
Compassion	Below Criteria Cut-off	53	15.09	2.93
	Above Criteria Cut-off	204	16.65	2.62
Likely Helping Behaviour	Below Criteria Cut-off	53	30.51	5.48
	Above Criteria Cut-off	204	33.94	4.90
Likely Punitive Behaviour	Below Criteria Cut-off	53	11.15	4.50
	Above Criteria Cut-off	204	8.52	3.66

Table 16.34
High and Low Trait EI Profile Group Comparisons across Attribution Model Variables using Independent T-tests for Pathway 3

Independent Samples Test

| | | Levene's Test for Equality of Variances | | | | |
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Student	Equal variances assumed	2.29	.13	3.17	255	.00
Self-Efficacy	Equal variances assumed	.33	.57	-3.55	255	.00
Perceived Risk	Equal variances assumed	.03	.86	2.65	255	.01
Negative Affect	Equal variances assumed	.04	.84	4.20	255	.00
Compassion	Equal variances assumed	2.78	.10	-2.34	255	.02
Likely Helping Behaviour		4.23	.04			
	Equal variances not assumed			-2.71	68.97	.01
Likely Punitive Behaviour		6.40	.01			
	Equal variances not assumed			2.84	64.37	.01

	EPG3 Cut-off Criteria	N	Mean	Std. Deviation
Perception of Student	Below Criteria Cut-off	51	10.31	2.56
	Above Criteria Cut-off	206	8.81	3.15
Perception of Self	Below Criteria Cut-off	53	7.26	3.22
	Above Criteria Cut-off	208	6.55	2.50
Self-Efficacy	Below Criteria Cut-off	51	17.69	5.37
	Above Criteria Cut-off	206	20.55	5.10
Perceived Risk	Below Criteria Cut-off	51	8.25	3.02
	Above Criteria Cut-off	206	7.07	2.83
Negative Affect	Below Criteria Cut-off	51	38.10	11.36
	Above Criteria Cut-off	206	30.95	10.77
Compassion	Below Criteria Cut-off	51	15.53	3.11
	Above Criteria Cut-off	206	16.53	2.63
Likely Helping Behaviour	Below Criteria Cut-off	51	31.31	5.81
	Above Criteria Cut-off	206	33.70	4.94
Likely Punitive Behaviour	Below Criteria Cut-off	51	10.73	4.87
	Above Criteria Cut-off	206	8.66	3.63

Table 16.35
High and Low Trait EI Profile Group Comparisons across Attribution Model Variables using Independent T-tests for pathway 4

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Student	Equal variances assumed	1.62	.21	2.00	255	.05
Self-Efficacy	Equal variances assumed	.00	1.00	-3.90	255	.00
Perceived Risk	Equal variances assumed	1.13	.29	2.44	255	.02
Negative Affect	Equal variances assumed	.66	.42	4.22	255	.00
Compassion		4.35	.04			
	Equal variances not assumed			-2.31	63.72	.02
Likely Helping Behaviour		3.97	.05			
	Equal variances not assumed			-3.02	65.78	.00
Likely Punitive Behaviour	Equal variances assumed	3.69	.06	2.78	255	.01

	EPG4 Criteria Cut-off	N	Mean	Std. Deviation
Perception of Student	Below Criteria Cut-off	49	9.90	2.65
	Above Criteria Cut-off	208	8.92	3.17
Self-Efficacy	Below Criteria Cut-off	49	17.41	5.10
	Above Criteria Cut-off	208	20.59	5.13
Perceived Risk	Below Criteria Cut-off	49	8.20	2.71
	Above Criteria Cut-off	208	7.09	2.91
Negative Affect	Below Criteria Cut-off	49	38.27	10.54
	Above Criteria Cut-off	208	30.98	10.97
Compassion	Below Criteria Cut-off	49	15.41	3.20
	Above Criteria Cut-off	208	16.55	2.60
Likely Helping Behaviour	Below Criteria Cut-off	49	31.06	5.74
	Above Criteria Cut-off	208	33.74	4.94
Likely Punitive Behaviour	Below Criteria Cut-off	49	10.47	4.81
	Above Criteria Cut-off	208	8.74	3.70

Table 16.36
High and Low Trait EI Profile Group Comparisons across Attribution Model Variables using Independent T-tests for pathway 5

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Perception of Student	Equal variances assumed	1.55	.21	2.56	255	.01
Self-Efficacy	Equal variances assumed	.15	.70	-4.81	255	.00
Perceived Risk	Equal variances assumed	1.53	.22	2.10	255	.04
Negative Affect	Equal variances assumed	1.59	.21	4.58	255	.00
Compassion	Equal variances assumed	1.52	.22	-2.27	255	.02
Likely Helping Behaviour	Equal variances assumed	.90	.34	-3.83	255	.00
Likely Punitive Behaviour	Equal variances assumed	.45	.51	3.15	255	.00

	EPG5 Criteria Cut-off	N	Mean	Std. Deviation
Perception of Student	Below Criteria Cut-off	49	10.11	2.60
	Above Criteria Cut-off	208	8.87	3.16
Perception of Self	Below Criteria Cut-off	49	6.86	2.20
	Above Criteria Cut-off	212	6.66	2.77
Self-Efficacy	Below Criteria Cut-off	49	16.86	5.02
	Above Criteria Cut-off	208	20.72	5.06
Perceived Risk	Below Criteria Cut-off	49	8.08	2.79
	Above Criteria Cut-off	208	7.12	2.90
Negative Affect	Below Criteria Cut-off	49	38.73	9.96
	Above Criteria Cut-off	208	30.87	11.02
Compassion	Below Criteria Cut-off	49	15.53	3.06
	Above Criteria Cut-off	208	16.52	2.65
Likely Helping Behaviour	Below Criteria Cut-off	49	30.73	5.27
	Above Criteria Cut-off	208	33.82	5.02
Likely Punitive Behaviour	Below Criteria Cut-off	49	10.65	4.35
	Above Criteria Cut-off	208	8.69	3.81

Table 16.37
High and Low Trait EI Profile Group Comparisons across Attribution Model Variables using Independent T-tests for pathway 6.

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Perception of Student	Equal variances assumed	.12	.73	2.57	255	.01
Self-Efficacy	Equal variances assumed	.06	.80	-4.20	255	.00
Perceived Risk	Equal variances assumed	2.69	.10	2.58	255	.01
Negative Affect	Equal variances assumed	.48	.49	4.47	255	.00
Compassion	Equal variances assumed	.98	.32	-2.2	255	.02
Likely Helping Behaviour	Equal variances assumed	.54	.46	-3.19	255	.00
Likely Punitive Behaviour	Equal variances assumed	2.38	.12	3.34	255	.00

	EPG6 Criteria Cut-off	N	Mean	Std. Deviation
Perception of Student	Below Criteria Cut-off	56	10.04	3.02
	Above Criteria Cut-off	201	8.85	3.07
Perception of Self	Below Criteria Cut-off	58	7.09	3.07
	Above Criteria Cut-off	203	6.59	2.54
Self-Efficacy	Below Criteria Cut-off	56	17.45	5.08
	Above Criteria Cut-off	201	20.69	5.11
Perceived Risk	Below Criteria Cut-off	56	8.18	2.68
	Above Criteria Cut-off	201	7.06	2.92
Negative Affect	Below Criteria Cut-off	56	38.09	10.63
	Above Criteria Cut-off	201	30.77	10.90
Compassion	Below Criteria Cut-off	56	15.59	2.99
	Above Criteria Cut-off	201	16.53	2.66
Likely Helping Behaviour	Below Criteria Cut-off	56	31.30	5.32
	Above Criteria Cut-off	201	33.77	5.05
Likely Punitive Behaviour	Below Criteria Cut-off	56	10.61	4.63
	Above Criteria Cut-off	201	8.64	3.69

Compassion Stress Profile Development Tables

Table 17.1

Significant mean differences found between High Compassion comparison groups in relation to Compassion and Negative Affect using Independent T-test

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Compassion	Equal variances assumed	.01	.93	-.21	90	.84
Negative Affect	Equal variances assumed	2.65	.11	12.66	90	.00

Group Statistics

	All high Compassion Scorers (Top 25%)	N	Mean	Std. Deviation
Compassion	Group 1 – Compassion Stress Group (top 25%)	26	19.23	1.18
	Group 2 - Low Negative Affect (Middle 50%)	66	19.29	1.19
Negative Affect	Group 1 – Compassion Stress Group (top 25%)	26	48.35	5.59
	Group 2 - Low Negative Affect (Middle 50%)	66	27.24	7.73

Table 17.2

Significant mean differences found between High Compassion comparison groups in relation to EI Traits using Independent T-test

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
PESSIMISM		4.87	.03			
	Equal variances not assumed			-3.49	36.89	.00
EMOTION EXPRESS RE SELF	Equal variances assumed	.05	.82	-2.41	90	.02
EMOTION EXPRES RE OTHERS	Equal variances assumed	.36	.55	-2.32	90	.02
EMOTION PERCEP		10.49	.00			
	Equal variances not assumed			-2.22	32.72	.03
ASSERTIVENESS	Equal variances assumed	.66	.42	-3.26	90	.00
EMOTION MGT IN OTHERS	Equal variances assumed	.41	.52	-2.53	90	.01
STRESS MGT	Equal variances assumed	2.58	.11	-3.98	90	.00
ADAPTABILITY	Equal variances assumed	.16	.69	-3.43	90	.00
Global EI	Equal variances assumed	.01	.92	-4.24	90	.00

Group Statistics

	All high Compassion Scorers (Top 25%)	N	Mean	Std. Deviation
PESSIMISM	Group 1 – Compassion Stress Group (top 25%)	26	5.25	1.17
	Group 2 - Low Negative Affect (Middle 50%)	66	6.13	.89
EMOTION EXPRESS RE SELF	Group 1 – Compassion Stress Group (top 25%)	26	4.75	1.13
	Group 2 - Low Negative Affect (Middle 50%)	66	5.41	1.21
EMOTION EXPRESS RE OTHERS	Group 1 – Compassion Stress Group (top 25%)	26	4.74	1.43
	Group 2 - Low Negative Affect (Middle 50%)	66	5.46	1.30
EMOTION PERCEPTION	Group 1 – Compassion Stress Group (top 25%)	26	5.51	1.41
	Group 2 - Low Negative Affect (Middle 50%)	66	6.17	.87
ASSERTIVENESS	Group 1 – Compassion Stress Group (top 25%)	26	3.61	1.03
	Group 2 - Low Negative Affect (Middle 50%)	66	4.42	1.10
EMOTION MGT IN OTHERS	Group 1 – Compassion Stress Group (top 25%)	26	4.30	1.11
	Group 2 - Low Negative Affect (Middle 50%)	66	4.90	.99
STRESS MANAGEMENT	Group 1 – Compassion Stress Group (top 25%)	26	4.61	1.11
	Group 2 - Low Negative Affect (Middle 50%)	66	5.48	.88
ADAPTABILITY	Group 1 – Compassion Stress Group (top 25%)	26	4.85	.83
	Group 2 - Low Negative Affect (Middle 50%)	66	5.50	.81
Global EI	Group 1 – Compassion Stress Group (top 25%)	26	63.21	7.77
	Group 2 - Low Negative Affect (Middle 50%)	66	70.52	7.33

Table 17.3

Compassion Stress group compared to Total Population in relation to Negative Affect and Teacher Responsibility levels using Independent T-test

Independent Samples Test

| | | Levene's Test for Equality of Variances | | | | Sig. (2-tailed) |
		F	Sig.	t	df	
Negative Affect		8.76	.00			
	Equal variances not assumed			14.01	49.61	.00

Group Statistics

	Comparison Groups	N	Mean	Std. Deviation
Negative Affect	Group 1 - Compassion Stress Group	26	48.35	5.59
	Group 2 - Teacher Population	235	30.05	10.91

Table 17.4

Compassion Stress group compared with top 25% of Negative Affect scorers from sample population in relation to Negative Affect levels using Independent T-test

Independent Samples Test

| | | Levene's Test for Equality of Variances | | | | Sig. (2-tailed) |
		F	Sig.	t	df	
Negative Affect	Equal variances assumed	3.24	.08	-2.66	66	.01

Group Statistics

	All high Negative Affect Scorers (Top 25%)	N	Mean	Std. Deviation
Negative Affect	Group 1 - High Negative Affect Scorers (top 25%)	42	44.98	4.74
	Group 2 - Compassion Stress Group	26	48.35	5.59

Table 17.5

Significant differences found in EI Trait between the Compassion Stress group and Sample Population using Independent T-test

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
ASSERTIVENESS	Equal variances assumed	.42	.52	-3.56	259	.00
EMOTION MANAGE IN OTHERS	Equal variances assumed	.52	.47	-2.21	259	.03
STRESS MANAGEMENT	Equal variances assumed	.16	.69	-2.38	259	.012
ADAPTABILITY	Equal variances assumed	1.61	.21	-2.23	259	.03

Group Statistics

	Comparison Groups	N	Mean	Std. Deviation
ASSERTIVENESS	Group 1 - Compassion Stress Group	26	3.61	1.03
	Group 2 - Teacher Population	235	4.40	1.08
EMOTION MANAGEMENT IN OTHERS	Group 1 - Compassion Stress Group	26	4.30	1.11
	Group 2 - Teacher Population	235	4.74	.95
STRESS MANAGEMENT	Group 1 - Compassion Stress Group	26	4.61	1.11
	Group 2 - Teacher Population	235	5.12	1.04
ADAPTABILITY	Group 1 - Compassion Stress Group	26	4.85	.83
	Group 2 - Teacher Population	235	5.26	.91

Table 17.8

High and Low Assertiveness Trait level Group Comparisons across Attribution Model Variables using Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances		t	df	Sig. (2-tailed)
		F	Sig.	t	df	Sig. (2-tailed)
Negative Affect	Equal variances assumed	1.56	.21	5.01	259	.00
Self-Efficacy	Equal variances assumed	.65	.42	-2.63	259	.01
Perceived Risk	Equal variances assumed	.11	.75	2.39	259	.02

Group Statistics

	Comparison Groups in Assertiveness	N	Mean	Std. Deviation
Negative Affect	Group 1 = Below criteria cut-off	71	37.62	10.42
	Group 2 = Above Criteria cut-off	190	29.72	11.65
Self-Efficacy	Group 1 = Below criteria cut-off	71	18.15	5.91
	Group 2 = Above Criteria cut-off	190	20.24	5.64
Perceived Risk	Group 1 = Below criteria cut-off	71	7.92	2.98
	Group 2 = Above Criteria cut-off	190	6.92	2.99

Table 17.9

High and Low Emotion Management (in others) Trait level Group Comparisons across Attribution Variables using Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances		t	df	Sig. (2-tailed)
		F	Sig.	t	df	Sig. (2-tailed)
Negative Affect	Equal variances assumed	.92	.34	2.79	259	.01
Self-Efficacy		7.25	.01			
	Equal variances not assumed			-3.22	134.91	.00
Likely Helping Behaviour	Equal variances assumed	.91	.34	-2.10	259	.04

Table 17.9 continued …

Group Statistics

	Comparison Groups in Emotion Management	N	Mean	Std. Deviation
Negative Affect	Group 1 = Below Cut-Off Criteria	84	34.80	12.38
	Group 2 = Above Cut-Off Criteria	177	30.48	11.35
Self-Efficacy	Group 1 = Below Cut-Off Criteria	84	17.90	6.52
	Group 2 = Above Cut-Off Criteria	177	20.51	5.20
Likely Helping	Group 1 = Below Cut-Off Criteria	84	31.49	7.20
Behaviour	Group 2 = Above Cut-Off Criteria	177	33.31	6.21

