2015

Rising to the challenge: Exploring the transition from primary to secondary education in a Western Australian school

Elizabeth Joan Wenden
Edith Cowan University

Recommended Citation

Wenden, E. J. (2015). *Rising to the challenge: Exploring the transition from primary to secondary education in a Western Australian school*. Retrieved from https://ro.ecu.edu.au/theses/1714

USE OF THESIS

Rising to the Challenge:
Exploring the transition from Primary to Secondary education in a Western Australian School

Elizabeth Joan Wenden
BHlthSc (OSH)

This thesis is presented in fulfilment of the requirements for the degree of

Master of Public Health in the **Faculty of Health, Engineering and Science,**

Edith Cowan University

September 2015

Abstract

The 'Rising to the Challenge: Exploring the transition from Primary to Secondary education in a Western Australian School' study explored the positive predictors of primary to secondary school transition of a cohort of Year 7 students (n=182) at a school in Western Australia. The transition from primary to secondary school is an important process in the lives of adolescents aged around 11-13 years old. It is a challenging and exciting time that coincides with social, emotional, physical and cognitive changes of the adolescent stage of development. Enabling a positive transition to secondary school can give adolescents the support they need to maintain their educational performance, mental health and social wellbeing during adolescence, and may also have an impact on their future adult success. The purpose of this study was therefore to follow a cohort of students through their transition into secondary school, and determine the positive predictors of transition for this cohort of students.

Nancy Schlossberg's theory entitled 'A model for analysing human adaptation to transition' was used to guide this research, providing a multifactorial ecological framework that describes the process of transition from the perception of the individual. The study investigated a broad range of variables around the individual, the transition situation, supports for students, and academic progress associated with primary to secondary school transition experience immediately after changing schools and again six months later. One kindergarten to Year 12 school was utilised as a case study school. Data was collected by online survey at two time points, being in the first few weeks of secondary school, and again six months later. Data pertaining to students' academic achievement was collected from student record files.

The results of this work identified many significant variables in the transition process for this cohort, while analysis of four research questions tested the applicability of each domain of Schlossberg's model to the primary to secondary school transition process using multinomial logistic regression. Results indicated that students' negative expectation about transition, the things they like about their secondary school, emotional peer support, loneliness, school safety, being a reliable person, levels of agitation and turmoil, and perceived academic achievement significantly influenced students' perception of a positive transition experience. Gender and primary school of origin were also significant predictors of transition experience for this cohort, with females experiencing a poorer transition than males, and 'continuous' students (those who remained at the school from primary through to secondary graduation) having the easiest transition experiences.

Finally, the implications of this research were discussed. Discussion of these results in conjunction with the literature shows that school transition is a complex process, with links between domains that require further investigation and an emphasis on an ecological approach to capture the nuances of the transition phenomenon. Results could not be generalised to the population of transitioning students due to sampling, but are useful for informing further research in the area. Investigation of the mechanisms of the predictor variables on transition experience is warranted given the results of the study, and the use of mixed methods research would provide depth to the analysis results. Given there is little research on transition in comprehensive K-12 schools, further research into primary school origin and the influence of gender are research foci for the future. Finally, the case study school and the school system at large should review school policies around transition and gender equality in teaching.

The declaration page
is not included in this version of the thesis

Acknowledgements

I would like to express my gratitude and thank to my supervisors. Dr Stacey Waters, who started me on this journey, Dr Laura Thomas and Associate Professor Leanne Lester who supported me from beginning to end, and Dr Robyn Johnston who helped me finalise this thesis. This thesis was made possible through their encouragement and expertise. Many thanks also to Dr Tony Curry, his staff, students, and their families, for their time and participation in this project. Thank you goes to my work colleagues, from whom I have learned so much in the last six years. Lastly, I would like to thank my family. Without the support and patience of my husband and children, I would never have been to return to study and get to this point in my life.

I dedicate this thesis to my mother, who has never had any doubt I would reach my goals.

Table of contents

List of figures

List of tables

CHAPTER ONE

INTRODUCTION

The transition from primary to secondary school is an exciting and challenging event in the lives of adolescents (Barber & Olsen, 2004; Ganeson & Ehrich, 2009; Hanewald, 2013; Pollard, 1987; Power & Cotterell, 1981; Topping, 2011). For adolescents who experience a successful transition to secondary school, it is a positive life experience with more choices, new and more friends (Topping, 2011), they are connected to their new school (Fyson, 2008; Hanewald, 2013; Topping, 2011), satisfactory academic progress (Galton, et al., 1999; Galton, et al., 2000b; Turner, 2007) and participate in school activities leading to increased enjoyment and commitment to school, engagement in learning, and positive social connections (Hanewald, 2013; Topping, 2011). It has also been described as "one of the most difficult [times] in pupils' educational careers, and success in navigating it can affect not only pupils' academic performance, but their general sense of well-being and mental health" (Zeedyk et al., 2003). This important time also coincides with the social, emotional and cognitive development of the adolescent - a stage of life that sees the emergence of identity and self-worth (Potter, Schlisky, Stevenson, & Drawdy, 2001), personal autonomy (Barber & Olsen, 2004; Chen & Gregory, 2009; Fenzel, 2000; Potter, et al., 2001), emotional and behavioural regulation (Barber & Olsen, 2004; Blackwell, Trzesniewski, & Dweck, 2007; Potter, et al., 2001), and new social relationships (Barber & Olsen, 2004; Howard & Johnson, n.d; Potter, et al., 2001). Consequently, transition to secondary school can be influenced by the developmental changes of adolescence coupled with broadening life experiences (Balfanz, 2009; M Galton, I Morrison, & T Pell, 2000; Hanewald, 2013), although research is challenging this relationship (Arens, Yeung, Craven, Watermann, & Hasselhorn, 2013; Galton, Gray, & Ruddock, 1999; Mizelle, 2005; Paulick, Watermann, & Nückles, 2013; Potter, et al., 2001; Serbin, Stack, & Kingdon, 2013). Nevertheless, evidence shows primary to secondary school transition is a multifactorial process rather than a single event that takes place over time (Department of Education and Early Childhood Development, 2013; Kinney, 2011; Rice, Frederickson, & Seymour, 2011). While most adolescents adjust relatively quickly to secondary school, there is an available body of evidence in the literature that indicates overall poorer outcomes for those who struggle with transition. These outcomes reflect deficiencies in social, emotional and academic development that can influence future health and well-being – setbacks from which the poorly transitioned adolescent may never recover. Optimising school transition outcomes is therefore an appropriate focus for research and intervention in modern public health.

Since much of an adolescent's life occurs within the context of their school, the recognised need for continuity in the school system and the critical role of schools in contributing to the social, emotional, and academic development of adolescents has seen the world-wide emergence of a research focus on the transition from primary to secondary school (Ganeson & Ehrich, 2009; Jindal-Snape & Foggie, 2008; Measor & Woods, 1984; Power & Cotterell, 1981; Speering & Rennie, 1996). Using an ecological approach, this quantitative research will present research that characterises the transition experience of a cohort of Year 7 students in a school in Western Australia, in an effort to understand how to maximise health and well-being outcomes for adolescents moving from primary to secondary school.

1.1 Study background

The transition from primary to secondary school is a significant normative event in the development of adolescents as they progress through their particular education system. In Western Australia, these adolescents are around 11-13 years of age, with most students moving to a separate secondary campus to complete their formal schooling. School transition in general has been researched since the 1960's; however interest in the primary to secondary transition that coincides with the developmental changes of adolescence has been of particular interest to researchers since late in the last century. Power and Cottrell (1981) and other authors such as Barton and Rapkin (1987), and Pollard (1987) highlighted the importance of transition on student outcomes in the 1980s. More recently, Australian researchers and educators have become concerned with the impact of transition, and in Western Australia the focus has become even more defined with the adoption in 2009 by the Catholic Education Office to move Year 7 into secondary schools in line with most other Australian states (Coffey, 2009). In 2015, Western Australian government schools migrated their Year 7 cohort to secondary school, although this decision was controversial and debated extensively in the education sector (Western Australia Department of Education and Training, 2007; Western Australian Council of State School Organisations Inc, 2010; Western Australian Primary Principals Association, 2006). Ultimately, the universal adoption in Australia of a National Curriculum for education made this decision unavoidable. Currently in Western Australia, there is little evidence of a co-ordinated effort to research or understand transition in the education system.

1.2 Why is primary to secondary school transition important?

School transitions produce discontinuity in the lives of adolescents in their organisational and social domains (Anderson, Jacobs, Schramm, & Splittgerber, 2000). School curriculum is more fragmented in secondary school and this can compromise students' sense of educational continuity (Hayes & Vivian, 2008). Continuity in education is important to adolescent development to facilitate formation of character and development of life skills (Arthur, Davison, See, & Knowles, 2010), and for true adjustment, not just conformity, to secondary school (Hayes & Vivian, 2008). The differing contexts between primary and secondary school result in very different learning environments (Hayes & Vivian, 2008) to which the adolescent must adjust if they are to successfully transition to their new school. While the transition from primary to secondary school is a normative move, it is outside the control of the adolescent and they must negotiate the exchange of a secure environment of primary school with its familiar routines, rules, values and structures for the new environment, rules, values and structure of secondary school (Arthur, et al., 2010).

Authors agree that the transition from primary to secondary school is a critical time in the life of an adolescent in which there is the opportunity for both positive and negative changes in response to the subjective experience of transition (Ganeson & Ehrich, 2009; Rice, et al., 2011; Serbin, et al., 2013; Sirsch, 2003). The transition to secondary school involves stress and anxiety to varying degrees even for those adolescents who adjust quickly, and for those who do not adjust well there is ample research linking poor transition to concurrent poor mental health, and poorer social, emotional and academic outcomes that can continue into adulthood (Rice, et al., 2011; Riglin, Frederickson, Shelton, & Rice, 2013; Serbin, et al., 2013). Additionally, low educational performance - a hallmark of poor transition - is widely linked by research with delinquency, early pregnancy, single parenthood, mental health problems, substance abuse (Freudenberg & Ruglis, 2007; Henry, Knight, & Thornberry, 2012; West, Sweeting, & Young, 2008), and correlates with low school graduation rates (Balfanz, 2009; Ganeson & Ehrich, 2009; Neild, Stoner-Eby, & Furstenberg, 2008; Serbin, et al., 2013).

School transitions can provide a critical juncture between student well-being, ongoing learning and rapid growth and development (Holdsworth, 2010). Barber's magazine article in a similar vein describes school transition as "five bridges that must be crossed at once" comprising the bureaucratic, social/emotional, curriculum, pedagogy and management of learning domains (Barber, 1999). What is evident from these and other authors is the ecological nature of school transition; and when the move from primary to secondary school is successful this influences the student's hopes for the future, provides new opportunities and challenges, greater responsibility and gives a chance to change some old habits and make a fresh start (Holdsworth, 2010). Therefore opportunities for intervention to increase psychological functioning and school attainment abound during school transition (Riglin, et al., 2013).

1.3 Factors that influence transition quality

According to the work of Anderson et al., (2000), the less prepared a student is for transition to secondary school, the more support and guidance that student will require and the greater the discontinuity that will be experienced. This summation of transition quality continues to be evident in recent literature. At the school level, studies show that transition quality is enhanced by primary/secondary school collaboration and information sharing (Balfanz, 2009; Griebel & Berwanger, 2006; Kinney, 2011), transition teams, a supportive school environment, effective communication between home and school (Coffey, 2009; Griebel & Berwanger, 2006; Kinney, 2011), knowledge of the social, emotional, academic, cognitive and physical needs of adolescents (Kinney, 2011; Wajsenberg, 2004) particularly for at-risk students (Balfanz, 2009), skill development of teachers and school staff, and appropriate orientation and transition activities (Kinney, 2011). Teacher and family involvement and support (de Bruyn, 2005; Hanewald, 2013; Jindal-Snape & Foggie, 2008; McGee, Ward, Gibbons, & Harlow, 2003; Resnick et al., 1997; Van Ryzin, Stormshak, & Dishion, 2012), strong pre-transition peer relationships (Eman, 2013; Kingery & Erdley, 2007), and adolescents' own personal social, emotional and academic skills (Arens, et al., 2013; Barber & Olsen, 2004; Brinthaupt, Lipka, & Wallace, 2007; Chen & Gregory, 2009; Fenzel, 2000; Hughes, Banks, & Terras, 2013; Parker & Neuharth-Pritchett, 2009; Potter, et al., 2001; Topping, 2011) have also been found to influence the quality of the transition experience. These factors combine to enhance transition quality and increase connectedness to school, which has been shown to predict a positive transition (Carter, McGee, Taylor, & Williams, 2007; Resnick, et al., 1997; Waters, Cross, & Runions, 2009; West, et al., 2008). However, the importance of each factor in a student's actual transitions experience is dependent on the individual, institutional and educational system context surrounding the move to secondary school, as evidenced in sometimes-conflicting study results. The need for further research

The wide-ranging and diverse factors previously cited by several authors point to the need for an ecological approach in understanding the primary to secondary school transition and how these factors influence the overall quality of students' transition to secondary school. Additionally, research into the differences in transition experience between students who have transitioned once (as in K-12 schools) and students who have transitioned two or more times (as in most schools) is minimal (Towns, 2010) and confirmed in the review of the literature for this thesis. Finally, while there is a growing body of Australian research into primary to secondary school transition, the implementation of a mandated change in school transition age in Western Australia therefore provides an opportunity for expanding this highly contextual body of knowledge.