Table 17.10

High and Low Stress Management Trait level Group Comparisons across Attribution Variables using Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Compassion	Equal variances assumed	.10	.75	-2.81	255	.01
Negative Affect	Equal variances assumed	.06	.81	4.45	259	.00
Perception of Self	Equal variances assumed	.95	.33	2.08	259	.04
Self-Efficacy	Equal variances assumed	.01	.91	-3.84	259	.00
Likely Helping Behaviour	Equal variances assumed	.90	.35	-2.25	259	.03
Likely Punitive Behaviour	Equal variances assumed	.13	.72	2.10	259	.04

Group Statistics

	Comparison Groups in Stress Management	N	Mean	Std. Deviation
Compassion	Group 1 = Below Cut-Off Criteria	62	15.48	2.68
	Group 2 = Above Cut-Off Criteria	195	16.60	2.73
Negative Affect	Group 1 = Below Cut-Off Criteria	64	37.39	12.28
	Group 2 = Above Cut-Off Criteria	197	30.08	11.15
Perception of Self	Group 1 = Below Cut-Off Criteria	64	7.30	2.94
	Group 2 = Above Cut-Off Criteria	197	6.50	2.55
Self-Efficacy	Group 1 = Below Cut-Off Criteria	64	17.33	5.77
	Group 2 = Above Cut-Off Criteria	197	20.44	5.58
Likely Helping Behaviour	Group 1 = Below Cut-Off Criteria	64	31.13	7.49
	Group 2 = Above Cut-Off Criteria	197	33.24	6.20
Likely Punitive Behaviour	Group 1 = Below Cut-Off Criteria	64	9.86	4.00
	Group 2 = Above Cut-Off Criteria	197	8.62	4.11

Table 17.11

High and Low Adaptability Trait level Group Comparisons across Attribution Variables using Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances				Sig. (2-tailed)
		F	Sig.	t	df	
Compassion	Equal variances assumed	.44	.51	-3.18	255	.00
Negative Affect	Equal variances assumed	.03	.87	4.00	259	.00
Perception of Self	Equal variances assumed	.19	.66	3.17	259	.00
Self-Efficacy	Equal variances assumed	1.30	.25	-4.79	259	.00
Likely Helping Behaviour	Equal variances assumed	2.02	.16	-3.46	259	.00
Likely Punitive Behaviour	Equal variances assumed	2.91	.09	2.70	259	.01

Group Statistics

	Comparison Groups in Adaptability	N	Mean	Std. Deviation
Compassion	Group 1 = Below Cut-Off Criteria	75	15.49	2.84
	Group 2 = Above Cut-Off Criteria	182	16.67	2.65
Negative Affect	Group 1 = Below Cut-Off Criteria	77	36.27	12.06
	Group 2 = Above Cut-Off Criteria	184	30.03	11.28
Perception of Self	Group 1 = Below Cut-Off Criteria	77	7.49	2.70
	Group 2 = Above Cut-Off Criteria	184	6.36	2.60
Self-Efficacy	Group 1 = Below Cut-Off Criteria	77	17.13	6.01
	Group 2 = Above Cut-Off Criteria	184	20.74	5.34
Likely Helping Behaviour	Group 1 = Below Cut-Off Criteria	77	30.58	7.28
	Group 2 = Above Cut-Off Criteria	184	33.61	6.07
Likely Punitive Behaviour	Group 1 = Below Cut-Off Criteria	77	9.97	4.65
	Group 2 = Above Cut-Off Criteria	184	8.49	3.79

Table 17.12
High and Low Compassion Stress Trait Profile Group Comparisons across Attribution Variables using
Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
Negative Affect	Equal variances assumed	2.74	.10	6.21	259	.00
Perception of Student	Equal variances assumed	2.856	.09	2.21	259	.03
Self-Efficacy	Equal variances assumed	.01	.94	-4.31	259	.00
Perceived Risk	Equal variances assumed	1.20	.27	2.92	259	.00
Likely Punitive Behaviour	Equal variances assumed	.43	.52	3.09	259	.00

Group Statistics

	Group Comparisons in Compassion Stress	N	Mean	Std. Deviation
Negative Affect	Group 1 = Below Cut-Off Criteria	59	39.75	9.44
	Group 2 = Above Cut-Off Criteria	202	29.57	11.50
Perception of Student	Group 1 = Below Cut-Off Criteria	59	9.79	2.60
	Group 2 = Above Cut-Off Criteria	202	8.73	3.41
Self-Efficacy	Group 1 = Below Cut-Off Criteria	59	16.92	5.48
	Group 2 = Above Cut-Off Criteria	202	20.48	5.62
Perceived Risk	Group 1 = Below Cut-Off Criteria	59	8.19	2.85
	Group 2 = Above Cut-Off Criteria	202	6.90	3.00
Likely Punitive Behaviour	Group 1 = Below Cut-Off Criteria	59	10.36	4.45
	Group 2 = Above Cut-Off Criteria	202	8.51	3.92

Longevity Indicator Tables

Table 17.14

Self-Motivation Comparison Groups using Independent T-tests

Independent Samples Test

		Levene's Test for Equality of Variances				
		F	Sig.	t	df	Sig. (2-tailed)
SELF MOTIVATION		8.98	.00			
	Equal variances not assumed			-16.14	14.17	.00

Descriptives

	Comparison Groups	N	Mean	Std. Deviation
SELF MOTIVATION	Group 1 = Below Criteria	8	3.75	.26
	Group 2 = Longevity Group	253	5.50	.94

Table 17.15
ANOVA indicating non-significance across Age for the Self-Motivation Longevity Group

ANOVA

SELF MOTIVATION

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.43	4	1.61	1.4	.12
Within Groups	216.82	248	.87		
Total	223.25	252			

Descriptives

Age	N	Mean	Std. Deviation
20-30	48	5.38	.95
31-40	72	5.44	.94
41-50	57	5.36	.98
51-60	59	5.77	.87
61+	17	5.58	.93
Total	253	5.50	.94

Table 17.16

ANOVA indicating non-significance across Teaching Experience for the Self-Motivation Longevity Group

ANOVA

SELF MOTIVATION

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	6.22	5	1.24	1.42	.22
Within Groups	217.03	247	.88		
Total	223.25	252			

Descriptives

Years Teach	N	Mean	Std. Deviation
0-2	21	5.50	.79
3-5	28	5.34	.94
6-9	56	5.35	.98
10-19	62	5.58	.96
20-29	39	5.36	.99
30+	47	5.76	.86
Total	253	5.50	.94

Melinda Metaxas

APPENDIX E - Assessment Screen for Emotionally Intelligent Teachers (ASET)

- Please answer each statement below by writing the number that best reflects your degree of agreement or disagreement with that statement. Your response is entered into the blank square in the corresponding right hand column. *There are no right or wrong answers*. Work quickly, and don't think too long about the exact meaning of the statements.
- *You have seven possible responses, ranging from:*　　**1**= *Completely Disagree*　　*to*　　**7**= *Completely Agree*

1　2　3　4　5　6　7

	1	2	3	4	5	6	7	8	9	10	11	12
5 I'm able to "read" most people's feelings like an open book					▢							
11 Generally, I must be under pressure to really work hard											▢	
1 I believe I'm full of personal weaknesses	▢											
8 When I disagree with someone, I usually find it easy to say so								▢				
10 I'm usually able to find ways to control my emotions when I want to										▢		
4 I find it difficult to speak about my intimate feelings even to my closest friends				▢								
1 I'm not able to do things as well as most people	▢											
12 On the whole, I can cope with change effectively												▢
3 I tend to see difficulties in every opportunity rather than opportunities in every difficulty			▢									
8 I'm a follower, not a leader								▢				
11 I normally find it difficult to keep myself motivated											▢	
5 Just by looking at somebody, I can understand what he or she feels					▢							
2 I generally believe that things will work out fine in my life		▢										
10 Others admire me for being relaxed										▢		
4 On the whole, I find it difficult to describe my feelings				▢								
3 I tend to see the glass as half-empty rather than as half-full			▢									
8 When I disagree with someone, I generally prefer to remain silent rather than make a scene								▢				

1=*Completely Disagree to*   **7**=*Completely Agree*

	1	2	3	4	5	6	7

Item	Scale
5 I'm normally able to "get into someone's shoes" and experience their emotions	
10 I would describe myself as a calm person	
3 There are many reasons to expect the worst in life	
1 If I went on a blind date, the other person would be disappointed with my looks	
12 I don't mind frequently changing my daily routine	
6 I often find it difficult to recognise what emotion I'm feeling	
1 On the whole, I like myself	
12 Generally, I'm able to adapt to new environments	
4 I usually find it difficult to express myself clearly	
8 On the whole, I would describe myself as assertive	
4 I usually find it difficult to express my emotions the way I would like to	
10 I get stressed by situations that others find comfortable	
6 I'm never really sure what I'm feeling	
11 On the whole, I'm a highly motivated person	
3 On the whole, I'm not a happy person	
9 I'm usually able to control other people	
2 I generally hope for the best	
9 I'm usually able to influence the way other people feel	
7 I find it difficult to tell others that I love them even when I want to	
4 It is easy for me to find the right words to describe my feelings	
2 Things tend to turn out right in the end	
12 I often find it difficult to adjust my life according to the circumstances	

1=*Completely Disagree to*   **7**=*Completely Agree*

1   2   3   4   5   6   7

Item	
4 Others tell me that I rarely speak about how I feel	
8 I would normally defend my opinions even if it meant arguing with important people	
10 I can handle most difficulties in my life in a cool and composed manner	
1 I believe I'm full of personal strengths	
5 I often find it difficult to see things from another person's viewpoint	
11 I lose interest in what I do quite easily	
3 I find it difficult to take pleasure in life	
10 Others tell me that I get stressed very easily	
9 I don't seem to have any power at all over other people's feelings	
2 I usually try to resist negative thoughts and think of positive alternatives	
6 Many times, I can't figure out what emotion I'm feeling	
7 Generally, I find it easy to tell others how much they really mean to me	
12 I usually find it difficult to change my attitudes and views	
2 Life is beautiful	
8 I tend to "back down" even if I know I'm right	
10 On the whole, I'm able to deal with stress	
1 I really don't like my physical appearance	
9 I usually find it difficult to change other people's opinions	
11 Generally, I need a lot of incentives in order to do my best	
5 Imagining myself in someone else's position is not a problem for me	
4 Expressing my emotions with words is not a problem for me	
7 I always find ways to express my affection to others when I want to	

| 12 I usually find it difficult to change my behaviour |
| 5 Even when I'm arguing with someone, I'm usually able to take their perspective |
| 9 I'm usually able to influence other people |
| 12 I would describe myself as a flexible person |

TOTAL SCALE SCORES:

1	2	3	4	5	6	7	8	9	10	11	12
÷ 6	÷ 5	÷ 5	÷ 7	÷ 6	÷ 3	÷ 3	÷ 6	÷ 5	÷ 7	÷ 5	÷ 7

CONVERTED SCORE =

Calculating the EI Trait Teacher Scores

Step 1: Calculate the 'TOTAL SCALE SCORE' for Each Trait

- Referring to the teacher questionnaire, sum the teacher's score responses, by adding the scores down each individual column (columns 1 to 12).

- Ensure that where there is the symbol ☼ that the score is first reversed before adding it. Refer to the REVERSING TABLE for Reverse Scoring. For column 1 (SE - self-esteem), for example, the scores for questions 4, 7(… etc.) are applicable. Questions 4 and 7 are firstly reverse scored (changed to 4 & 1), and then all 6 scores are added together. Record this score at the bottom of the table in the questionnaire where it states 'TOTAL SCALE SCORE'.

Step 2: Calculate the Converted Score

- Divide each TOTAL SCALE SCORE by the number in the row below it. This calculates the CONVERTED SCORE. Transfer these CONVERTED SCORES into the 'ASET SCORING TABLE'. This displays the link between the score and each individual Trait.

Step 3: Plot the 12 CONVERTED SCORES onto the 'INDIVIDUAL TRAIT SCORES CHART'.

- These scores on the chart display the teachers' individual trait levels in comparison to the sample teacher population levels. This chart does not determine the 'ideal' traits, but just gives a personal profile of individual trait levels in comparison to other teachers' levels. Generally a total score above or below the middle 50% of (standardised) scorers indicates that the teacher responded to items to a greater or lesser degree than the general teacher population. This merely describes a teachers' personal characteristics or suggested 'make up'. There are no good or bad scores. It does not matter if a teacher is lower or higher in some EI traits as these traits may not be relevant or significant to the 'ideal' trait profiles. A descriptive interpretive summary of each individual trait can be found in the INDIVIDUAL EI TRAIT INTERPRETATIONS.

Step 4: Enter 'CONVERTED SCORES' into the 'EI TRAIT PROFILE SCORE SHEET'.

- Record the 12 'TOTAL CONVERTED SCORES' for each individual EI trait across each row. For Trait 1, Self-Efficacy (SE), the same 'Total Score' is entered 3 times across the same row.

- Each column is then summed to form 7 'TOTAL PROFILE SCORES' at the bottom of the table.

- These TOTAL PROFILE SCORES are compared to CRITERIA CUT-OFF SCORES in the row below, to determine if the teacher is above the suggested 'Ideal' trait profile levels. *E.g. Profile 1 (Column 1) = Scores above or equal to 46.45 meet criteria for the ideal teacher profile.*

Step 5: Plot the 'TOTAL PROFILE SCORES' onto the 'PERCENTAGE OF TRAIT PROFILE CHART'.

- The first 6 'TOTAL PROFILE SCORES' are transferred from the 'PROFILE SCORING SHEET' and marked onto the PERCENTAGE OF TRAIT PROFILE CHART. The numbers down the left and right hand sides of the chart represent the percentage proportions of each profile. Profiles 1 to 6 only are compared to determine which Profile has the highest percentage of traits. The highest profile percentage (out of the six trait profiles), indicates the profile that is most reflective of that individual teacher.

- If this highest profile is above the suggested cut-off criteria, then the teacher is deemed to have one of the effective and ideal trait combination profiles required to produce positive student and teacher outcomes. This teachers' EI trait strengths can be theoretically understood by referring to their highest corresponding Profile description in the PROFILE TRAIT INTERPRETATIONS section.

Criteria for the 'Ideal' Teacher Trait Profiles:

It is suggested that teachers should meet the first **TWO** of the following criteria to be considered to have the 'ideal' teacher traits. If the teacher has less than 5 years' experience, they should meet all **THREE** criteria.

A. As recorded in the EI TRAIT PROFILE SCORE SHEET, at least **one** out of the six TOTAL PROFILE SCORES should be above the 'IDEAL' EI PROFILE CRITERIA SCORE.

B. As recorded in the EI TRAIT PROFILE SCORE SHEET, the TOTAL PROFILE SCORE for the Compassion Fatigue Stress Profile should be above the 'IDEAL' EI PROFILE CRITERIA SCORE.

C. As recorded in the EI TRAIT PROFILE SCORE SHEET, the TOTAL PROFILE SCORE for the Longevity Profile should be above the 'IDEAL' EI PROFILE CRITERIA SCORE.

Interpretive Summary of Criteria

Criteria A relates to the ideal trait combinations that are more likely to lead to supportive helping outcomes for students and create the most effective academic and emotional environment for students. This criteria also relates to those teachers who are less likely to experience psychological distress and have higher well-being. Specific profile interpretations can be found in the PROFILE TRAIT INTERPRETATIONS section.

Criteria B relates to teachers who are more resilient to experiencing Compassion Stress. That is, those teachers who are less likely to experience negative emotional consequences as a result of being unable to create emotional boundaries for themselves (feeling too much responsibility or emotion for some needy students). These are the trait combinations that separate those teachers who experience extremely high negative affect as a result of their high compassion for a student (possible rescuers) from those who do not.

Criteria C relates only to those teachers who are within their first five years of teaching. This is because research suggests that teachers are most likely to leave the profession as a result of low job satisfaction, stress or burnout within the first 5 years. This profile considers the significant trait that seems to separate some newer teachers from those who have been in the field for longer. That is their general levels of Self-Motivation, determination and perseverance.