1.4 Purpose of this study

The purpose of this study is to follow a cohort of students through the crucial transition period by reflecting on experiences in Year 6, and gathering their Year 7 experiences immediately and six months post transition. The data gathered will be used to test an ecological model of transition that incorporates pre-transition, environmental and individual factors as identified in the work of Emeritus Professor Nancy Schlossberg. Schlossberg's 'A model for analysing human adaptation to transition' (Schlossberg's model) (Schlossberg, 1981) will be used to firstly determine the main characteristics of the transition process, describe the components of transition in light of current literature, and relate these to the overall transition outcomes of the Year 7 cohort. Secondly, this research will also investigate if there are any significant differences between the experience of transition from primary to secondary school for students who 1) had been at the school since their primary schooling years; 2) had moved into Year 7 from primary affiliated schools ('feeder' schools), and; 3) had moved into Year 7 from non-affiliated primary schools ('other' schools). The findings of this study will be used by the case study school to inform future transition planning and activities for internal and external transitioning adolescents, and by the researcher to inform future work in this area.

1.5 Definition of terms

1. Adjustment: “The degree of school acculturation or adaptation necessary for maximising the educational fit between students’ unique characteristics and the distinct nature and requirement of learning environments….. the process of maintaining a balance between [students’] academic, social and emotional needs and the school environment” (Opara & Onyekuru, 2013).

2. ‘Feeder’ school: A primary school that has recognised links to a secondary school, whose students may receive preferential enrolment at that secondary school, and that is on a separate campus to the secondary school.

3. Internal or ‘continuous’ school or students: A primary school that operates as the junior school of the whole school campus, whose students receive preferential enrolment at that secondary school, and is on the same campus as the secondary school.

4. External or ‘other’ school: A primary school or student that has no previous association with the case study school.

5. Transition: “...should be understood as a process, not a point in time. It is an individual experience for everyone involved…..transition is something that is experienced, rather than something that happens to a child and their family,…a deep-rooted part of natural learning and environment,….[and] involves building on children’s prior and current experiences to help them feel secure, confident and connected to people, places, events, routines and understandings” (Department of Education and Early Childhood Development, 2013).

6. Well-being: ‘…a sustainable positive mood and attitude, health, resilience, and satisfaction with self, relationships and experiences at school’ (Department of Education and Early Childhood Development, 2010).

7. Adolescents: Children in Year 7, and aged 11, 12, or 13 years in Western Australian schools, also described as adolescents or early adolescents.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

The transition from primary to secondary school is a major event in the life of an adolescent, and one over which the individual can exercise very little control. Within school education systems all over the world, this change is normative at around the age of 11-13 years old. In Australia, some children attend a kindergarten to Year 12 school and therefore only experience one transition into schooling, however most children undergo two school transitions – from home to primary/preschool, and from primary to secondary school – and still others may experience up to four school transitions (home to kindergarten to preschool to primary to secondary), depending on the school system and state they are enrolled in (Ganeson & Ehrich, 2009). While multiple researchers have stressed that this time can be a ‘make or break’ stage in the educational, social and emotional lives of the adolescent and future adult, to date there is limited research that takes an ecological approach to transition. The purpose of this current research is to apply an ecological model to a cohort of transitioning students in a case study school, in an attempt to increase understanding of the process. To this end, the following literature review was conducted to discover the major themes, directions and current state of local, national and international school transition research.

The following literature review firstly details the history of academic interest in school transition, reviews definitions of transition, and the role of transition activities for incoming students. The remainder then describes the perceptions and worries adolescents have about moving to a new school, identifies predictors and outcomes of transition that have emerged in the literature, describes theories and models used in transition research, and identifies gaps evident in the literature.

2.2 History of school transition research

Primary to secondary school transition research has its roots firmly in the middle school movement of the last century that developed in response to the social, economic, theoretical and political changes of the time (Lounsbury, 1960). In 1963, an historical speech at Cornell University was delivered by Dr William Alexander, who outlined the need for a ‘new school in the middle’ for the education of young adolescents that would address the unique social, emotional and educational need of this group (National Association of Secondary School Principals, n.d). Academics of the time such as Donald Eichhorn, John Lounsbury and Theodore Moss were also producing work supporting the concept of middle schooling, and as their ideas regarding curriculum for adolescents gained respect in the worldwide educational sector (Beane, 1990), so began a movement that led to many research foci including that of optimising the transfer of students between schools.

The 1980's saw seminal works by authors such as Power and Cottrell (1981) who stressed the need for educational continuity for adolescents. Investigations as to how this could be achieved led the move from a narrow curriculum focus to broader avenues of inquiry. Importantly, work by Measor and Woods (Measor & Woods, 1984) researched transition from the student's point of view and outlined the importance of school context and the outcomes of a successful school transition. Additionally, Barton and Rapkin (Barton & Rapkin, 1987) investigated the psychological well-being of transitioning students, and emphasised the need for an ecological approach to transition, and Pollard (Pollard, 1987) summarised school transition as a process, voiced the need for continuing research, and helped move school transition into the realms of evidence-based policy.

As a result of the impetus of these researchers, the body of literature based on the various social, emotional, academic, school, family and individual aspects of school transition has grown steadily through the last 30 years. Additionally, acknowledgement of the importance of transition to health and well-being has been made by the World Bank in their 2007 report 'Development and the Next Generation', where primary to secondary school transition is cited as one of the five life transitions related to positive health outcomes for young people (World Bank, 2007). Much of the research currently available has been undertaken in the United States and Europe where the positive and negative outcome of school transition across an individual's schooling career have been recognised for some time. In Australia, however, there has been little original research into transition with most information available based on the work of modern international authors with works by relatively few Australian authors and organisations found (Coffey, 2009; Department of Education and Training, 2007; Dockett & Perry, 2003; Government of Western Australia, 2011; Hanewald, 2013; Holdsworth, 2010; NSW Department of Education and Training, 2006; Patton et al., 2000; Pereira & Pooley, 2007; Wajsenberg, 2004; Waters, Lester, & Cross, 2014; Waters, Lester, Wenden, & Cross, 2012; WAPPA, 2006). A thorough understanding of school transition however remains elusive partly due to inconsistent research approaches and methods but also the international differences in school systems, structures, and governing bodies.(Andrews & Bishop, 2008; Benner, 2011). Today it is evident in the growing body of transition literature that health authorities, educational authorities and academics around the globe are focussing on optimising the school transition experience to improve overall adolescent health and well-being outcomes.

2.3 Towards a definition of primary to secondary school transition

The systematic and normative transition between schools has been described as the movement from a ‘primary-type’ or private environment likened to that of the family unit, to a ‘secondary-type’ or public environment such as a bureaucracy (Hayes & Vivian, 2008; Simmons & Blyth, 1987). Following this line of reasoning, the learning environment found in a secondary school can be described as generally more performance based and competitive compared to the primary school learning environment (McGee, et al., 2003; Paulick, et al., 2013). Anderson et al., (Anderson, et al., 2000) qualifies transition further by stating that there are different types of educational transitions – developmental, e.g., age, physical, emotional, and intellectual; and systemic, e.g., those built into the school system including home to school, primary to secondary, and secondary to work or tertiary education. Breaking this down further, Delamont (Delamont, 1991) describes four phases of transition, being;

1) Preparation – Primary school activities for pre-transition children and their parents/caregivers.
2) Transfer – High levels of activity and communication between pre-transition students and their future secondary school.
3) Induction – Orientation activities at the commencement of the first year at secondary school.
4) Consolidation – Merging of transition activities into the secondary school’s overall student educational, welfare, and care programs.

In comparison, Anderson et al., (2000) provides three essential elements of transition being; 1) preparedness, which includes academic knowledge and skills, independence and industriousness to stay on task, conformity to adult standards of behaviour and coping mechanisms to deal with challenges; 2) support, which includes informational and tangible resources and services; and 3) social, which is supplied by peers and teachers. More recently, Pascarella and Terezini (Pascarella & Terenzini, 2005) take a broader view by asserting that school adjustment requires de-socialisation from the values, beliefs and traits of the old school and re-socialisation to the new school’s values, beliefs, and traits. Most recently, the Department for Education and Early Childhood Development (DEECD, 2013) in Victoria, Australia has published their own definition of transition:

> '[Transition]…should be understood as a process, not a point in time. It is an individual experience for everyone involved…..transition is something that is experienced, rather than something that happens to a child and their family,…a deep-rooted part of natural learning and environment,….[and] involves building on children's prior and current experiences to help them feel secure, confident and connected to people, places, events, routines and understandings' (pg.1)

What is common within these understandings is that the transition process is co-constructed by the students, parents, and teachers of the both primary and secondary school – a point also made in the work of Griebel and Berwanger (2006). Consequently, the DEECD definition is important as it encompasses the many aspects described by authors in their efforts to understand the transition process, and therefore offers the best definition of transition for the scope of this research.

2.4 The role of transition activities

The process of transition to secondary school does not commence with end-of-year transition activities and primary school valedictory rituals, although these are important for developing autonomy, detaching from parents, creating a positive attitude, developing coping skills, and facilitating contact with peers (Roderick, 1993; Schlossberg, 1989) as part of the adolescent stage. Preparation for transition can commence as early as two years prior to transition with activities that aim to reduce concern, anxiety, and develop skills, knowledge and confidence for the move to secondary school (Andrews & Bishop, 2008; Delamont, 1991; Turner, 2007). It is important that these activities continue post-transition, well into the new school year with responsibilities shared by both the primary and secondary school (Andrews & Bishop, 2008). Transition activities are important in preparing young adolescents for secondary school and even though both the content and duration of these activities often varies widely between schools, a review by McGee, et.al., (McGee, et al., 2003) found any type of transition activity to be a positive influence on students' transition experiences. Such activities include school visits, orientation days, student handbooks, peer mentoring, student passports, school organised family barbeques, parent/teacher/school meetings, teacher and student 'shadowing' at the new school, and secondary staff visiting the primary school (Anderson, et al., 2000; Andrews & Bishop, 2008; Bloyce & Frederickson, 2012; Holdsworth, 2010; Maras & Aveling, 2006). Some adolescents however find transition difficult and experience a discontinuity in their social, educational and organisational domains (Anderson, et al., 2000; Rice, 1997) as they "leave the familiar for the strange" (Delamont, 1991). These discontinuities are often expressed in the concerns and worries of pre- and post-transition adolescents (Anderson, et al., 2000).

2.5 Perceptions and worries of transitioning adolescents

The literature has identified the most common perceptions and worries adolescents have about transition from primary to secondary school. Recent research has found that students' worries about changing schools rarely eventuate into actual experience (Pereira & Pooley, 2007; Waters, Lester, & Cross, 2014), and that structural and academic upheaval after transitioning is short term (Pereira & Pooley, 2007). Nevertheless, young pre-transitional adolescents report they are commonly anxious about bullying (Kingery & Erdley, 2007; Lawson, Wyra, Skrzypiec, & Askell-Williams, 2008; Measor & Woods, 1984; Pollard, 1987; Topping, 2011), getting lost at school (Bohnert, Aikins, & Arola, 2013; Coffey, 2009; Jindal-Snape & Foggie, 2008; Kingery & Erdley, 2007; Lawson, et al., 2008; Smith, Akos, Lim, & Wiley, 2008; Topping, 2011), making friends (Bohnert, et al., 2013; Coffey, 2009; Lawson, et al., 2008; Measor & Woods, 1984; Smith, et al., 2008; Topping, 2011), increased workload and homework (Jindal-Snape & Foggie, 2008; Measor & Woods, 1984; Zeedyk, et al., 2003), and travelling to and from school (Zeedyk, et al., 2003). Additionally many students have incomplete information about moving to secondary school, commonly obtained from friends and siblings (Delamont, 1991; Jindal-Snape & Foggie, 2008; Pollard, 1987). Many perceptions about transition stem from these worries because adolescents move from being the oldest students at a small school to the youngest students in a much larger school (Barber & Olsen, 2004; Ellerbrock & Kiefer, 2013; Hanewald, 2013; Jindal-Snape & Foggie, 2008; Riglin, et al., 2013; Speering & Rennie, 1996; Van Ryzin, et al., 2012) leading to feelings of vulnerability (Delamont, 1991; Hanewald, 2013; Humphrey & Ainscow, 2006). There is growing evidence that adolescents who do not resolve these concerns can continue to have issues through their secondary school life and beyond (Freudenberg & Ruglis, 2007; Galton, et al., 2000; Henry, et al., 2012; Osborn, McNess, & Pollard, 2006; Rice, et al., 2011; Riglin, et al., 2013; Serbin, et al., 2013; West, et al., 2008; Wrigley & Lofsnaes, 2005).

2.6 What predicts the primary to secondary school transition experience?

A multitude of factors are described that influence the transition process. These factors predict the adolescent’s ability to transition to secondary school by influencing social, emotional and academic balance (Brinthaupt, et al., 2007; Eman, 2013; Parker, 2009) and are evidenced at the individual, family, peer and institutional levels.

2.6.1 Individual predictors

In studies examining positive transition, predictors include well developed independence (Jindal-Snape & Foggie, 2008), supportive peer networks (Hanewald, 2013; Topping, 2011; Waters, et al., 2014), high motivation, achievement at school, positive self-esteem (Roeser, Eccles, & Freedman-Doan, 1999), developed personal values, decision making skills, and behavioural regulation (Barber & Olsen, 2004; Brinthaupt, et al., 2007; Chen & Gregory, 2009; Fenzel, 2000; Hughes, et al., 2013; Parker & Neuharth-Pritchett, 2009; Potter, et al., 2001; Topping, 2011). Additionally, while pre-transition concerns may not directly relate to academic attainment (Riglin, et al., 2013) fewer pre-transition behavioural problems, higher school liking, positive psychological functioning (Riglin, et al., 2013), a positive self-concept (Craven, Marsh, & Burnett, 2003; Opara & Onyekuru, 2013), connectedness to school, involvement in sports, art and extra-curricular activities (McGee, et al., 2003), and good maths and reading grades (Hakkarainen, Holopainen, & Savolainen, 2012; Paulick, et al., 2013; Riglin, et al., 2013; Roderick, 1993), have emerged as indicators of a successful transition. Turner (2007) also found that adolescents with a positive expectation of secondary school have a high similarity of transition beliefs and actual experiences, and report an easier adjustment to their new circumstances. It is evident, however, that the greater portion of the reviewed literature takes a deficit view of transition.