Figure 1:

Reversing Table

☼ = REVERSE SCORING
1 = 7
2 = 6
3 = 5
4 = 4
5 = 3
6 = 2
7 = 1

Figure 2:

ASET Scoring Table

	ENTER CONVERTED SCORE	TRAIT EI (Individual Traits)	ABBREV.
1		SELF-ESTEEM	**SE**
2		OPTIMISM	**OPT**
3		PESSIMISM	**PESS**
4		EMOTION EXPRESSION RE: SELF	**EEXS**
5		EMPATHY	**EMP**
6		EMOTION PERCEPTION	**EP**
7		EMOTION EXPRESSION RE: OTHERS	**EEXO**
8		ASSERTIVENESS	**ASS**
9		EMOTION MANAGEMENT (OF OTHERS)	**EM**
10		STRESS MANAGEMENT	**SMO**
11		SELF-MOTIVATION	**SM**
12		ADAPTABILITY	**ADA**

Figure 3

Individual Trait Scores Chart

EI Trait levels Compared to Other Teachers from the study sample (n=261)
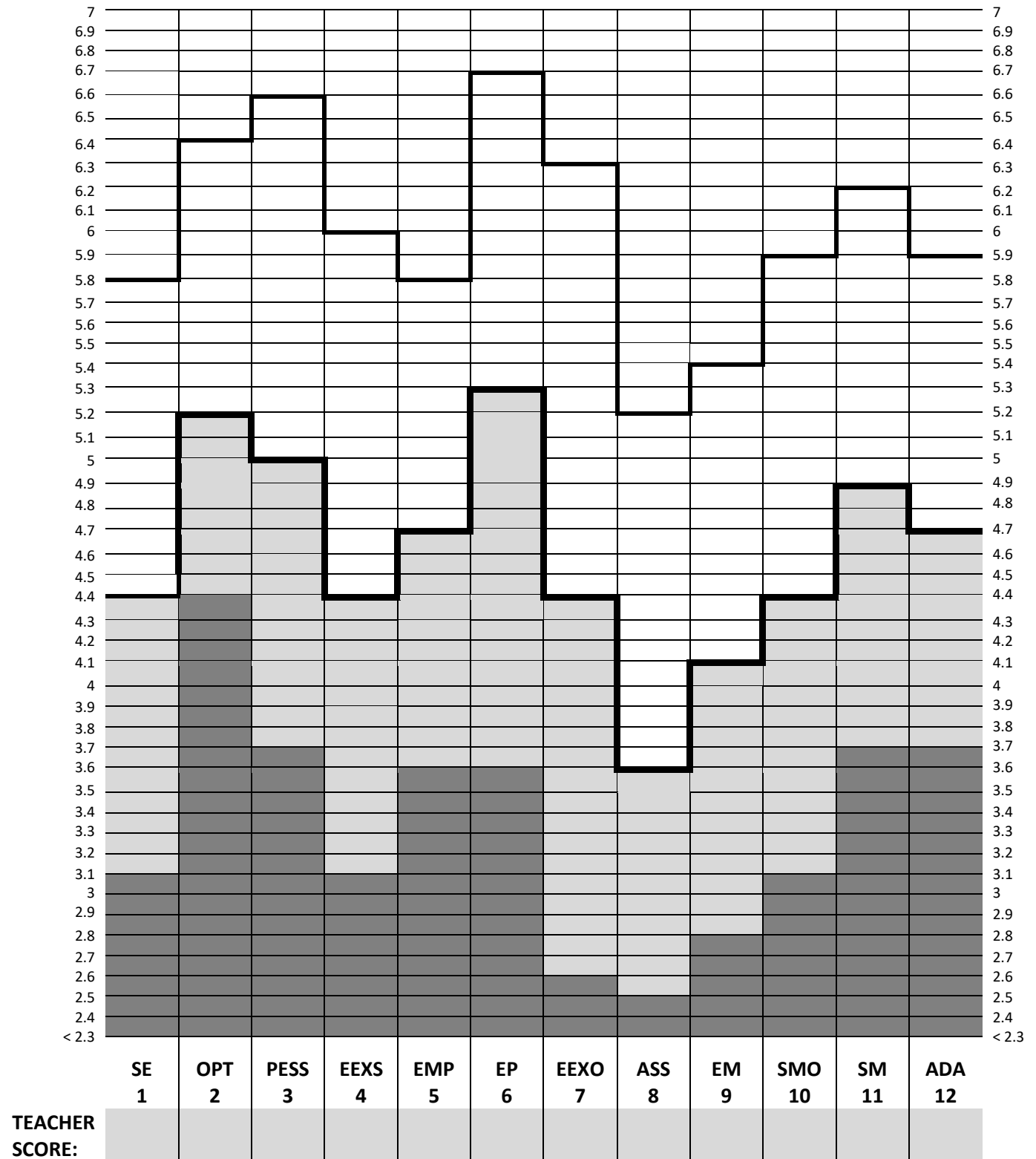
Key	Sample Population Score Ranks	Comparison Descriptor
	Top 75% of sample = (25th – 100th percentile)	**EI Trait Range**
	Bottom 25% of sample = (6th – 24th percentile)	**Lower in EI Trait**
	Bottom 5% of sample = (< 5th percentile)	**Significantly Lower in EI Trait**

'Ideal' Teacher EI Trait Profiles

Figure 4:

EI Trait Profile Score Sheet

EI Trait		Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Compass Stress Resiliency	Longevity Indicator ≤5 years' experience
1	SE		■		■		■	■	■
2	OPT			■	■		■	■	■
3	PESS				■	■		■	■
4	EEXS	■				■	■	■	■
5	EMP					■		■	■
6	EP					■	■	■	■
7	EEXO	■	■	■		■	■	■	■
8	ASS		■	■			■		■
9	EM		■	■	■				■
10	SMO								■
11	SM					■	■	■	
12	ADA						■		■
Total Profile Score:									
'Ideal' EI Profile Criteria Score:		≥ 46.45	≥ 38.67	≥ 37.89	≥ 36.5	≥ 26.55	≥ 18.28	≥ 17.1	> 4.2

Figure 5
Percentage of Trait Profile Chart

Percentage of Profile	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Compassion Stress Resiliency Profile	Longevity Indicator <5 yrs Experience
100	70	56	56	56	42	28	28	7
97.5	68.3	54.6	54.6	54.6	40.95	27.3	27.3	6.83
95	66.5	53.2	53.2	53.2	39.9	26.6	26.6	6.65
92.5	64.75	51.8	51.8	51.8	38.85	25.9	25.9	6.48
90	63	50.4	50.4	50.4	37.8	25.2	25.2	6.3
87.5	61.25	49	49	49	36.75	24.5	24.5	6.13
85	59.5	47.6	47.6	47.6	35.7	23.8	23.8	5.95
82.5	57.75	46.2	46.2	46.2	34.65	23.1	23.1	5.78
80	56	44.8	44.8	44.8	33.6	22.4	22.4	5.6
77.5	54.25	43.4	43.4	43.4	32.55	21.7	21.7	5.43
75	52.5	42	42	42	31.5	21	21	5.25
72.5	50.75	40.6	40.6	40.6	30.45	20.3	20.3	5.1
70	49	39.2	39.2	39.2	29.4	19.6	19.6	4.9
67.5	47.25	37.8	37.8	37.8	28.35	18.9	18.9	4.73
65	45.5	36.4	36.4	36.4	27.3	18.2	18.2	4.55
62.5	43.75	35	35	35	26.25	17.5	17.5	4.38
60	42	33.6	33.6	33.6	25.2	16.8	16.8	4.2
57.5	40.25	32.2	32.2	32.2	24.15	16.1	16.1	4.03
55	38.5	30.8	30.8	30.8	23.1	15.4	15.4	3.85
52.5	36.75	29.4	29.4	29.4	22.05	14.7	14.7	3.68
50	35	28	28	28	21	14	14	3.5
47.5	33.25	26.6	26.6	26.6	19.95	13.3	13.3	3.33
45	31.5	25.2	25.2	25.2	18.9	12.6	12.6	3.15
42.5	29.75	23.8	23.8	23.8	17.85	11.9	11.9	2.98
40	28	22.4	22.4	22.4	16.8	11.2	11.2	2.8
37.5	26.25	21	21	21	15.75	10.5	10.5	2.63
35	24.5	19.6	19.6	19.6	14.7	9.8	9.8	2.45
32.5	22.75	18.2	18.2	18.2	13.65	9.1	9.1	2.28
30	21	16.8	16.8	16.8	12.6	8.4	8.4	2.1

General Administration of ASET Tool

The purpose of the ASET tool is to provide information about a teachers' individual trait levels and their combination Profile Trait levels to help make predictions about whether the teacher has the suggested 'ideal' teacher traits required to produce the most effective outcomes for students and for themselves.

Administration:

The ASET tool can be administered either individually or in a group. As part of the explanation to the teacher being assessed, it should be mentioned that some of the questions may be sensitive in nature, whereas other questions are aimed at understanding how their EI traits are similar to or different from other teachers'. There are no correct responses but rather teachers should be encouraged to try to give an accurate description of their feelings, thoughts or attitudes so that the results can help to better understand them. The confidentiality of teachers' responses should be protected. Most teachers can complete the 65 questionnaire on the self-report questionnaire within 15 minutes. It is important that all items are answered so that the tool can be accurately scored and only one response per item should be emphasised. Responses are written in the blank square to the right hand side of each question.

Scoring Summary:

The ASSET is very simple to score and is a completely objective process. Each item is given a different weighting which is determined entirely by the responding teacher, not by the test administrator. Where a response has been left blank, encourage the teacher to complete the item if possible. If it is not possible, then the average number of all of the other responses within that column should be calculated and entered into this blank space. This method cannot be used for any more than one missing response for each trait (column) when calculating total scores for each trait.

Teachers' responses are objectively compared to the responses of 261 primary and secondary school teachers from within Victorian State, Catholic and Independent schools. Generally a total score above or below the middle 50% of (standardised) scorers indicates that a teacher responded to items to a greater or lesser degree than the general teacher population. On the trait profile charts, a score between the two middle lines indicates this middle 50% of the teacher sample populations EI trait levels. A higher score on the chart for Pessimism indicates lower Pessimistic levels.

As each teacher varies in EI traits, it is not the direct individual levels of EI trait that are meaningful for teacher effectiveness, but rather how each EI trait interrelates with other traits to influence supportive outcomes for students. Criteria cut-off scores for 'ideal' teacher traits are based on the EI traits that form part of the statistical and theoretical pathway in the related research project that predicted higher and/or lower helping and punitive behaviour outcomes. Criteria are also based on the trait combinations that related to the most effective outcomes for teacher well-being.

EI Trait Profile Groups Interpretation:

The EI Trait *combinations* provided by the EI Trait Profile scales are more meaningful that just the individual traits. The Trait Profiles combine information from some of the individual scales into a patterned whole. This shows the interactions of specific traits that influence either higher or lower helping or punitive behaviour, as statistically and theoretically discovered in the corresponding

research. Profile cut-off scores were developed by selecting and comparing particular clusters of traits that predicted higher and lower supportive helping and higher well-being in teachers.

Predictive Nature of EI Traits:

There is ongoing debate about whether individuals can be trained to be effective teachers or whether they are born with it (Whitbeck, 2000). The research that the ASET tool is founded on purports that teachers' Emotional Intelligence Traits are innate and stable across the adult lifespan, the same as personality traits, and are not something that can be changed, learnt or taught as skills. Trait EI is viewed as "a constellation of behavioural dispositions and self-perceptions concerning one's ability to recognize, process, and utilize emotion-laden information. It encompasses various dispositions from the personality domain..." (Petrides, 2004). It has been established that teachers "vary in their ability to perceive, understand, use and manage emotions (Cherniss, 2010). It has also been reported that "not everyone is cut out to be a teacher of students and that there are traits or characteristics beyond the simple delivery of instruction" (Scott et al., 2012, p. 4). Trait Emotional Intelligence can predict the way teachers respond and behave towards students and therefore, "teachers' dispositions directly affect their effectiveness as educators" (Wadlington and Wadlington, 2011, p. 323). Effective teachers are those who possess the 'ideal' teacher traits that are likely to be advantageous to students as well as teachers.

Teacher Profile Case Studies

Demonstration in completing the Score Tables and Charts

☐ Teacher Case Study 1 – Stan

Stan completed the ASET Tool and his scores down each of the 12 columns were added together, following reversal of some items. His scores were entered at the bottom of the questionnaire (*Figure 18.6*) then divided (÷) by the number indicated below each total score. This created his Converted Scores below:

Figure 6: **Questionnaire Score Results for Teacher 1:**

	1	2	3	4	5	6	7	8	9	10	11	12
TOTAL SCORE:	30	32	22	35	31	17	8	29	23	35	25	31
	÷ 6	÷ 5	÷ 5	÷ 7	÷ 6	÷ 3	÷ 3	÷ 6	÷ 5	÷ 7	÷ 5	÷ 7
CONVERTED SCORE =	5	6.4	4.4	5	5.17	5.67	2.67	4.83	4.6	5	5	4.43

Stan's converted scores were entered into the ASET scoring table below for reference (Figure 7):

Figure 7: **ASET SCORING TABLE**

	ENTER CONVERTED SCORE	TRAIT EI (Individual Traits)	ABBREV.
1	5	SELF-ESTEEM	SE
2	6.4	OPTIMISM	OPT
3	4.4	PESSIMISM	PESS
4	5	EMOTION EXPRESSION RE: SELF	EEXS
5	5.17	EMPATHY	EMP
6	5.67	EMOTION PERCEPTION	EP
7	2.67	EMOTION EXPRESSION TO OTHERS	EEXO
8	4.83	ASSERTIVENESS	ASS
9	4.6	EMOTION MANAGEMENT (OF OTHERS)	EM
10	5	STRESS MANAGEMENT	SMO
11	5	SELF-MOTIVATION	SM
12	4.43	ADAPTABILITY	ADA

Stan's scores were plotted onto the Individual Trait Scores Chart below (*Figure 18.8*). This revealed his individual EI Trait levels and unique profile. Many of Stan's EI traits were within similar levels as

reported by the teacher sample. Compared to the sample of teachers surveyed, he was lower in Emotional Expression (of others) and Adaptability, and much higher in Optimism. His lower levels in the Pessimism Trait suggests he is slightly more Pessimistic compared to the sample population.