The predictors for poor transition are highlighted throughout the literature, and particular adolescents will often evidence clusters of negative predictors prior to transition (Serbin, et al., 2013). Adolescents who are young in age, have low confidence and demonstrate low academic ability are at increased risk of poor transition as they are socially, emotionally, and academically unprepared for moving to a new school. (Anderson, et al., 2000; Cauley & Jovanovich, 2006; Chen & Gregory, 2009; Galton, et al., 2000; Hughes, et al., 2013; Serbin, et al., 2013). Children who have moved schools regularly are also at risk of poor transition, although the data is conflicting with the impact of mobility and instability not yet quantified (Bates, 2013; Neild, et al., 2008).

2.6.1.1 Gender

Adolescents who are male are often considered as being at risk for poor transition based on literature that shows that boys generally underperform in maths and reading in comparison to girls at this stage (Serbin, et al., 2013), although examination of gender as a predictor of transition has elicited mixed results (Rice, et al., 2011). Arens et al., (2013) found that boys and girls did not differ in their reactions to transition, and that puberty did not affect self-perception during transition, whereas other authors state that gender is important, finding boys show more disruptive behaviours through transition and girls adjust more quickly in relation to social aspects and self-esteem (McGee, et al., 2003; Serbin, et al., 2013). Interestingly, McGee et al., (2003) also found that neither single sex nor coeducational schools demonstrated better transition experiences. Generally, however, the research indicates transition is a greater challenge for boys in terms of school functioning, while girls have problems with social groups (Anderson, et al., 2000; Benner & Graham, 2009; Bohnert, et al., 2013; Cauley & Jovanovich, 2006; Galton, et al., 1999; Hanewald, 2013; Hughes, et al., 2013; Mason, 1997; Topping, 2011; Wrigley & Lofsnaes, 2005).

2.6.1.2 Boarding school

The geographical move to an urban boarding school has been identified as an additional challenge for transitioning adolescents, particularly those from rural, remote or regional areas (Baills & Rossi, 2001; Hodges, Sheffield, & Ralph, 2013; Whyte & Boylan, 2008). The main issues expressed by boarders are homesickness, decreased self-concept, and the rigours of communal living (Baills & Rossi, 2001; Bramston & Patrick, 2007; Whyte & Boylan, 2008). Adolescents at boarding school have been found to exhibit higher incidences of emotional problems, depression, anxiety and stress (Fisher, Fraer, & Murray, 1984; Mander, Lester, & Cross, 2014), and are more likely to bully and be bullied in the two years post-transition than day students (Lester, Mander, & Cross, 2014). Several authors posit that this is due to the lack of readily available family support, which must be replaced by the boarding school’s houseparents (Baills & Rossi, 2001; Fisher, et al., 1984; Hodges, et al., 2013; Mander, et al., 2014). These houseparents face a dilemma in providing adequate familial support for boarders while maintaining a professional distance, as forming relationships with boarding students can be impacted by staff movements and the legal complications surrounding child protection legislation (Hodges, et al., 2013). Additionally, high houseparent to student ratios (25:1) make important student-staff-school bonds difficult to foster, and for Indigenous students, may not provide the social, emotional and academic care necessary for a successful transition (Queensland Indigenous Education Consultative Body, 2000)

2.6.1.3 Special educational needs

Adolescents with special educational needs (SEN) have emerged as a major at-risk group in relation to primary to secondary school transition (Hanewald, 2013; Hughes, et al., 2013; Measor & Woods, 1984; Topping, 2011). In particular the predictors of low educational attainment, low self-esteem, and problem behaviour often cluster in SEN adolescents (Anderson, et al., 2000), and are linked to experiencing higher stress levels throughout the transition to secondary school (West, et al., 2008). While these adolescents express the same common transition worries and perceptions as non-SEN children, they can take longer to settle into secondary school and differential outcomes may be found in relation to the stressors of transition and the particular educational needs of the adolescent (Barnes-Holmes, Scanlon, Desmond, Shevlin, & Vahey, 2013; Maras & Aveling, 2006). Consequently, for SEN adolescents the discontinuity of resources and support previously available in the primary learning environment as they move into secondary school is a particular issue in transition (Maras & Aveling, 2006), along with social anxiety, social rejection, and keeping up with work requirements (Barnes-Holmes, et al., 2013). Lack of communication between primary and secondary school teachers about individual SEN requirements is also often encountered, so that children suffer socially embarrassing accidents or are chastised in the classroom – a serious social mishap (Barnes-Holmes, et al., 2013). Notably, parents have expressed the concern that the behaviour of SEN adolescents may be misinterpreted as trouble-making, thereby hindering the happiness and social integration of SEN adolescents into the new school (Barnes-Holmes, et al., 2013). Behavioural problems, while not wholly attributable to SEN adolescents, are an important predictor of transition for these and all adolescents (Anderson, et al., 2000; Cauley & Jovanovich, 2006; Chen & Gregory, 2009). Not surprisingly, SEN students are at risk for early school leaving (Hakkarainen, et al., 2012).

2.6.1.4 Ethnicity

Membership of a minority ethnic group has been found to predict a negative transition experience (M Galton, I. Morrison, & T. Pell, 2000a; Galton, et al., 2000; Graham & Hill, 2003; Humphrey & Ainscow, 2006; McGee, et al., 2003; Riglin, et al., 2013). Changes in the ethnic makeup of classes (Hanewald, 2013), low socio-economic status (Topping, 2011; Wrigley & Lofsnaes, 2005), and a non-English speaking background (Topping, 2011) can lead to less cohesive social groups and exclusion post transition. Additionally, adolescents of Aboriginal and Torres Strait Islander (ATSI) descent are likely to find the move to secondary school particularly stressful, especially if they are required to leave their community in order to study (Adermann & Campbell, 2010; What works: The work program, 2014). In 2004, only 40% of Indigenous adolescents attended secondary school in Australia, with 30% of these students leaving before completing Year 11 (Adermann & Campbell, 2010). Transition does, however, create an opportunity for schools to attend to and rectify the lack of academic progress and high school disengagement often seen in ATSI adolescents (QIECB, 2000; What works: The work program, 2014) through scaffolding students, and using innovative school and staffing approaches to value and respond to Indigenous culture, identity and diversity in the school environment (Waters, et al., 2014).

2.6.2 Family predictors

Family predictors in the form of parental monitoring, positive intervention (Hanewald, 2013; Jindal-Snape & Foggie, 2008; Van Ryzin, et al., 2012), promotion of autonomy, sensitivity to adolescent needs, parental emotional intimacy (Allhusen et al., 2004), high parent support (de Bruyn, 2005; Hanewald, 2013; Jindal-Snape & Foggie, 2008; McGee, et al., 2003; Rice, 1997; Van Ryzin, et al., 2012), and parental attachment (Duchesne, Ratelle, Poitras, & Drouin, 2009) are important predictors to ease the transition process. A more comprehensive list of negative family predictors are evident in the literature.

Family characteristics such as lack of mother attachment (Duchesne, et al., 2009), being from a blended or single-parent family (Duchesne, et al., 2009; Hughes, et al., 2013), having a culturally and/or linguistically diverse background, and low socio-economic status (SES) (Hughes, et al., 2013) are described by many authors as predictors of poor transition to secondary school. In particular, low SES adolescents may not have access to parental support and home resources to facilitate a successful transition resulting in early school failure (Anderson, et al., 2000; McGee, et al., 2003; Serbin, et al., 2013). Additionally, non-western immigrants are generally low SES and can suffer from a pooling of disadvantage since many are refugees (Driessen, Sleegers, & Smit, 2008). School transition can be very difficult for families and adolescents not of the dominant culture, since learning and literacy styles may vary greatly and ‘success’ may be perceived very differently from that of the school (McGee, et al., 2003).

2.6.3 Peer predictors

Peer relationships have proved important in social and emotional development, and have strong links with academic achievement (Eman, 2013; Tobbell & O'Donnell, 2013). The transition to secondary school disrupts friendship networks at a time when they are becoming increasingly important in the lives of adolescents (McGee, et al., 2003). In a US study by Kingery & Eardley

(2007) the quality of peer relationships was tested pre- and post-transition in 146 students and the quality of pre-transition relationships were identified as an important predictor for school transition. Indeed pre-existing friendships are of particular importance to adolescents who are having difficulty transitioning to secondary school – these friendships support confidence and provide a ‘comfort zone’ (Weller, 2007). Maintenance of the social capital inherent in primary school friendships is necessary, especially if adolescents are moving to a secondary school away from their primary school networks, as this has implications for their development of new friendships and connectedness to the new school (Weller, 2007). Old school relationships support new school connectedness by representing a shared past, which fades as adolescents make new relationships in the new setting with friends that more closely fit their emerging selves (Weller, 2007). Moving to secondary school with friends or acquaintances helps to provide continuity and enables the development of new friendships by acting as transitional supports (Weller, 2007).

2.6.4 Institutional predictors

The school as an institution has an important role to play in the transition experience, and understanding the needs of the cohort when developing the learning environment is necessary for successful transition (Eccles & Roeser, 2011; Ellerbrock & Kiefer, 2013; Holdsworth, 2010; McGee, et al., 2003). A larger secondary school with traditional structures that are isolating and complex can fail to match the developmental needs of transitioning adolescents leading to school disengagement and decreased motivation (Eccles et al., 1993; Eccles & Roeser, 2011; McGee, et al., 2003). McGee et al, (2003) makes the point in their literature review that “liaison between primary and secondary schools is often viewed with suspicion” (pg. 21) and this lack of basic readiness to collaborate could be rationalised as the basis of the educational discontinuity influencing primary to secondary school transition (Griebel & Berwanger, 2006; McGee, et al., 2003). Indeed Griebel & Berwanger (2006) state that a “precondition for transition is an intensified co-operation between primary school, secondary school and the parental home”. Additionally, information from the primary school is often ignored, not utilised, or never given to the teacher(s) in the new school (Balfanz, 2009; McGee, et al., 2003), partly due to the wide variation of assessments and marking schemas used in primary schools (McGee, et al., 2003). A responsive school environment that promotes personalisation, competence, care, autonomy and relationships enhances motivation and connectedness to school (Eccles & Roeser, 2011; Ellerbrock & Kiefer, 2013; Holdsworth, 2010). Research has also shown that connectedness to school predicts a positive transition and results in less problem behaviour (Carter, et al., 2007; Resnick, et al., 1997), increased educational motivation (Stumpers, Breen, Pooley, Cohen, & Pike, 2005), less absenteeism (Russell, Mielke, Palmiter, Turner, & Vaden, 2012; Stevens, Bourdeaudhuij, & Van Oost, 2000; Vieno, Perkins, Smith, & Santinello, 2005), and less anxiety and depression (Anderman & Leake, 2007; Resnick, et al., 1997; Shochet, Dadds, Ham, & Montague, 2006), and children who have had assistance to settle into their new school are more connected to the new school, and more likely to have a positive transition (Maras & Aveling, 2006; Measor & Woods, 1984). Activities that bring primary and secondary schools together are essential for an institutional context that promotes successful transition, and should include all key issues such as school visits, orientation and induction activities, supports and services, information exchange and records keeping (McGee, et al., 2003). School-home communication also influences a successful transition by being mutually reinforcing and creating continuity (Coffey, 2009; Jackson & Davis, 2000; Rice, 1997).

Teacher-student relationship quality predicts a successful transition, and provides support to students through warmth and friendliness, enthusiasm, having reasonable expectations (Brinthaupt, et al., 2007), and being capable and trained in teaching adolescents (Andrews & Bishop, 2008). In a study by Resnick, et al., (1997) teacher support was found to predict better peer relationships and academic success (Resnick, et al., 1997). Other authors have subsequently confirmed the importance of teacher support as being crucial to student motivation and personal, interpersonal and academic success (Hanewald, 2013; Hughes, et al., 2013; Speering & Rennie, 1996; Stumpers, et al., 2005).

Class sizes and a dedicated physical space for the transitioning cohort are important environmental predictors (NSWDET, 2006), and if not optimal may make the new school seem especially threatening particularly for those who bully others, or are bullied themselves (Felner, Seitsinger, Brand, Burns, & Bolton, 2007). Classrooms in the same vicinity, staying with the same class groups for most subjects, common areas, alternative forms of class scheduling, and a limited number of teachers for the group helps provide a ‘home base’ in the school for the transitioning students (Jackson & Davis, 2000; McGee, et al., 2003). Research by Galton et al., (Galton, et al., 2000) also revealed that secondary schools with large numbers of feeder schools have some difficulty in successfully transitioning students.

2.7 The impact of educational discontinuity on school transition

Evident in the literature is a dissonance between what schools (academic) and families (social/emotional) believe is important in transition (Ellerbrock & Kiefer, 2013; Jindal-Snape & Foggie, 2008; Speering & Rennie, 1996; Topping, 2011). The dominating school pedagogy of economy, effectiveness and technology often fails to respond to the developmental needs of adolescents (Stumpers, et al., 2005). The result is a general lack of recognition of how school environment and structure can help or hinder the transition process (Eccles, et al., 1993; Ellerbrock & Kiefer, 2013; Fyson, 2008; Holdsworth, 2010; Power & Cotterell, 1981; Wrigley & Lofsnaes, 2005), leading to educational ideologies, teaching practices and environments that do not support transitioning students (Stumpers, et al., 2005). In addition, the workload of teachers often means that meeting the needs of individual students is difficult (Hanewald, 2013; Hughes, et al., 2013; Speering & Rennie, 1996; Wrigley & Lofsnaes, 2005). An inherent lack of communication and information sharing about students' skills, abilities and needs between primary and secondary schools also impacts on the provision of appropriate support for transitioning adolescents (Jindal-Snape & Foggie, 2008; Power & Cotterell, 1981; Wrigley & Lofsnaes, 2005). Collectively termed as 'educational discontinuity' in the literature (Rice, 1997), these factors can lead to academic disruption due to gaps in knowledge (Galton, et al., 1999), social and behavioural problems, a reduction in motivation, and school disengagement (Galton, et al., 1999; Power & Cotterell, 1981; Speering & Rennie, 1996) – all of which are implicated in poor or negative school transition experiences. It should be noted however that educational discontinuity can only ever be minimised, and that a degree of discontinuity is desirable to develop an individual's resilience and coping skills (Jindal-Snape & Foggie, 2008), and to adapt previously learned social, emotional and academic behaviours and patterns to meet the new demands of secondary school (Hanewald, 2013; Jindal-Snape & Foggie, 2008; Topping, 2011; Van Ryzin, et al., 2012).