Figure 8: **Individual Trait Scores Chart**

EI Trait levels Compared to Other Teachers from the study sample (n=261)

	SE 1	OPT 2	PESS 3	EEXS 4	EMP 5	EP 6	EEXO 7	ASS 8	EM 9	SMO 10	SM 11	ADA 12
TEACHER SCORE:	5	6.4	4.4	5	5.17	5.67	2.67	4.83	4.6	5	5	4.43
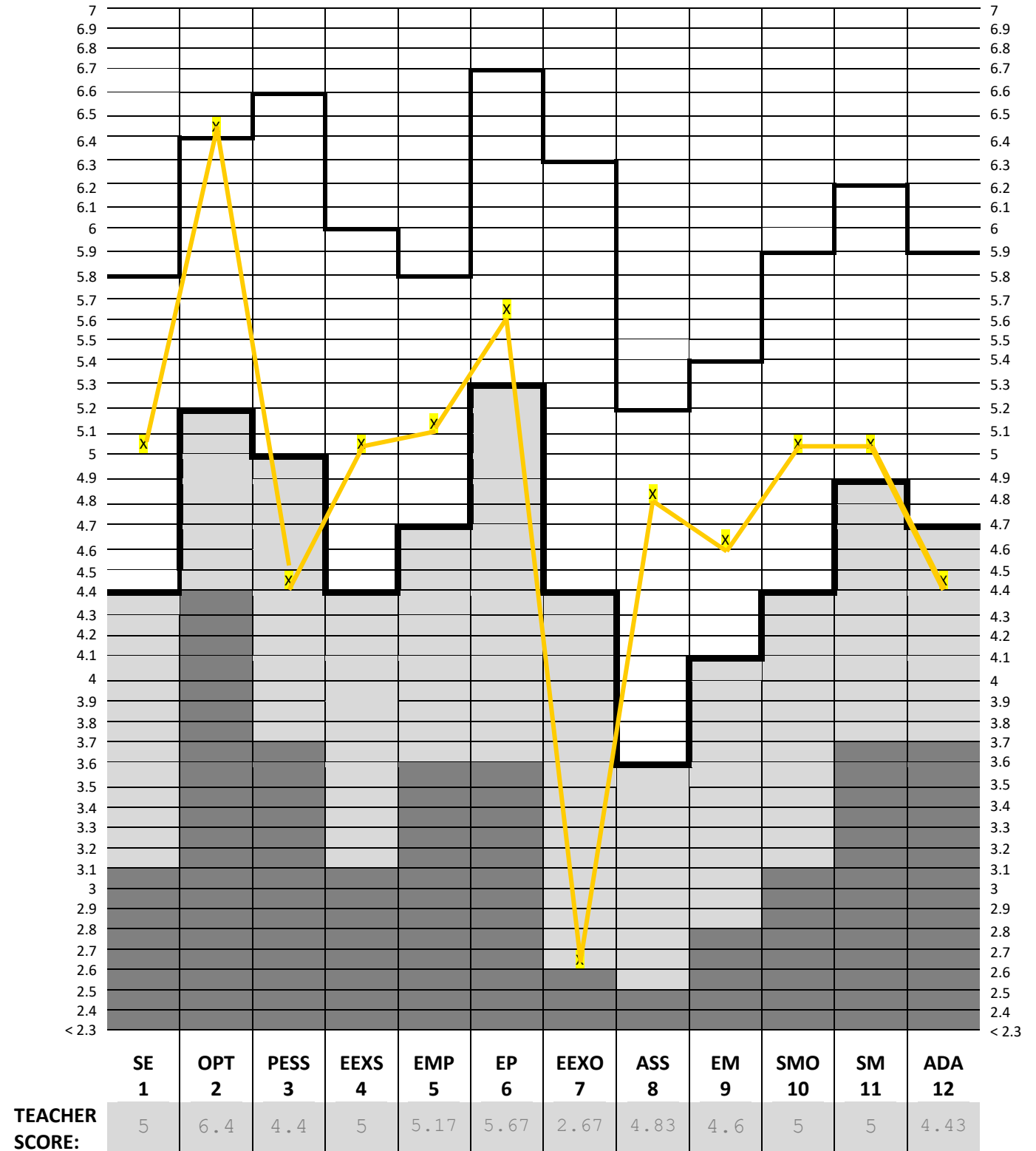
Stan's Converted Scores were entered into the EI Trait Profile Score Sheet as demonstrated below (Figure 9):

Figure 9: **EI Trait Profile Score Sheet**

EI Trait		Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Compass Stress Resiliency	Longevity Indicator ≤5 years' experience
1	SE	5		5		5			
2	OPT	6.4	6.4			6.4			
3	PESS	4.4	4.4	4.4			4.4		
4	EEXS		5	5	5				
5	EMP	5.17	5.17	5.17	5.17		5.17		
6	EP	5.67	5.67	5.67	5.67				
7	EEXO				2.67				
8	ASS	4.83			4.83	4.83		4.83	
9	EM	4.6				4.6	4.6	4.6	
10	SMO	5	5	5	5	5	5	5	
11	SM	5	5	5	5				N/A
12	ADA	4.43	4.43	4.43	4.43	4.43		4.43	
Total Profile Score		54.93	41.07	39.67	37.77	30.26	20.44	18.86	N/A
'Ideal' EI Profile Criteria Score:		≥ 46.45	≥ 38.67	≥ 37.89	≥ 36.5	≥ 26.55	≥ 18.28	≥ 17.1	> 4.2

Stan has been teaching between 20 and 29 years. As Stan has been teaching for greater than five years, the Longevity Profile scores and criteria are not relevant to him. This Indicator Profile is only for those teachers with five years or less teaching experience.

All six of Stan's Total Trait Profile Scores were above the suggested criteria cut-off score, suggesting that Stan has many different 'ideal' trait combinations that relate to positive outcomes for students and teachers. It did not seem to make a difference that he was slightly more Pessimistic, as his much higher levels of Optimism most likely balanced this out. Stan's lower levels of Emotion Expression (regarding others) also did not affect his overall profile levels as this trait had minimal contribution to the 'ideal' trait combination profiles. Stan was also above the suggested cut-off score for the Compassion Stress Resiliency Profile, indicating that he is likely to be more resilient to experiencing Compassion Stress. Stan meets both of these suggested criteria for the ideal teacher trait profiles.

Stan's Total Profile Scores were plotted on the Percentage of Trait Profile Chart below (Figure 10). Stan's highest Profile Trait Levels were within Profile 1. This is because for Profile 1 he received a percentage score of 77.5, which was higher than his other percentage scores. Stan's EI trait strengths can be theoretically understood in the Profile 1 of the Profile Trait Interpretation section.

Profiles that **DO MEET** criteria for the 'ideal' teacher traits

Figure 10: Percentage of Trait Profile Chart

Percentage of Profile	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Compassion Stress Resiliency Profile	Longevity Indicator <5 yrs Experience
100	70	56	56	56	42	28	28	7
97.5	68.3	54.6	54.6	54.6	40.95	27.3	27.3	6.83
95	66.5	53.2	53.2	53.2	39.9	26.6	26.6	6.65
92.5	64.75	51.8	51.8	51.8	38.85	25.9	25.9	6.48
90	63	50.4	50.4	50.4	37.8	25.2	25.2	6.3
87.5	61.25	49	49	49	36.75	24.5	24.5	6.13
85	59.5	47.6	47.6	47.6	35.7	23.8	23.8	5.95
82.5	57.75	46.2	46.2	46.2	34.65	23.1	23.1	5.78
80	56	44.8	44.8	44.8	33.6	22.4	22.4	5.6
77.5	54.25	43.4	43.4	43.4	32.55	21.7	21.7	5.43
75	52.5	42	42	42	31.5	21	21	5.25
72.5	50.75	40.6	40.6	40.6	30.45	20.3	20.3	5.1
70	49	39.2	39.2	39.2	29.4	19.6	19.6	4.9
67.5	47.25	37.8	37.8	37.8	28.35	18.9	18.9	4.73
65	45.5	36.4	36.4	36.4	27.3	18.2	18.2	4.55
62.5	43.75	35	35	35	26.25	17.5	17.5	4.38
60	42	33.6	33.6	33.6	25.2	16.8	16.8	4.2
57.5	40.25	32.2	32.2	32.2	24.15	16.1	16.1	4.03
55	38.5	30.8	30.8	30.8	23.1	15.4	15.4	3.85
52.5	36.75	29.4	29.4	29.4	22.05	14.7	14.7	3.68
50	35	28	28	28	21	14	14	3.5
47.5	33.25	26.6	26.6	26.6	19.95	13.3	13.3	3.33
45	31.5	25.2	25.2	25.2	18.9	12.6	12.6	3.15
42.5	29.75	23.8	23.8	23.8	17.85	11.9	11.9	2.98
40	28	22.4	22.4	22.4	16.8	11.2	11.2	2.8
37.5	26.25	21	21	21	15.75	10.5	10.5	2.63
35	24.5	19.6	19.6	19.6	14.7	9.8	9.8	2.45
32.5	22.75	18.2	18.2	18.2	13.65	9.1	9.1	2.28
30	21	16.8	16.8	16.8	12.6	8.4	8.4	2.1

Jessica completed the ASET, and her Converted Scores that were calculated from her Total Scores on the questionnaire, were entered into the EI Trait Profile Score Sheet as demonstrated below (Figure 11):

Figure 11: **EI Trait Profile Score Sheet** (Summary)

EI Trait	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Compass Stress Resiliency	Longevity Indicator $\leq$5 years' experience
Total Profile Score	53.17	46.07	44.34	42.5	29.07	20.53	18	5.6
'Ideal' EI Profile Criteria Score:	$\geq$ 46.45	$\geq$ 38.67	$\geq$ 37.89	$\geq$ 36.5	$\geq$ 26.55	$\geq$ 18.28	$\geq$ 17.1	> 4.2

Jessica is aged between 21 and 30 years old and has been teaching between 3 and 5 years. As she has less than five years teaching experience, the Longevity Profile scores and criteria are relevant to her. To meet suggested criteria, Jessica needs to have at least one out of her six Profile scores above their criteria cut-offs, as well as be above the Compassion Stress and the Longevity Profile criteria.

All six of Jessica's Total Trait Profile Scores were above suggested criteria cut-off scores, suggesting that she has many different 'ideal' trait combinations that relate to positive outcomes for students and teachers. She was also above the suggested cut-off for the Compassion Stress Resiliency Profile, indicating that she is likely to be more resilient to experiencing Compassion Stress. Jessica is also above cut-off criteria for Longevity. This indicates that she has sufficient Self-Motivating levels that can possibly assist her in remaining in the teaching profession for longer. Jessica meets all three of these suggested criteria for the 'ideal' teacher trait profile.

Jessica's Total Profile Scores were plotted on the Percentage of Trait Profile Chart above (Figure 11). Jessica's highest Profile Trait Levels and EI strengths were within Profile 2 where she received an approximate percentage score of 82.5, which was higher than her other percentage scores. Jessica's EI trait strengths can be theoretically understood in the Profile 2 of the Profile Trait Interpretation Section.

Both Stan and Jessica's EI Trait profiles met criteria for the 'ideal' trait profiles and would be suggested as ideal trait profiles for teacher selection or recruitment.

Profiles that **DO NOT MEET** criteria for the 'ideal' teacher traits

■ Teacher Case Study 3 Profile Scores – Kate

■ Teacher Case Study 4 Profile Scores – Peter

■ Teacher Case Study 5 Profile Scores – Sarah

Figure 12: Percentage of Trait Profile Chart

Percentage of Profile	Profile 1	Profile 2	Profile 3	Profile 4	Profile 5	Profile 6	Compassion Stress Resiliency Profile	Longevity Indicator <5 yrs Experience
100	70	56	56	56	42	28	28	7
97.5	68.3	54.6	54.6	54.6	40.95	27.3	27.3	6.83
95	66.5	53.2	53.2	53.2	39.9	26.6	26.6	6.65
92.5	64.75	51.8	51.8	51.8	38.85	25.9	25.9	6.48
90	63	50.4	50.4	50.4	37.8	25.2	25.2	6.3
87.5	61.25	49	49	49	36.75	24.5	24.5	6.13
85	59.5	47.6	47.6	47.6	35.7	23.8	23.8	5.95
82.5	57.75	46.2	46.2	46.2	34.65	23.1	23.1	5.78
80	56	44.8	44.8	44.8	33.6	22.4	22.4	5.6
77.5	54.25	43.4	43.4	43.4	32.55	21.7	21.7	5.43
75	52.5	42	42	42	31.5	21	21	5.25
72.5	50.75	40.6	40.6	40.6	30.45	20.3	20.3	5.1
70	49	39.2	39.2	39.2	29.4	19.6	19.6	4.9
67.5	47.25	37.8	37.8	37.8	28.35	18.9	18.9	4.73
65	45.5	36.4	36.4	36.4	27.3	18.2	18.2	4.55
62.5	43.75	35	35	35	26.25	17.5	17.5	4.38
60	42	33.6	33.6	33.6	25.2	16.8	16.8	4.2
57.5	40.25	32.2	32.2	32.2	24.15	16.1	16.1	4.03
55	38.5	30.8	30.8	30.8	23.1	15.4	15.4	3.85
52.5	36.75	29.4	29.4	29.4	22.05	14.7	14.7	3.68
50	35	28	28	28	21	14	14	3.5
47.5	33.25	26.6	26.6	26.6	19.95	13.3	13.3	3.33
45	31.5	25.2	25.2	25.2	18.9	12.6	12.6	3.15
42.5	29.75	23.8	23.8	23.8	17.85	11.9	11.9	2.98
40	28	22.4	22.4	22.4	16.8	11.2	11.2	2.8
37.5	26.25	21	21	21	15.75	10.5	10.5	2.63
35	24.5	19.6	19.6	19.6	14.7	9.8	9.8	2.45
32.5	22.75	18.2	18.2	18.2	13.65	9.1	9.1	2.28
30	21	16.8	16.8	16.8	12.6	8.4	8.4	2.1

■ Teacher Case Study 3 – Kate

Kate is aged between 30 and 40 years old and has been teaching between 10 and 19 years. The Longevity Profile criteria is not relevant to her. Kate needs to have at least one out of her six Profile scores above their criteria cut-offs, as well as be above the Compassion Stress Profile criteria.

Kate's Total Profile Scores are plotted on the Percentage of Trait Profile Chart above in Figure 12. None of Kate's Total Trait Profile Scores are above suggested criteria cut-off scores, indicating that she does not have many of the 'ideal' trait combination levels that are considered to relate to the most effective outcomes for students and teachers. Kate was also below the suggested cut-off for the Compassion Stress Resiliency Profile. This was more likely a result of her generally lower Global EI levels. Kate does not meet any of the suggested criteria for the 'ideal' teacher trait profile for teacher selection.

Kate's highest Profile Trait Levels were within Profile 6 where she received an approximate percentage score of 57.5. Kate's EI trait profile can be theoretically understood in Profile 6 of Profile Trait Interpretation section. Her profile description would be interpreted as being lower in trait EI levels and so the opposite characteristics to what is described may be more applicable.

☐ Teacher Case Study 4 – Peter

Peter is aged between 21 and 30 years old and has been teaching between 0 and 2 years. The Longevity Profile score and criteria is relevant to him, based on his years of experience. Peter's Total Profile Scores are plotted on the Percentage of Trait Profile Chart above in Figure 12. All of Peter's Total Trait Profile Scores are above the suggested criteria cut-off scores, indicating that he has many of the 'ideal' trait combinations that are considered to relate to the most effective outcomes for students. He is also at much lower risk of experiencing psychological distress. Peter was above the suggested cut-off for the Compassion Stress Resiliency Profile, indicating that he is likely to be more resilient to experiencing Compassion Stress. So far, Peter has met the first two criteria for the ideal profile.

Peter was, however, below the cut-off criteria for Longevity. This indicates that he has low Self-Motivation levels that could possibly relate to teacher attrition. Peter meets two out of the three criteria suggesting that he falls short of meeting the 'ideal' teacher trait profiles.

Peter's highest Profile Trait Levels were within Profile 1 where he received an approximate percentage score of 75. Peter's EI trait profile can be theoretically understood in the Profile 1 of the Profile Interpretation section.

☐ Teacher Case Study 5 – Sarah

Sarah is aged between 51 and 60 years old and has been teaching for more than 30+ years. The Longevity Profile score and criteria is not relevant to her. Sarah's Total Profile Scores are plotted on the Percentage of Trait Profile Chart above in Figure 12. Five out of six of Sarah's Total Trait Profile Scores are above the suggested criteria cut-off scores, indicating that she does have many of the 'ideal' trait levels that are considered to relate to the most effective outcomes for students and teachers. Sarah meets the first part of criteria.

Sarah's profile suggests that she is at higher risk of experiencing Compassion Stress compared to other teachers in the sample population as she was below the suggested cut-off for the Compassion Stress Resiliency Profile. This means that Sarah does not meet all of the suggested criteria for the 'ideal' teacher trait profile for teacher selection. Upon observation of her individual trait scores below in Figure 13, she has some very high levels of traits that relate to creating an effective and supportive environment for students, however, there are likely to be consequences for herself. It is her lower trait levels in Assertiveness and Stress Management (of others) that has most likely placed her at greater risk of Compassion Fatigue.

☐ Teacher Case Study 5 Individual Trait Scores – Sarah

Figure 13: **Individual Trait Scores Chart**

	SE 1	OPT 2	PESS 3	EEXS 4	EMP 5	EP 6	EEXO 7	ASS 8	EM 9	SMO 10	SM 11	ADA 12
TEACHER SCORE:	2.83	6.4	6.8	5.86	5.83	6.33	3.67	2.33	5.6	3.57	6.2	5
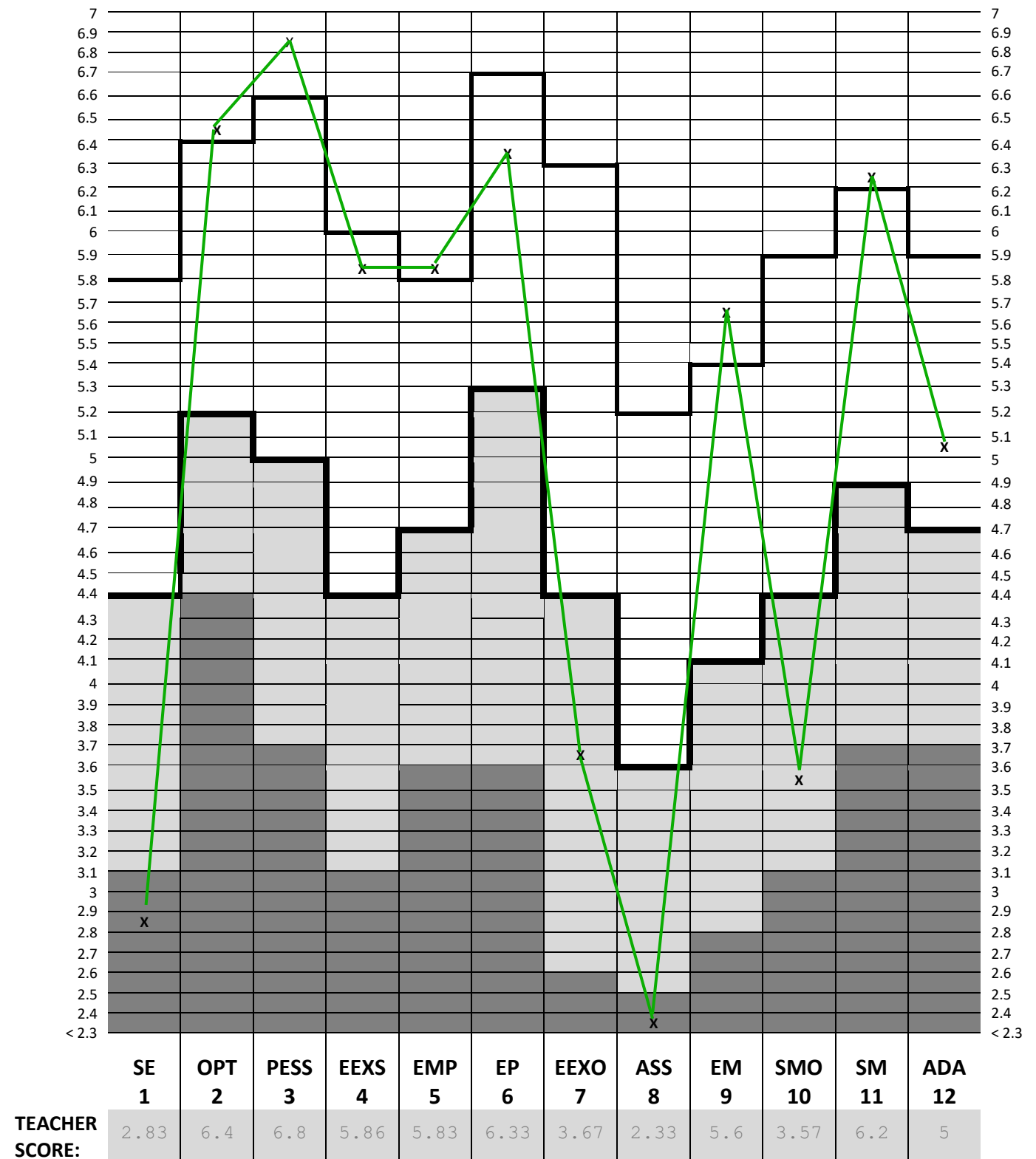
Individual EI Trait Interpretations

All traits are directly quoted from Petrides' (2001) theoretical descriptions of his individual trait facets and corresponding research. Some interpretations have been slightly adapted to relate to some new or revised EI traits (Metaxas, 2017).

Self-Esteem: The self-esteem scale measures one's overall evaluation of oneself. High scorers have a positive view of themselves and their achievements. They are confident, positive, and satisfied with most aspects of their life. Low scorers tend to lack self-respect and do not value themselves very highly.

Optimism: High scorers look on the bright side and expect positive things to happen in their life. They are less likely to be able to identify and pursue new opportunities and tend to be risk-averse. This scale reflects your general psychological state at this point in time. Lower scorers reflect less of these characteristics.

Pessimism: Low scorers are pessimistic and view things from a negative perspective. They are less likely to be able to identify and pursue new opportunities and tend to be risk-averse. Higher scorers reflect less of these characteristics.

Emotion Expression regarding Self: High scores on this scale means people are fluent in communicating their emotions to others about how they generally feel. They know what the best words are for expressing their feelings accurately and unambiguously. Low scores on this scale indicate a difficulty in communicating emotion-related thoughts, even in situations when this is necessary. People with low scores find it difficult to let others know how they feel. Inability to express emotion may be indicative of a more generalized problem of lack of self-confidence and social assertiveness.

Empathy: This scale measures the 'perspective-taking' aspect of empathy: seeing the world from someone else's point of view. In other words, it has to do with whether one can understand other people's needs and desires. They are able to decode other people's emotional expressions. People with high scores on this scale tend to be skilful in conversations with negotiations because they take into account the viewpoints of those they are dealing with. They can put themselves "in somebody else's shoes" and appreciate how things seem to them. Low scorers have difficulty adopting other people's perspectives. They tend to be opinionated and argumentative and may often seem self-centred. They do not pay much attention to the emotional signals that others send out.

Emotion Perception: This scale measures emotion perception in one's own self. High scorers on this scale are clear about what they feel. In contrast, people with low scores on the emotion perception scale are often confused about how they feel.

Emotion Expression regarding Others: High scores on this scale means people are fluent in communicating their emotions about how they feel *towards* another person**.** They know what the best words are for expressing their feelings accurately and unambiguously. Low scores on this scale indicate a difficulty in communicating emotion-related thoughts about another person, even in situations when this is necessary. People with low scores find it difficult to let others know how they feel about them. Inability to express emotion may be indicative of a more generalized problem of lack of self-confidence and social assertiveness.

Assertiveness: Individuals with high scores on this scale are forthright and frank. They know how to ask for things, give and receive compliments, and confront others when necessary. They have leadership qualities and can stand up for their rights and beliefs. Low scorers tend to back down even if they know they are right and have difficulty saying "no", even when they feel they must. As a result, they often end up doing things they do not want to do. In most cases, they prefer to be part of a team rather than to lead it.

Emotion Management (in others): This scale concerns one's perceived ability to manage other people's emotional states. High scorers on the emotion management scale can influence other people's feelings (e.g., calm them down, console them, motivate them). They know how to make other people feel better when they need it. Low scorers can neither influence nor manage others' feelings. They become overwhelmed when they have to deal with other people's emotional outbursts and are less likely to enjoy socialising and networking.

Stress Management: High scorers on this scale can handle pressure calmly and effectively because they have developed successful coping mechanisms. More often than not, they are good at regulating their emotions, which helps them tackle stress. Low scorers are less likely to have developed stress-coping strategies. They may prefer to altogether avoid situations that are potentially hectic, rather than deal with the associated tension. Their vulnerability to stress is problematic, as it leads them to reject important, but time-demanding, projects.

Self-Motivation: People with high scores on this scale are driven by a need to produce high-quality work. They tend to be determined and persevering. They do not need to be externally rewarded for their efforts because they have a strong sense of achievement and are motivated from within. Low scorers tend to need a lot of incentives and encouragement in order to get things done. They need constant reward to keep going and they are more likely to give up in the face of adversity. They also tend to have reduced levels of drive and persistence.

Adaptability: High scorers are flexible in their approach to work and life. They are willing and able to adapt to new environments and conditions – in fact, they may even enjoy novelty and regular change. Low scorers are change-resistant and find it difficult to modify their work – and life style. They are generally inflexible and have fixed ideas and views.

Profile Trait Interpretations

All of the following profiles have been quoted directly or slightly adapted from Petrides' (2009) theoretical interpretations of his individual Trait facets and corresponding research.

Profile1

Teachers higher in this profile tend to have a more positive view of themselves and their achievements. They are confident, positive, and satisfied with most aspects of their life. They tend look on the bright side and expect positive things to happen in their life. They are also good at percepting their own emotions and are clear about what they feel. More often than not, they are good at regulating their emotions, which helps them tackle stress. These teachers can handle pressure calmly and effectively because they have developed successful coping mechanisms.

These teachers can put themselves "in somebody else's shoes" and appreciate how things seem to them. They are able to decode other people's emotional expressions. They also have the ability in managing and influencing other people's feelings (e.g., calm them down, console them or motivate them). They also know how to make other people feel better when they need it. Higher scorers can often be direct and upfront, knowing how to ask for things, give and receive compliments, and confront others when necessary. This can translate into having leadership qualities and standing up for their rights and beliefs.

These teachers can also be driven by a need to produce high-quality work. They tend to be determined and persevering and are more motivated from within. They tend to be more flexible in their approach to work and life and are willing and able to adapt to new environments and conditions.

This trait profile is theorised to relate to happiness and well-being (current psychological state), adaptive coping styles, resilience, extraversion, conscientiousness, life satisfaction, job satisfaction, Openness to Experience, mood monitoring, self-monitoring, faith in one's judgement, and a need for cognition. These traits are also linked to lower levels of anger, depression, anxiety, sadness and neuroticism.

In relation to the corresponding study, this profile related to teachers experiencing lower Negative Affective states, higher Self-Efficacy, higher Compassion for students, less blame towards students, higher supportive and helping behaviour and lower punitive behaviours towards students.

Profile 2

Teachers higher in this profile tend to look on the bright side and expect positive things to happen in their life. They are emotionally perceptive of one's own self and are clear about what they feel. They can also be good at putting themselves "in somebody else's shoes" and appreciate how things seem to them. They can see the world from someone else's point of view. They are able to decode other people's emotional expressions.

These teachers are more fluent in communicating their emotions and they know what the best words are for expressing their feelings accurately and unambiguously. They can handle pressure calmly and effectively because they have developed successful coping mechanisms. More often than not, they are good at regulating their emotions, which helps them tackle stress.

These teachers are often driven by a need to produce high-quality work. They tend to be determined and persevering. They do not need to be externally rewarded for their efforts because they have a strong sense of achievement and are motivated from within. They are likely to be more flexible in their approach to work and life and are willing and able to adapt to new environments and conditions.

This trait profile is theorised to relate to a teacher's general psychological state, resilience, job satisfaction, life satisfaction, social boldness, positive mood, self and mood monitoring, extraversion, Openness to Experience, Conscientiousness, faith in one's judgement, and need for cognition. These traits are also linked to lower levels of avoidance tendencies, anger, stress, depression, maladaptive coping styles and neuroticism.

In relation to the corresponding study, this profile related to lower Negative Affective states, higher Self-Efficacy, higher Compassion for students, less perceived risk and blame towards challenging student behaviour, higher supportive and helping behaviour and lower punitive behaviours towards students.

Profile 3

Teachers higher in this profile tend to have a more positive view of themselves and their achievements. They are more confident, positive, and satisfied with most aspects of their life. They are clear about what they feel and are fluent in communicating their emotions. They know what the best words are for expressing their feelings accurately and unambiguously. They can also be good at putting themselves "in somebody else's shoes" and appreciate how things seem to them. They can see the world from someone else's point of view. They are able to decode other people's emotional expressions.

These teachers can handle pressure more calmly and effectively because they have developed successful coping mechanisms. More often than not, they are good at regulating their emotions, which helps them tackle stress. They are driven by a need to produce high-quality work. They tend to be determined and persevering and are more motivated from within. They are more flexible in their

approach to work and life. They are willing and able to adapt to new environments and conditions – in fact, they may even enjoy novelty and regular change.

This profile is theorised to relate to a teacher's life satisfaction, job satisfaction, positive mood, self and mood monitoring, confidence, resilience, Extraversion, social boldness, Openness to Experience, Conscientiousness, faith in one's judgement, and need for cognition. These traits are also linked with lower levels of avoidant tendencies, anger, apprehension, stress, depression, maladaptive coping styles, and neuroticism.

In relation to the corresponding study, this profile related to teachers experiencing lower Negative Affective states, higher Self-Efficacy, higher Compassion for students, less perceived risk and blame towards challenging student behaviour, higher supportive and helping behaviour and lower punitive behaviours towards students.

Profile 4

Teachers higher in this profile are more fluent in communicating their emotions to others. They are good at letting other know how they feel in relation to themselves and another person. They know what the best words are for expressing their feelings accurately and unambiguously. This may also be because they are clear about what they feel. They are also good at 'perspective-taking' or seeing the world from someone else's point of view. They can put themselves "in somebody else's shoes" and appreciate how things seem to them. They are able to decode other people's emotional expressions.

These teachers can be more forthright and frank. They know how to ask for things, give and receive compliments, and confront others when necessary. They have leadership qualities and can stand up for their rights and beliefs. They are driven by a need to produce high-quality work and tend to be determined and persevering. They have a strong sense of achievement and are motivated from within

These teachers can handle pressure calmly and effectively because they have developed successful coping mechanisms. More often than not, they are good at regulating their emotions, which helps them tackle stress. They are more flexible in their approach to work and life. They are willing and able to adapt to new environments and conditions.

This trait profile is theorised to relate to a teacher's job satisfaction, confidence, positive mood, mood monitoring, resilience, social boldness, Extraversion, Openness to Experience, Conscientiousness, preference for social careers, faith in one's judgement, enterprising careers, need for cognition. These traits are also linked with lower levels of avoidant tendencies, maladaptive coping styles, depression, anxiety, stress, anger, neuroticism.

In relation to the corresponding study, this profile related to teachers experiencing lower Negative Affective states, higher Self-Efficacy, higher Compassion for students, less perceived risk and blame towards challenging student behaviour, higher supportive and helping behaviour and lower punitive behaviours towards students.

Profile 5

Teachers higher in this profile have a positive view of themselves and their achievements. They are confident, positive, and satisfied with most aspects of their life. They tend to look on the bright side and expect positive things to happen in their life.

These teachers can handle pressure calmly and effectively because they have developed successful coping mechanisms. More often than not, they are good at regulating their emotions, which helps them tackle stress. These teachers also have the ability to manage other people's emotional states

and influence other people's feelings (e.g., calm them down, console them, motivate them). They know how to make other people feel better when they need it.

These teachers tend to be more forthright and frank. They know how to ask for things, give and receive compliments, and confront others when necessary. They have leadership qualities and can stand up for their rights and beliefs. They are more flexible in their approach to work and life. They are willing and able to adapt to new environments and conditions.

This trait profile is theorised to relate to a teacher's general psychological state, adaptive coping styles, resilience, life satisfaction, job satisfaction, Extraversion, enterprising careers, and need for cognition. These traits are also linked with lower levels of anger, apprehension, depression, anxiety, stress, maladaptive coping styles, and neuroticism.

In relation to the corresponding study, this profile related to teachers experiencing lower Negative Affective states, higher Self-Efficacy, higher Compassion for students, less perceived risk and blame towards challenging student behaviour, higher supportive and helping behaviour and lower punitive behaviours towards students.