2.8 What are the outcomes of primary to secondary school transition?

To date, the ultimate combination of predictors to support a positive transition has not been found. This reflects the lack of a widely accepted guiding theory or standardised measures for transition experience. However, work by Measor and Woods (1984) and others subsequently describes outcomes for successful transition as the development of new friendships, new confidence and self-esteem, feeling settled at the new school, integration into new routines, interest in school work and school itself, and the experience of a continuous curriculum between schools (Evangelou et al., 2008; Holdsworth, 2010; Measor & Woods, 1984). While broad, these outcomes give researchers a glimpse of what successful transition could look like. Further work by Anderson et al., (2000) provides more specific transition outcomes drawn from the work of multiple authors, including school grades, post-transition conformity to classroom behaviour norms and rules, post-transitional social relationships with peers, and post-transition academic orientation and attitudes in the classroom. Additionally, mastery-based goals rather than performance-based goals, the use of school transition teams (Anderson, et al., 2000), high teacher support and engagement (de Bruyn, 2005), and the provision of information about the transition (McGee, et al., 2003; Rice, 1997) have been linked to facilitating a successful transition. This evidence supports the notion that primary to secondary school transition requires an ecological approach in research to effectively describe and link the components of a ‘successful’ transition.

Much of the literature, however, takes a deficit view of transition and focuses on negative outcomes, revealing that adolescents who experience a poor transition to secondary school are more likely to report feeling depressed, anxious, having low self-esteem, being lonely and participating in anti-social behaviours (Akos, 2002; Blackwell, et al., 2007; Bohnert, et al., 2013; Frey, Ruchkin, Martin, & Schwab-Stone, 2009; Hughes, et al., 2013; Kingery & Erdley, 2007; NSWDET, 2006; Rice, et al., 2011; Waters, et al., 2012; Zeedyk, et al., 2003). Further, these students can experience ongoing academic decline, an inability to cope with schoolwork demands, increasing psychological problems, peer relationship problems, increased stress, motivational decline, a dislike of school, and experience conflict with authority figures (Akos, 2002; Anderson, et al., 2000; Fenzel, 2000; Herlihy, 2007; Kingery & Erdley, 2007; Qualter, Whiteley, Hutchinson, & Pope, 2007; Rice, et al., 2011; Zanobini & Usai, 2002; Zeedyk, et al., 2003). Such adolescents rarely participate in school or extra-curricular activities (Anderson, et al., 2000), are at risk of disengaging from school (Anderson, et al., 2000; Herlihy, 2007; NSWDET, 2006; Rice, et al., 2011), engaging in bullying behaviours (Anderson, et al., 2000; Measor & Woods, 1984; NSWDET, 2006; Qualter, et al., 2007), being socially isolated, dropping out of school and being highly absent (Howard & Johnson, n.d; NSWDET, 2006) and often experience conflict with others (Anderson, et al., 2000) . Overall, students that experience a poor transition have expressed not feeling welcome, respected or valued, are unrewarded and feel rejected (Anderson, et al., 2000). In a recent Australian study, Waters, et al (2012), found that those students (31%) who experienced a sub-optimal transition were more likely to report poorer social and emotional health than their peers at the end of their first year in secondary school. International literature supports these results (Rice, et al., 2011; Zeedyk, et al., 2003), with a study by Wentzel (2008) revealing that ongoing issues for these adolescents also include having fewer resources for coping, fewer peers to rely on, and experience of victimisation at school (Serbin, et al., 2013). Adolescents who have problems adjusting to secondary school often describe transition as a lonely or scary experience (Lawson, et al., 2008). In the longer term, evidence suggests that adult success and functioning can also be impeded by these adolescent experiences (Benner & Graham, 2009; Kennelly & Monrad, n.d.; Qualter, et al., 2007; Wampler, Munsch, & Adams, 2002).

There is evidence that the move to secondary school is linked to a dip in academic performance and a decline in school enjoyment (Barber & Olsen, 2004; Benner & Graham, 2009; Galton, et al., 1999; Parker & Neuharth-Pritchett, 2009; Pollard, 1987; Riglin, et al., 2013; Speering & Rennie, 1996). Recent research has found the decline in achievement may be related to the change in learning environment that is part of transition rather than puberty (Arens, et al., 2013; Galton, et al., 1999; McGee, et al., 2003; Mizelle, 2005; Paulick, et al., 2013; Potter, et al., 2001; Serbin, et al., 2013) although this is still in contention. Academic preparation in primary school has the ability to influence adolescents' psychological preparation for transition (Turner, 2007). In the recent Western Australian report by Coffey (2009) this was attributed to the widely differing knowledge and skills obtained from primary school in the transitioning cohort. Many other authors have noted this issue (Galton, et al., 1999; Galton, et al., 2000b; Power & Cotterell, 1981; Speering & Rennie, 1996), and in the United Kingdom this remains a problem even with the adoption of a national curriculum (Galton, et al., 1999; Galton, et al., 2000). Primary to secondary school transition brings with it an expectation of independent academic performance (Duchesne, et al., 2009; Hanewald, 2013), however for those adolescents who are struggling with transition, less teacher scaffolding (Coffey, 2009; Duchesne, et al., 2009; Hanewald, 2013), changed teacher roles (Coffey, 2009; Duchesne, et al., 2009; Ellerbrock & Kiefer, 2013; Fyson, 2008; Hanewald, 2013; Holdsworth, 2010; Jindal-Snape & Foggie, 2008; Kingery & Erdley, 2007; Pollard, 1987; Smith, et al., 2008), and increased academic pressure and homework (Bohnert, et al., 2013; Hanewald, 2013; Jindal-Snape & Foggie, 2008; Lawson, et al., 2008; Pollard, 1987; Power & Cotterell, 1981; Topping, 2011; Wrigley & Lofsnaes, 2005) can lead to continuing school failure, increased absenteeism and ultimately affect long term personal development and employment prospects (Benner & Graham, 2009; Hanewald, 2013; Humphrey & Ainscow, 2006; Kennelly & Monrad, n.d.; Qualter, et al., 2007; Speering & Rennie, 1996; Van Ryzin, et al., 2012; Wampler, et al., 2002).