Profile 6

Teachers higher in this profile tend to look less on the negative side of life and generally don't expect things to go too wrong in their life. They can handle pressure calmly and effectively because they have developed successful coping mechanisms. More often than not, they are good at regulating their emotions, which helps them tackle stress. They also tend to have the ability to manage other people's emotional states. These teachers can influence other people's feelings (e.g., calm them down, console them, motivate them) as they know how to make other people feel better when they need it. This may be because they are good at 'perspective-taking' or seeing the world from someone else's point of view. They can put themselves "in somebody else's shoes" and appreciate how things seem to them. They are able to decode other people's emotional expressions.

This trait profile is theorised to relate to a teacher's general psychological state, job satisfaction, life satisfaction, adaptive coping styles, resilience, mood monitoring, extraversion, Openness to Experience, Agreeableness, preference for social careers, and need for cognition. These traits are also linked with lower levels of depression, anger, stress, and neuroticism.

In relation to the corresponding study, this profile related to teachers experiencing lower Negative Affective states, higher Self-Efficacy, higher Compassion for students, less perceived risk and blame towards challenging student behaviour, higher supportive and helping behaviour and lower punitive behaviours towards students.

APPENDIX F

Teacher Attribution Model Survey (TAMS

FedUniTeacherSurvey1

Section A - Demographics

What is your age in years? Please click on your age group.

20 -30

31-40

41-50

51-60

61+

What is your gender?

Male

Female

What is the highest level of education that you have completed?

Bachelor

Graduate diploma

Post graduate diploma

Masters

Doctorate

Other (Please specify):

For approximately how many years have you been teaching?

0-2

3-5

6-9

10-19

20-29

30+

In what type of school do you teach?

State/Government

Independent/private

Catholic

Are you a special education teacher or teach in a similar role?

No

Yes - currently

Yes – In the past

What subjects do you generally teach?

English/humanities

Maths/science

Art subjects

LOTE

Other

Please click on the year levels that you currently teach

Preparatory

Year 1

Year 2

Year 3

Year 4

Year 5

Year 6

Year 7

Year 8

Year 9

Year 10

Year 11

Year 12

SECTION B - Self-Belief Questionnaire

(Trait Emotional Intelligence Questionnaire – TEIQue - Petrides, 2009)

- Please answer each statement below by clicking on the number that best reflects your degree of agreement or disagreement with that statement. *There are no right or wrong answers*. **Please attempt all questions.**
- Work quickly, and don't think too long about the exact meaning of the statements.
- You have seven possible responses, ranging from 1=Completely Disagree to 7=Completely Agree

		DISAGREE						AGREE
1.	I'm usually able to control other people	1	2	3	4	5	6	7
2.	Generally, I don't take notice of other people's emotions	1	2	3	4	5	6	7
3.	When I receive wonderful news, I find it difficult to calm down quickly	1	2	3	4	5	6	7
4.	I tend to see difficulties in every opportunity rather than opportunities in every difficulty	1	2	3	4	5	6	7
5.	On the whole, I have a gloomy perspective on most things	1	2	3	4	5	6	7
6.	I don't have a lot of happy memories	1	2	3	4	5	6	7
7.	Understanding the needs and desires of others is not a problem for me	1	2	3	4	5	6	7
8.	I generally believe that things will work out fine in my life	1	2	3	4	5	6	7
9.	I often find it difficult to recognise what emotion I'm feeling	1	2	3	4	5	6	7
10.	I'm not socially skilled	1	2	3	4	5	6	7
11.	I find it difficult to tell others that I love them even when I want to	1	2	3	4	5	6	7
12.	Others admire me for being relaxed	1	2	3	4	5	6	7
13.	I rarely think about old friends from the past	1	2	3	4	5	6	7
14.	Generally, I find it easy to tell others how much they really mean to me	1	2	3	4	5	6	7
15.	Generally, I must be under pressure to really work hard	1	2	3	4	5	6	7
16.	I tend to get involved in things I later wish I could get out of	1	2	3	4	5	6	7
17.	I'm able to "read" most people's feelings like an open book	1	2	3	4	5	6	7
18.	I'm usually able to influence the way other people feel	1	2	3	4	5	6	7
19.	I normally find it difficult to calm angry people down	1	2	3	4	5	6	7
20.	I find it difficult to take control of situations at home	1	2	3	4	5	6	7
21.	I generally hope for the best	1	2	3	4	5	6	7
22.	Others tell me that they admire me for my integrity	1	2	3	4	5	6	7
23.	I really don't like listening to my friends' problems	1	2	3	4	5	6	7
24.	I'm normally able to "get into someone's shoes" and experience their emotions	1	2	3	4	5	6	7
25.	I believe I'm full of personal weaknesses	1	2	3	4	5	6	7
26.	I find it difficult to give up things I know and like	1	2	3	4	5	6	7
27.	I always find ways to express my affection to others when I want to	1	2	3	4	5	6	7
28.	I feel that I have a number of good qualities	1	2	3	4	5	6	7
29.	I tend to rush into things without much planning	1	2	3	4	5	6	7
30.	I find it difficult to speak about my intimate feelings even to my closest friends	1	2	3	4	5	6	7
31.	I'm not able to do things as well as most people	1	2	3	4	5	6	7
32.	I'm never really sure what I'm feeling	1	2	3	4	5	6	7
33.	I'm usually able to express my emotions when I want to	1	2	3	4	5	6	7
34.	When I disagree with someone, I usually find it easy to say so	1	2	3	4	5	6	7
35.	I normally find it difficult to keep myself motivated	1	2	3	4	5	6	7
36.	I know how to snap out of my negative moods	1	2	3	4	5	6	7
37.	On the whole, I find it difficult to describe my feelings	1	2	3	4	5	6	7
38.	I find it difficult not to feel sad when someone tells me about something bad that happened to them	1	2	3	4	5	6	7
39.	When something surprises me, I find it difficult to get it out of my mind	1	2	3	4	5	6	7
40.	I often pause and think about my feelings	1	2	3	4	5	6	7
41.	I tend to see the glass as half-empty rather than as half-full	1	2	3	4	5	6	7
42.	I often find it difficult to see things from another person's viewpoint	1	2	3	4	5	6	7

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43.	I'm a follower, not a leader	1	2	3	4	5	6	7
44.	Those close to me often complain that I don't treat them right	1	2	3	4	5	6	7
45.	Many times, I can't figure out what emotion I'm feeling	1	2	3	4	5	6	7
46.	I couldn't affect other people's feelings even if I wanted to	1	2	3	4	5	6	7
47.	If I'm jealous of someone, I find it difficult not to behave badly towards them	1	2	3	4	5	6	7
48.	I get stressed by situations that others find comfortable	1	2	3	4	5	6	7
49.	I find it difficult to sympathize with other people's plights	1	2	3	4	5	6	7
50.	In the past, I have taken credit for someone else's input	1	2	3	4	5	6	7
51.	On the whole, I can cope with change effectively	1	2	3	4	5	6	7
52.	I don't seem to have any power at all over other people's feelings	1	2	3	4	5	6	7
53.	I have many reasons for not giving up easily	1	2	3	4	5	6	7
54.	I like putting effort even into things that are not really important	1	2	3	4	5	6	7
55.	I always take responsibility when I do something wrong	1	2	3	4	5	6	7
56.	I tend to change my mind frequently	1	2	3	4	5	6	7
57.	When I argue with someone, I can only see my point of view	1	2	3	4	5	6	7
58.	Things tend to turn out right in the end	1	2	3	4	5	6	7
59.	When I disagree with someone, I generally prefer to remain silent rather than make a scene	1	2	3	4	5	6	7
60.	If I wanted to, it would be easy for me to make someone feel bad	1	2	3	4	5	6	7
61.	I would describe myself as a calm person	1	2	3	4	5	6	7
62.	I often find it difficult to show my affection to those close to me	1	2	3	4	5	6	7
63.	There are many reasons to expect the worst in life	1	2	3	4	5	6	7
64.	I usually find it difficult to express myself clearly	1	2	3	4	5	6	7
65.	I don't mind frequently changing my daily routine	1	2	3	4	5	6	7
66.	Most people are better liked than I am	1	2	3	4	5	6	7
67.	Those close to me rarely complain about how I behave toward them	1	2	3	4	5	6	7
68.	I usually find it difficult to express my emotions the way I would like to	1	2	3	4	5	6	7
69.	Generally, I'm able to adapt to new environments	1	2	3	4	5	6	7
70.	I often find it difficult to adjust my life according to the circumstances	1	2	3	4	5	6	7
71.	I would describe myself as a good negotiator	1	2	3	4	5	6	7
72.	I can deal effectively with people	1	2	3	4	5	6	7
73.	On the whole, I'm a highly motivated person	1	2	3	4	5	6	7
74.	I have stolen things as a child	1	2	3	4	5	6	7
75.	On the whole, I'm pleased with my life	1	2	3	4	5	6	7
76.	I find it difficult to control myself when I'm extremely happy	1	2	3	4	5	6	7
77.	Sometimes, it feels like I'm producing a lot of good work effortlessly	1	2	3	4	5	6	7
78.	When I take a decision, I'm always sure it is the right one	1	2	3	4	5	6	7
79.	If I went on a blind date, the other person would be disappointed with my looks	1	2	3	4	5	6	7
80.	I normally find it difficult to adjust my behaviour according to the people I'm with	1	2	3	4	5	6	7
81.	On the whole, I'm able to identify myself with others	1	2	3	4	5	6	7
82.	I try to regulate pressures in order to control my stress levels	1	2	3	4	5	6	7
83.	I don't think I'm a useless person	1	2	3	4	5	6	7
84.	I usually find it difficult to regulate my emotions	1	2	3	4	5	6	7
85.	I can handle most difficulties in my life in a cool and composed manner	1	2	3	4	5	6	7
86.	If I wanted to, it would be easy for me to make someone angry	1	2	3	4	5	6	7
87.	On the whole, I like myself	1	2	3	4	5	6	7
88.	I believe I'm full of personal strengths	1	2	3	4	5	6	7
89.	I generally don't find life enjoyable	1	2	3	4	5	6	7
90.	I'm usually able to calm down quickly after I've got mad at someone	1	2	3	4	5	6	7
91.	I can remain calm even when I'm extremely happy	1	2	3	4	5	6	7
92.	Generally, I'm not good at consoling others when they feel bad	1	2	3	4	5	6	7
93.	I'm usually able to settle disputes	1	2	3	4	5	6	7
94.	I never put pleasure before business	1	2	3	4	5	6	7
95.	Imagining myself in someone else's position is not a problem for me	1	2	3	4	5	6	7
96.	I need a lot of self-control to keep myself out of trouble	1	2	3	4	5	6	7
97.	It is easy for me to find the right words to describe my feelings	1	2	3	4	5	6	7

98.	I expect that most of my life will be enjoyable	1	2	3	4	5	6	7
99.	I am an ordinary person	1	2	3	4	5	6	7
100	I tend to get "carried away" easily	1	2	3	4	5	6	7
101	usually try to resist negative thoughts and think of positive alternatives	1	2	3	4	5	6	7
102	I don't like planning ahead	1	2	3	4	5	6	7
103	Just by looking at somebody, I can understand what he or she feels	1	2	3	4	5	6	7
104	Life is beautiful	1	2	3	4	5	6	7
105	I normally find it easy to calm down after I have been scared	1	2	3	4	5	6	7
106	I want to be in command of things	1	2	3	4	5	6	7
107	I usually find it difficult to change other people's opinions	1	2	3	4	5	6	7
108	I'm generally good at social chit-chat	1	2	3	4	5	6	7
109	Controlling my urges is not a big problem for me	1	2	3	4	5	6	7
110	I really don't like my physical appearance	1	2	3	4	5	6	7
111	I tend to speak well and clearly	1	2	3	4	5	6	7
112	On the whole, I'm not satisfied with how I tackle stress	1	2	3	4	5	6	7
113	Most of the time, I know exactly why I feel the way I do	1	2	3	4	5	6	7
114	I find it difficult to calm down after I have been strongly surprised	1	2	3	4	5	6	7
115	On the whole, I would describe myself as assertive	1	2	3	4	5	6	7
116	On the whole, I'm not a happy person	1	2	3	4	5	6	7
117	When someone offends me, I'm usually able to remain calm	1	2	3	4	5	6	7
118	Most of the things I manage to do well seem to require a lot of effort	1	2	3	4	5	6	7
119	I have never lied to spare someone else's feelings	1	2	3	4	5	6	7
120	I find it difficult to bond well even with those close to me	1	2	3	4	5	6	7
121	nsider all the advantages and disadvantages before making up my mind	1	2	3	4	5	6	7
122	I don't know how to make others feel better when they need it	1	2	3	4	5	6	7
123	I usually find it difficult to change my attitudes and views	1	2	3	4	5	6	7
124	Others tell me that I rarely speak about how I feel	1	2	3	4	5	6	7
125	On the whole, I'm satisfied with my close relationships	1	2	3	4	5	6	7
126	I can identify an emotion from the moment it starts to develop in me	1	2	3	4	5	6	7
127	On the whole, I like to put other people's interests above mine	1	2	3	4	5	6	7
128	Most days, I feel great to be alive	1	2	3	4	5	6	7
129	I tend to get a lot of pleasure just from doing something well	1	2	3	4	5	6	7
130	s very important to me to get along with all my close friends and family	1	2	3	4	5	6	7
131	I frequently have happy thoughts	1	2	3	4	5	6	7
132	I have many fierce arguments with those close to me	1	2	3	4	5	6	7
133	Expressing my emotions with words is not a problem for me	1	2	3	4	5	6	7
134	I find it difficult to take pleasure in life	1	2	3	4	5	6	7
135	I'm usually able to influence other people	1	2	3	4	5	6	7
136	When I'm under pressure, I tend to lose my cool	1	2	3	4	5	6	7
137	I usually find it difficult to change my behaviour	1	2	3	4	5	6	7
138	Others look up to me	1	2	3	4	5	6	7
139	Others tell me that I get stressed very easily	1	2	3	4	5	6	7
140	I'm usually able to find ways to control my emotions when I want to	1	2	3	4	5	6	7
141	I believe that I would make a good salesperson	1	2	3	4	5	6	7
142	I lose interest in what I do quite easily	1	2	3	4	5	6	7
143	On the whole, I'm a creature of habit	1	2	3	4	5	6	7
144	I would normally defend my opinions even if it meant arguing with important people	1	2	3	4	5	6	7
145	I would describe myself as a flexible person	1	2	3	4	5	6	7
146	Generally, I need a lot of incentives in order to do my best	1	2	3	4	5	6	7
147	Even when I'm arguing with someone, I'm usually able to take their perspective	1	2	3	4	5	6	7
148	On the whole, I'm able to deal with stress	1	2	3	4	5	6	7
149	I try to avoid people who may stress me out	1	2	3	4	5	6	7
150	I often indulge without considering all the consequences	1	2	3	4	5	6	7
151	I tend to "back down" even if I know I'm right	1	2	3	4	5	6	7
152	I find it difficult to take control of situations at work	1	2	3	4	5	6	7
153	Some of my responses on this questionnaire are not 100% honest	1	2	3	4	5	6	7

STUDENT SCENARIO:

Please read the scenario below about Jamie and try to imagine that Jamie is a student in your class.

Jamie has trouble concentrating in class and cannot focus or attend to any activity for longer than a few minutes. Jamie generally fails to listen to instructions or directions. He may 'switch off' or state that he already knows what to do and commences with his own agenda. Jamie is unable to remain still in his chair and fiddles with anything within his reach.

When Jamie is introduced to new tasks, he has been known to suddenly become overwhelmed and angry and make statements like, "I'm not doing that" and walk out of the room without permission. It is common that when things don't go his way, he leaves the room and school grounds. Alternatively, Jamie laughs loudly and abruptly at tasks that he finds achievable and makes announcing comments like "that was pathetic, too easy. Who comes up with this (*swearword*)?"

Jamie can become verbally abusive towards teachers and openly make rude comments regarding their physical features. He makes aggressive comments like, "Are you kidding me? Why are you giving me that question? You're an idiot... you're a moron..." Jamie can engage with other students when the activity is running on his terms, otherwise he reacts angrily and can be threatening. Jamie's moods and behaviours impulsively change throughout the day.

When Jamie becomes explosive he may bounce his fists on the table or pace around the room gritting his teeth and clenching his fists as he looks for something to destroy. He often attempts to break open a cupboard in the classroom and pretends to punch the wall whilst making angry growling noises. Jamie threatens to rip up handout sheets and stabs his workbook with pens. Jamie has been known on occasions to pick up his chair and hold it above his head ready to throw or hit the wall. Jamie has taken knives without permission during home economics.

SECTION C - Views of Jamie's Presentation

*Please respond to each of the following statements/questions in relation to Jamie, imagining that he is one of your students. These items seek **the first answer that comes to your mind** when considering each one. You are asked to give your **personal views**, not what may seem conventional to teaching.*

For each statement or question below, please indicate your views in relation to Jamie's presentation. Click the position on each statement that your views most likely reflect (Between 1 and 7).

		Not at all				Very much		
		1	2	3	4	5	6	7
1	If I were Jamie's teacher, I would be willing to know more about his background							
2	How much control do you think you could have over Jamie's presentation for the future?							
3	I am likely to spend a lot of one-on-one time with Jamie during class time							
4	I would feel stressed by Jamie's presentation							
5	I would think that Jamie's presentation in my class is my own fault							
6	Jamie does not deserve the same amount of help as the well behaved students							
7	I think that the way Jamie is presenting is his own fault							
8	How angry would you feel at Jamie?							
9	If Jamie was a student of my school, I would wish that I did not have to teach him							
10	I would feel confident in engaging with this student							
11	If I were Jamie's teacher I would be willing to proactively guide him on the right track							
12	If I were Jamie's teacher, I would seek out help for him							
13	I would be willing to support Jamie no matter how he behaved							
14	I would feel confident in implementing strategies to manage this type of presentation							
15	I would feel hurt/offended by Jamie's presentation							
16	I would feel burnt out by Jamie's presentation							
17	I am likely to assist Jamie outside of class time and in my own time							
18	I think Jamie misbehaves seriously and that the school should punish him							
19	I would feel confident in teaching Jamie							
20	If I were Jamie's teacher, I think that only punishment can stop his behaviour							
21	I would feel helpless by Jamie's presentation							
22	Jamie should not be allowed in the classroom							
23	I am likely to spend a lot of my time preparing a different lesson specifically for Jamie							
24	Jamie should be in a specialized environment, not in mainstream classrooms							
25	How much pity would you feel for Jamie?							
26	If I were Jamie's teacher I would be willing to help him							
27	How much sympathy would you feel for Jamie?							
28	I would feel overwhelmed by Jamie's presentation							
29	How responsible do you think Jamie is for his presentation?							
30	I would feel confident in coping with this type of presentation							
31	How dangerous do you perceive Jamie to be?							
32	I would feel depressed by Jamie's presentation							
33	How much concern would you feel for Jamie?							
34	I would feel fearful of Jamie							
35	I would feel anxious by Jamie's presentation							
36	I would feel indifferent towards Jamie							
37	I think Jamie would be a violent risk to me							
38	How much control do you think Jamie has over his presentation?							
39	How irritated would you feel by Jamie?							
40	How responsible would you feel for Jamie's presentation in your classroom?							
41	I would feel aggravated by Jamie.							

SECTION D - Causal Beliefs

Bearing in mind the student described in the vignette, indicate whether you think each of the following items is likely to be the cause of the student's presentation or not. You are asked to *choose only one number* from 1 to 5 *for each statement*, with 1 being a very unlikely cause to 5 being the most likely cause.

1 = Very unlikely cause

5= most likely cause

		1	2	3	4	5
1	Poor attachment between parents and child					
2	Parents low socio-economic background					
3	Lenient parental discipline					
4	Excessively strict parental discipline					
5	Dysfunctional parental unit					
6	Innate personality/temperament					
7	The child wants to attract others' attention					
8	Child's low intelligence					
9	The child dislikes school					
10	The child is being purposely manipulative					
11	Teaching styles (e.g., authoritarian, democratic, indifferent)					
12	Teacher's personality (e.g., distant, friendly)					
13	Poor classroom management					
14	Teacher's inappropriate manner towards the child (e.g.,. Reject the child)					
15	Inappropriate manner towards the child of previous teachers					
16	Lack of resources and services for children like Jamie in our school					
17	Poor school organisation and management (e.g., poor disciplinary systems)					
18	Class sizes too large					
19	Bad school experiences of the child (e.g., rejection by peers)					

FedUniTeacherSurvey2

Survey 2 is completely identical to survey 1 except for in the 'Student Scenario' *where the fourth paragraph is removed from the scenario.*

APPENDIX G

Description of Petrides' (2009) TEIQue Facets and Factors

10.7.2.1 Description of TEIQue Facets (Petrides, 2009, p. 59-62)

Adaptability: High scorers are flexible in their approach to work and life. They are willing and able to adapt to new environments and conditions – in fact, they may even enjoy novelty and regular change. Low scorers are change-resistant and find it difficult to modify their work – and life style. They are generally inflexible and have fixed ideas and views. This facet is characterized by a negative association with neuroticism, depression and maladaptive coping styles, and positive association with extraversion and job satisfaction.

Assertiveness: Individuals with high scores on this scale are forthright and frank. They know how to ask for things, give and receive compliments, and confront others when necessary. They have leadership qualities and can stand up for their rights and beliefs. Low scorers tend to back down even if they know they are right and have difficulty saying "no", even when they feel they must. As a result, they often end up doing things they do not want to do. In most cases, they prefer to be part of a team rather than to lead it. This facet is characterised by a positive association with extraversion and enterprising careers and negative correlations with neuroticism and anxiety.

Emotion Expression: High scores on this scale mean people are fluent in communicating their emotions to others. They know what the best words are for expressing their feelings accurately and unambiguously. Low scores on this scale indicate a difficulty in communicating emotion-related thoughts, even in situations when this is necessary. People with low scores find it difficult to let others know how they feel. Inability to express emotion may be indicative of a more generalized problem of lack of self-confidence and social assertiveness. This facet correlates negatively with avoidant tendencies, and positively with extraversion, social boldness, and positive mood.

Emotion Management (in others): This scale concerns one's perceived ability to manage other people's emotional states. High scorers on the emotion management scale can influence other

people's feelings (e.g., calm them down, console them, motivate them). They know how to make other people feel better when they need it. Low scorers can neither influence nor manage others' feelings. They become overwhelmed when they have to deal with other people's emotional outbursts and are less likely to enjoy socialising and networking. This facet is associated with low scores on agreeableness and high scores on adaptive coping styles. It is associated with a preference for enterprising careers.

Emotion Perception: This scale measures emotion perception in one's own self as well as in others. High scorers on this scale are clear about what they feel and are able to decode other people's emotional expressions. In contrast, people with low scores on the emotion perception scale are often confused about how they feel and do not pay much attention to the emotional signals that others send out. This facet correlates negatively with depressive tendencies and positively with self-monitoring and faith in one's judgement.

Emotion Regulation: This scale measures short-, medium-, and long-term control of one's own feelings and emotional states. High scorers have control over their emotions and can change unpleasant moods or prolong pleasant moods through personal insight and effort. They are psychologically stable and they know how to pick themselves up after emotional setbacks. Low scorers are subject to emotional seizures and periods of prolonged anxiety or even depression. They find it difficult to deal with their feelings and are often moody and irritable. This facet correlates negatively with neuroticism and paranoid personality and positively with adaptive coping styles, and conventional careers.

Empathy: This scale measures the 'perspective-taking' aspect of empathy: seeing the world from someone else's point of view. In other words, it has to do with whether one can understand other people's needs and desires. People with high scores on this scale tend to be skilful in conversations with negotiations because they take into account the viewpoints of those they are dealing with. They can put themselves "in somebody else's shoes" and appreciate how things seem to them. Low scorers have difficulty adopting other people's perspectives. They tend to be opinionated and argumentative

and may often seem self-centred. This facet is characterized by high openness to Experience, mood monitoring, and a preference for social careers.

Happiness: This scale concerns pleasant emotional states, primarily directed towards the present rather than the past (life satisfaction) or the future (optimism). High scorers are cheerful and feel good about themselves. Low scorers often feel blue and can be overly negative about things. More generally, people with low scores on this scale tend to be disappointed with their life as it is at present. Along with *self-esteem* and *optimism*, this scale reflects one's general psychological state at present. This facet correlates positively with extraversion and job motivation and negatively with neuroticism and depression.

Low Impulsiveness: This scale measures mainly dysfunctional ('unhealthy') rather than functional ('healthy') impulsivity. Low impulsiveness involves thinking before acting and reflecting carefully before making decisions. High scorers on this scale weigh all the information before they make up their mind, without, however, being overly cautious. Low scorers tend to be impetuous and to give into their urges. Much like children, they want immediate gratification and have low self-control. They often speak without having thought things through and they change their mind frequently. This facet is characterized by high scores on conscientiousness, need for cognition, and job motivation and low scores on psychoticism, aggression and borderline personality disorder.

Optimism: As for *happiness,* this scale is linked to well-being, albeit in a forward looking way. High scorers look on the bright side and expect positive things to happen in their life. Low scorers are pessimistic and view things from a negative perspective. They are less likely to be able to identify and pursue new opportunities and tend to be risk-averse. Along with *happiness* and *self-esteem*, this scale reflects one's general psychological state at this point in time. This facet correlates positively with extraversion, job satisfaction and life satisfaction, and negatively with neuroticism and depression.

Relationships: This scale mainly concerns one's personal relationships, including close friends, partners and family. It is about starting and maintaining emotional bonds with others. High

scorers usually have fulfilling personal relationships that positively affect their productivity and emotional well-being. They know how to listen and be responsive to the people close to them. Low scorers find it difficult to bond well with others and tend to undervalue their personal relationships. They often behave in ways that hurt those close to them. This facet is characterized by high agreeableness and extraversion and low psychoticism, anxiety, and depression. It is associated with preference for socially-oriented careers.

Self-Esteem: The self-esteem scale measures one's overall evaluation of oneself. High scorers have a positive view of themselves and their achievements. They are confident, positive, and satisfied with most aspects of their life. Low scorers tend to lack self-respect and do not value themselves very highly. Low self-esteem scores are often the result of challenges in one or more of the other areas that the TEIQue assesses. This facet correlates negatively with neuroticism, anger, and apprehension and positively with extraversion and life satisfaction.

Self-Motivation: People with high scores on this scale are driven by a need to produce high-quality work. They tend to be determined and persevering. They do not need to be externally rewarded for their efforts because they have a strong sense of achievement and are motivated from within. Low scorers tend to need a lot of incentives and encouragement in order to get things done. They need constant reward to keep going and they are more likely to give up in the face of adversity. They also tend to have reduced levels of drive and persistence. This facet is associated positively with high conscientiousness, need for cognition, and job satisfaction, and low levels of stress and anger.

Social Awareness: High scorers believe they have excellent social skills and are socially sensitive, adaptable, and perceptive. They are good at negotiating, brokering deals, and influencing others. In addition, they tend to have control over their emotions and the manner in which they express them, which enables them to function confidently in diverse social contexts, such as parties or networking events. Low scorers believe they have limited social skills and often feel anxious in unfamiliar settings because they are unsure about how to behave. They find it difficult to express themselves clearly and have a small circle of acquaintances. They are known for their limited

interpersonal skills. This facet is associated positively with extraversion, self-monitoring, and a preference for enterprising careers, and negatively associated with avoidant personality tendencies and anxiety.

Stress Management: High scorers on this scale can handle pressure calmly and effectively because they have developed successful coping mechanisms. More often than not, they are good at regulating their emotions, which helps them tackle stress. Low scorers are less likely to have developed stress-coping strategies. They may prefer to altogether avoid situations that are potentially hectic, rather than deal with the associated tension. Their vulnerability to stress is problematic, as it leads them to reject important, but time-demanding, projects. This facet is characterized by high levels of resilience and need for cognition, and low levels of neuroticism, anger, and stress.

10.7.2.2 Description of TEIQue Factors (Petrides, 2009, p. 61-62)

Emotionality: Individuals with high scores on this factor are in touch with their own and other people's feelings. They can perceive and express emotions and use these qualities to develop and sustain close relationships with important others. Individuals with low scores on this factor find it difficult to recognize their internal and emotional states and to express their feelings to others, which may lead to less rewarding personal relationships. This factor is associated positively with extraversion, job motivation, and a preference for socially-oriented careers and negatively with neuroticism.

Self-control: High scorers have a healthy degree of control over their urges and desires. In addition to controlling impulses, they are good at regulating external pressures and stress. They are neither repressed nor overtly expressive. In contrast, low scorers are prone to impulsive behaviour and may find it difficult to manage stress. This factor is associated positively with conscientiousness and a preference for conventional careers and negatively with somatic complaints, neuroticism, and psychoticism.

Sociability: This factor differs from the *Emotionality* factor above in that it emphasizes social relationships and social influence. The focus is on the individual as an agent in social contexts, rather

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than on personal relationships with family and close friends. Individuals with high scores on the sociability factor are better at social interaction. They are good listeners and can communicate clearly and confidently with people from diverse backgrounds. Those with low scores believe they are unable to affect others' emotions and are less likely to be good negotiators and networkers. They are unsure what to do or say in social situations and, as a result, they often appear shy and reserved.

Well-being: High scores on this factor reflect a generalised sense of well-being, extending from past achievements to future expectations. Overall, individuals with high scores feel positive, happy, and fulfilled. In contrast, individuals with low scores tend to have low self-regard and to be disappointed about their life as it is at present. This factor is associated positively with extraversion, positive mood, job satisfaction, and faith in intuition and negatively with somatic complaints, anxiety, and depression.

10.7.2.3 Description of Global Trait EI (Petrides, 2009, p. 62)

The global trait EI score is a broad index of general emotional functioning. Global trait EI correlates positively with extraversion, conscientiousness, mental health, job satisfaction, organizational commitment, seniority, pro-social behaviour, popularity, sensitivity, and susceptibility to affect, over-prediction of affective reactions in decision-making, overconfidence, social desirability, and hubris. It correlates negatively with neuroticism, introversion, anxiety, psychopathology, turnover, maladaptive coping, truancy, job stress, rumination, and humility.

APPENDIX H – School Recruitment Documents

Dear Principal,

A unique opportunity is available for classroom teachers and special education teachers to participate in an Australian education research project relating to students who display difficult behaviours in the classroom. As difficult behaviour is a challenge that most teachers face on a regular basis, it is important that teachers are given a chance to voice their views and opinions.

My name is Melinda Dridan and I am a psychologist currently undertaking a PhD at Federation University Australia. I am writing to you to ask for your permission to conduct research within your school. The following information outlines the purpose and methods for the proposed research for your consideration. I have also attached the 'Plain Language Information Statement' that I plan to email to your nominated contact person in your school for distribution to all classroom teachers at your school.

<u>**Background to the study**</u>
The study will investigate whether there are particular personality traits that teachers possess which help them to apply supportive approaches towards students with emotional-behavioural disorders (EBDs); in a way that reduces the chance of teachers becoming angry and/or burnt out. This study will also help to determine whether there are certain personality traits that make some teachers better equipped in dealing with students who have challenging behaviours in their classroom. Students with EBDs have added to teachers' concerns in Australian classrooms and teachers have been forced to find new approaches to teach and manage students with complex special needs.

The unique aspect of this proposed study is the focus on teachers' emotionally intelligent personality traits as the central influence behind how students with emotional-behavioural disorders learn and behave. Appropriate emotional support from teachers affects not only their interactions with students but plays a significant role in students' adjustment, development, emotional wellbeing and academic achievement. In relation to finding interventions for students with EBDs, research has tended to focus on the students' development, and "there has been little focus on teachers' own development despite evidence that teachers make important contributions to desirable classroom and student outcomes" (Jennings & Greenberg, 2009).

This study fits within the 'other side of education' where teachers' emotional interactions with students are deemed just as important, if not more so, than academic knowledge and good instruction skills. This study continues to support and demonstrate a widely recognized concept that a student's formal learning environment is largely influenced and shaped by the student's teacher (Jennings & Greenberg, 2009). The study may establish new connections between teacher characteristics and desirable classroom outcomes; specifically outcomes for students with emotional-behavioural disorders and classroom teachers.

For additional information on the benefits of participation, please refer to the attachment 'How participation in the study directly relates to my school'.

Method:
Through an online questionnaire, the study will attempt to capture the perceptions, feelings and likelihood of helping behaviours by classroom and special education teachers towards students who have different severities of difficult behaviour. I will be attempting to find out how a student would be perceived and treated by teachers based on their emotionally intelligent personality traits, as well as the student's behaviours. The study measures whether emotional intelligence traits or the student's severity of behaviour influences more supportive or punitive approaches.

Teachers will be provided with counsellor phone numbers, should they encounter any distress as a result of the questionnaire and study and a complaints number on which to lodge any objections to the study.

The research will commence following receipt of your participation details and should be completed before the end of the term. I request that a school contact person be nominated to receive and distribute the survey to general and special education teachers via email. The questionnaire should take 20 to 40 minutes to complete. The survey is completed through an internet survey site which does not identify individuals or require direct email responses. Each teacher's response will be anonymous once submitted and will form part of a larger database from which only group data will be reported. Results of the study will form part of my thesis and may be presented at conferences or published in journals. Disseminated results will not include information that identifies individual participants or the school.

How My School Can Participate

1. Nominate a school contact person to distribute the survey emails to your general classroom and special education teachers. A suggestion is to nominate a special education teacher or welfare staff member.

2. Fill in your basic details in the attached 'Participation in Research Form'

3. Please return your Participation Form to Melinda Dridan by 20th May 2015.
   Please mail to: ███████████████████. Alternatively, you can scan and/or email details to melindadridan@students.federation.edu.au.

If you have any further questions regarding my proposed research project please feel free to contact my Research Supervisor, Associate Professor John Fisher, of the School of Education, Faculty of Education and Arts on:
Phone: ███████████ or email: j.fisher@federation.edu.au
I look forward to hearing from you.

Kind regards,

Melinda Dridan
Psychologist

How Participation in the Study Directly Relates to My School

Teaching approaches towards students with EBDs
Many researchers have attempted to find the best interventions and approaches most effective for teaching students with EBDs. These approaches seem to work for some teachers but not for others. What if there is no secret or complex skill required, but it is just a matter of, you've either got what it takes or you don't? It has been found that teachers with high emotional intelligence appear to manage negative situations more effectively and seek positive solutions more frequently (Perry & Ball, 2007).

Access to an assessment tool (ASSET – Assessment Screen for Special Education Teachers).
The results of the study will be used for the purpose of developing an ASSET tool. This assessment tool would enable schools, such as yours, to easily survey and profile individual teachers in relation to whether they have the developed 'qualities' required to more effectively teach students with special needs (specifically those with challenging behaviours).

Better classroom placement of Special Need Students
The ASSET tool would assist with the placement of particular difficult students through the teacher screening process. Students could be allocated to the most suitable teachers for their needs.

Reduce teacher burnout and teacher absenteeism:
A teachers' inability to regulate their own emotions and emotionally express themselves, may have serious implications for their teaching outcomes as a result of their interactions with students. Such an emotional application may leave a teacher feeling stressed and burnt out, leading to them regularly taking sick leave, stress leave or resigning. These factors could be more controlled through a teacher screening process.

Reduce the number and intensity of 'meltdowns' that students with emotional behavioural disorders may have:
If troublesome student behaviours escalate and teachers do not have the emotional resources to manage the emotional challenges in the classroom, "teachers may resort to reactive and excessively punitive responses that do not teach self-regulation and may contribute to a self-sustaining cycle of classroom disruption" (Jennings & Greenberg, 2009, p. 492).

Reduce student misconduct in classrooms
Teachers' classroom management skills relate to their ability to regulate their emotions (Coplan et al, 2011) and to student behavioural outcomes (Nizielski et al., 2012). Emotionally intelligent teachers pay more attention to their students' needs, which in turn leads to lower levels of teacher reported student misconduct (Nizielski et al., 2012).

Teacher knowledge/education
It is important for teachers to understand how the quality of their emotional approach towards their students greatly influences a student's education and behaviour. It is important for teachers to understand the factors and processes that influence a high-quality interaction with their students.

Assist with student development
Appropriate emotional support from teachers affects not only their interactions with students but plays a significant role in students' adjustment, development, emotional wellbeing and academic achievement. The results will help to identify the teacher characteristics that are important to developing higher quality interactions.

Participation in Research Form

Name of school: _____

Our school would like to participate in the research titled 'An Attributional Analysis of Teacher Perceptions on Student Classroom Behaviours'. I give permission for Melinda Dridan, from Federation University, to email the research questionnaire (and other relevant information) to our school contact person who will then forward it on to our general and special education teachers.

The nominated contact person from our school is:

_____

Telephone contact number:

_____

Contact person's email address:

_____

Name and signature of person completing this form:

_____

Date: /   /2015

FACULTY OF EDUCATION AND ARTS

PROJECT TITLE:	An Attributional Analysis of Teacher Perceptions on Student Classroom Behaviours
PRINCIPAL RESEARCHER:	Dr John Fisher
OTHER/STUDENT RESEARCHERS:	**Dr Jenene Burke** **Melinda Dridan** Psychologist, BPsych, Post Grad. Dip. Psych., MEd Studies. **PhD Student**

An Invitation to Participate in Research

You are invited to participate in my research that involves completing a short online questionnaire. My name is Melinda Dridan and I am a psychologist conducting PhD research at Federation University Australia.

Your Principal has granted approval for this research to be conducted in your school. This research has also been approved by the Federation University's Human Research Ethics Committee (no. A14-156). Your participation is fully voluntary and refusal to participate requires no explanation. By completing the online questionnaire and then selecting the 'send' button, you are consenting to participate in this research. Once you have 'sent' your completed questionnaire, it will be too late to withdraw your consent as your information will be unable to be identified and retrieved from that point. You are free to choose not to answer questions on the questionnaire, however, I would appreciate your full participation if possible.

Firstly, you will be asked to provide some basic demographic information such as your age, gender, qualifications and years of teaching experience. Secondly, you will be asked to answer some questions by indicating whether you agree or disagree with statements. The statements relate to how people might perceive or describe themselves. Lastly, you will read a hypothetical scenario of a student and imagine that you have this student in your class. You will then be asked to answer some questions in relation to the scenario. The questionnaire should take twenty to forty minutes to complete.

The research aims to find out how you would describe your personality, how you perceive and feel about the student's classroom behaviour and what you consider to be the main cause for the student's behaviour. The questionnaire will ask about your personal views, beliefs and feelings on the subject matter. Some of the questions may be emotive and sensitive.

You are not asked to provide your name on the questionnaire so you will remain unidentified. The attached survey is completed through an internet survey site that does not identify individuals or require direct email responding. Your responses remain confidential, and when completed, your anonymous questionnaire will form part of a larger database from which only group data will be reported. If the sample size is small, it can have implications for confidentiality; however my goal is to collect hundreds of responses.

Results of the study will form part of my thesis and may be presented at conferences or published in journals. Disseminated results will not include information that identifies individual participants or the school. The anonymous results of the study will be forwarded to the School Principal and circulated to those who are interested in some feedback. The completed questionnaires will be securely stored on my computer behind locked passwords, which only the researchers have access to, and will be deleted after five years.

Once I have received all of the completed surveys, I will be emailing more specific information regarding the project to all schools that indicate staff have agreed to participate.

If any of the content in this questionnaire causes you any grief or distress, please contact your school counsellor, or phone LifeLine on 131114, or contact a local counsellor or psychologist who can assist you.

If you are interested in participating in my research, then please <u>click on the link found in this email</u> titled 'TeacherSurveyFedUni' to commence the questionnaire.

Thank you for your time in participating within this research project.

I look forward to receiving it by 4th of May 2015.

Kind regards,

Melinda Dridan
Psychologist

If you have any questions, or you would like further information regarding the project titled **'**An Attributional Analysis of Teacher Perceptions on Student Classroom Behaviours', please contact the Principal Researcher, Associate Professor John Fisher, of the School of Education, Faculty of Education and Arts:

PH: ▮▮▮▮▮▮▮▮▮
EMAIL: j.fisher@federation.edu.au

Should you (i.e. the participant) have any concerns about the ethical conduct of this research project, please contact the Federation University Ethics Officer, Research Services, Federation University Australia, PO Box 663, Mt Helen VIC 3353. Telephone: (03) 5327 9765, Email: research.ethics@federation.edu.au

CRICOS Provider Number 00103D

FACULTY OF EDUCATION AND ARTS

PROJECT TITLE:	An Attributional Analysis of Teacher Perceptions on Student Classroom Behaviours
PRINCIPAL RESEARCHER:	Associate Professor John Fisher
OTHER/STUDENT RESEARCHERS:	Dr Jenene Burke **Melinda Dridan** BPsych, Post Grad. Dip. Psych., MEd Studies. **PhD Student**

Debrief for Research Participants

The following information explains the full nature of my research project that you participated in. I thank you for your participation.

You were first asked questions in relation to how you see yourself. My study aimed to determine whether there are particular personality traits that teachers possess which help them to apply supportive approaches towards students with Emotional Behavioural Disorders (EBD); and possibly lessens the chance of teachers becoming angry and burnt out. This study will also help to determine whether there are certain personality traits that make some teachers better equipped in dealing with students who have challenging behaviours in their classroom. Since the push towards inclusive education, students with emotional-behavioural disorders have added to teachers concerns in the classroom and mainstream teachers are forced to find new ways to deal with students with complex special needs.

Secondly, you were asked to read a hypothetical scenario of a student and imagine that you had the student in your class. The scenario described a student who had an emotional-behavioural disorder (EBD). You were randomly assigned to one of two hypothetical scenarios. Both scenarios described a student with an EBD but they varied in their intensity of challenging or difficult behaviour (low versus high severity). You were all then asked the same questions about what you attribute to being the cause of the student's behaviour, your personal perceptions and beliefs about the student's behaviour, how you feel in a given situation and the likelihood of you wanting to help the student. The two groups were compared in an attempt to challenge one evolving claim in the literature, that the more severe a student's behavioural presentation the more they are stigmatized.

My study will attempt to capture the perceptions, feelings and likelihood of helping behaviours by teachers towards students who have different severities of behaviour. I will be attempting to find out how a student would be perceived and treated by teachers based on their personality traits as well as the student's behaviours.

Kind regards,
Melinda Dridan

If you have any questions, or you would like further information regarding the project titled 'An Attributional Analysis of Teacher Perceptions on Student Classroom Behaviours', please contact the Principal Researcher, Dr John Fisher, of the School of Education, Faculty of Education & Arts:

PH: ▮▮▮▮▮▮▮▮
EMAIL: j.fisher@federation.edu.au

Should you (i.e. the participant) have any concerns about the ethical conduct of this research project, please contact the Federation University Ethics Officer, Research Services, Federation University Australia, PO Box 663, Mt Helen VIC 3353. Telephone: (03) 5327 9765, Email: research.ethics@federation.edu.au

APPENDIX I – Ethics Documents

Approval
Human Research Ethics Committee

Federation
UNIVERSITY·AUSTRALIA

Principal Researcher:	John Fisher
Other/Student Researcher/s:	Jenene Burke Melinda Dridan
School/Section:	**FEA**
Project Number:	**A14-156**
Project Title:	**Victims or Villains: Teachers' Emotional Intelligence as a Predisposition for Discrimination against Students with Severe Emotional and Behavioural disorders.**
For the period:	12/02/2015 **to** 08/09/2017

Please quote the Project No. in all correspondence regarding this application.

Please note: Ethics Approval is contingent upon the submission of annual progress reports and a final report upon completion of the project. It is the responsibility of researchers to make a note of the following dates and submit these reports in a timely manner, as reminders may not be sent out. Failure to submit reports will result in your ethics approval lapsing

REPORTS TO HREC:

Annual reports for this project must be submitted to the Ethics Officer on:
12 February 2016
12 February 2017

A final report for this project must be submitted to the Ethics Officer on:
8 October 2017

These report forms can be found at:
http://federation.edu.au/research-and-innovation/research-support/ethics/human-ethics/human-ethics3

Fiona Koop

Ethics Officer
12 February 2015
Please see attached 'Conditions of Approval'.

CONDITIONS OF APPROVAL

1. The project must be conducted in accordance with the approved application, including any conditions and amendments that have been approved. You must comply with all of the conditions imposed by the HREC, and any subsequent conditions that the HREC may require.

2. You must report immediately anything which might affect ethical acceptance of your project, including:

    - Adverse effects on participants;
    - Significant unforeseen events;
    - Other matters that might affect continued ethical acceptability of the project.

3. Where approval has been given subject to the submission of copies of documents such as letters of support   or approvals from third parties, these must be provided to the Ethics Office before the research may commence at each relevant location.

4. Proposed changes or amendments to the research must be applied for, using a 'Request for Amendments' form, and approved by the HREC before these may be implemented.

5. If an extension is required beyond the approved end date of the project, a 'Request for Extension' should be submitted, allowing sufficient time for its consideration by the committee. Extensions cannot be granted retrospectively.

6. If changes are to be made to the project's personnel, a 'Changes to Personnel' form should be submitted for approval.

7. An 'Annual Report' must be provided by the due date specified each year for the project to have continuing approval.

8. A 'Final Report' must be provided at the conclusion of the project.

9. If, for any reason, the project does not proceed or is discontinued, you must advise the committee in writing, using a 'Final Report' form.

10. You must advise the HREC immediately, in writing, if any complaint is made about the conduct of the project.

11. You must notify the Ethics Office of any changes in contact details including address, phone number and email address.

12. The HREC may conduct random audits and / or require additional reports concerning the research project.

Failure to comply with the *National Statement on Ethical Conduct in Human Research* (2007) and with the conditions of approval will result in suspension or withdrawal of approval.

Amendment Approval
Human Research Ethics Committee

Federation
UNIVERSITY·AUSTRALIA

Principal Researcher:	John Fisher
Other/Student Researcher/s:	Jenene Burke Melinda Dridan
School/Section:	**FEA**
Project Number:	**A14-156**
Project Title:	**Victims or Villains: Teachers' Emotional Intelligence as a Predisposition for Discrimination against Students with Severe Emotional and Behavioural Disorders.**
For the period:	12/02/2015 **to** 08/09/2017

Please quote the Project No.A14-156 in all correspondence regarding this application.

Amendment Detail: Inviting primary school teachers in Victoria to join with their secondary school colleagues in participating in this project.

REPORTS TO HREC:

Annual reports for this project must be submitted to the Ethics Officer on:
12 February 2016
12 February 2017

A final report for this project must be submitted to the Ethics Officer on:
8 October 2017

These report forms can be found at:
http://federation.edu.au/research-and-innovation/research-support/ethics/human-ethics/human-ethics3

Fiona Koop

Ethics Officer
5 August 2015

Consent for use of TEIQue (Petrides, 2009)

All TEIQue forms, versions, and translations are available free of charge for academic research purposes only. Provided there is no commercial usage, TEIQue instruments can be used for research purposes without permission. Please do not email us to request permission for usage in academic or medical research, as this is unnecessary.

Prof. K. V. Petrides
Department of Psychology
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26 Bedford Way
London, WC1H 0AP
U.K.

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