2.9 Current theories and models of transition

Within the literature, many different theories and models are used to explain school transition, although in most of the papers reviewed only certain aspects of transition were investigated. Individual approaches included self-determination theory (Deci & Ryan, 1985), used to investigate the psychological needs of adolescents for competence, connectedness and autonomy and how this influences transition. The work of Sirsch (2003) takes a different direction and applies cognitive-transactional stress theory, which views the transition to a new school as a challenge and a threat that is influenced by the adolescents' pre-transition environment. Similarly, two authors adapt role strain theory, and argue the experiences the student encounters on commencing at a new school can be categorised as 'roles', each with new expectations and rules to adjust to (de Bruyn, 2005; Fenzel, 2000). Yet other authors test sociocultural theory (O'Kane, 2007), stage-environment fit theory (Eccles, et al., 1993; Waters, et al., 2012) and communities of practice (Lave & Wenger, 1991), among others. Recently, and perhaps in light of academic recognition of the important of an ecological approach to public health in general, researchers have made the move to more ecological theories of school transition.

Historically, most transition theories are based on the socio-ecological model originally proposed by Bronfenbrenner in 1979. This model recognises that children's experiences of transition points are influenced by their own capabilities and skills as well as the contexts that surround them such as family, friends, teachers, school context, broader community and the policy environment (Bronfenbrenner, 1979). Transition theory from the field of developmental psychology, states that unique and challenging life transitions are accompanied by rapid adaptation to new and more difficult tasks, and has been recently applied to school transition with some success (Benner, 2011; Benner & Graham, 2009; Serbin, et al., 2013). Similarly, the transition model of Griebel & Berwanger (Griebel & Berwanger, 2006) focuses on the individual, interactional and environmental challenges of transition. Taking a completely different approach, Barnes-Holmes, et al., (Barnes-Holmes, et al., 2013) utilise grounded theory in their extensive qualitative study to discover the transition perspectives of both students and observers, while Ganeson & Ehrich (2009) took a phenomenological approach to students' and teachers' perception of middle school transition. While the influence of Bronfenbrenner is apparent in these and other recent studies, it is highly evident from the literature that there is currently no widely accepted and unifying theory or model of school transition.

2.9.1 A model for analysing human adaptation to transition

As previously discussed, the literature reviewed for this research project did not reveal any one universally accepted model or theory to adequately describe the process of transition from primary to secondary school. The search did however reveal the need for an ecological approach, and a broader enquiry located the work of Nancy K. Schlossberg and her 'Model for analysing human adaptation to transition' (Schlossberg, 1981). In this paper, Schlossberg defines transition as when "an event [anticipated or unanticipated] or non-event [i.e. an anticipated event that does not occur] results in a change in assumptions about oneself and the world and thus requires a corresponding change in one's behaviour and relationships" (Schlossberg, 1981). Further, Schlossberg postulates that it is not the transition itself, but the stage, situation and style of the individual at the time that is of importance (Schlossberg, 1981). Schlossberg is a emerita professor of counselling psychology at the University of Maryland who spent her career studying life transitions (Meyer, n.d; Schlossberg, 1981), and developed this model based on the extensive research of field leaders in psychology, human development, sociology and education (Schlossberg, 1981).

In developing this model, Schlossberg was attempting to answer questions around why individuals, specifically adults, differ in their ability to cope with life transitions, why there are differences between how an individual copes with transitions that occur at various point in their life, and how they can be helped to manage transition (Meyer, n.d; Schlossberg, 1981, 1984, 2011). The aim of her work was to propose a framework for understanding the factors that influence an individual's transition experience and for the development of interventions to ensure a smooth transition as life inevitably changes (Schlossberg, 1981, 1984, 2011). Schlossberg has drawn on the work of many other authors in the evolution of the model for analysing human adaptation to transition based on empirical and thematic research into adult development. This informative research encompassed age and stage (Brim & Kagan, 1980; Levinson, 1978) , life events and transition .(Holmes & Rahe, 1967; Lowenthal & Chiriboga, 1975; Neugarten, 1979) , and individual timing and variability (Erikson, 1950; Vaillant, 1977) theories and models (Schlossberg, 1984). The resulting model was published in her paper, 'A model for analysing human adaptation to transition', and is shown below in Figure 2.1.

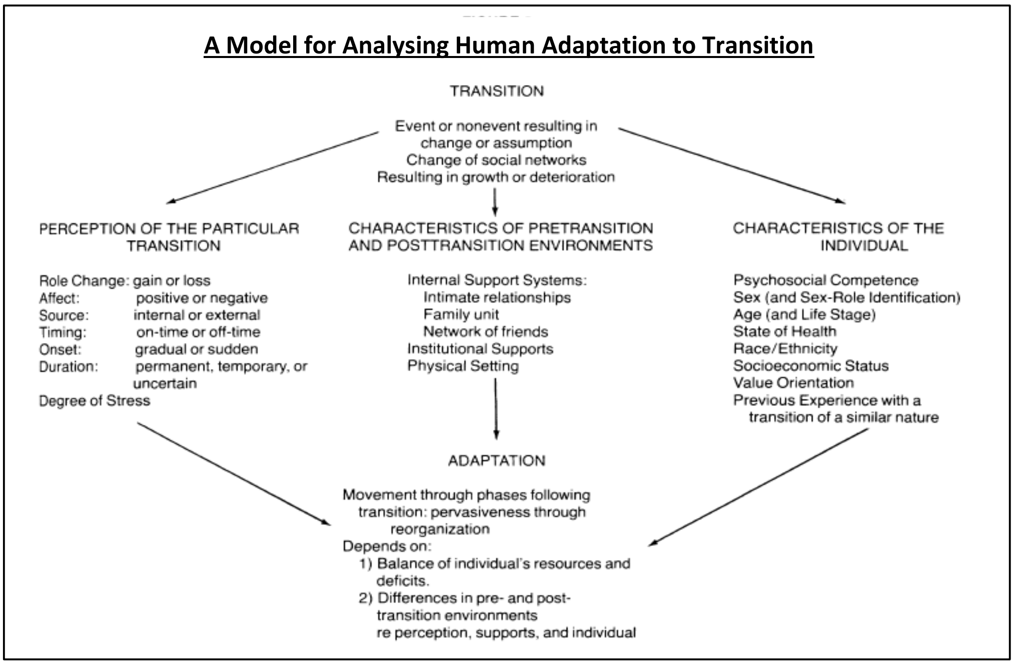

A Model for Analysing Human Adaptation to Transition
TRANSITION
Event or nonevent resulting in change or assumption
Change of social networks
Resulting in growth or deterioration
PERCEPTION OF THE PARTICULAR TRANSITION
Role Change: gain or loss
Affect: positive or negative
Source: internal or external
Timing: on-time or off-time
Onset: gradual or sudden
Duration: permanent, temporary, or uncertain
Degree of Stress
CHARACTERISTICS OF PRETRANSITION AND POSTTRANSITION ENVIRONMENTS
Internal Support Systems:
Intimate relationships
Family unit
Network of friends
Institutional Supports
Physical Setting
CHARACTERISTICS OF THE INDIVIDUAL
Psychosocial Competence
Sex (and Sex-Role Identification)
Age (and Life Stage)
State of Health
Race/Ethnicity
Socioeconomic Status
Value Orientation
Previous Experience with a transition of a similar nature
ADAPTATION
Movement through phases following transition: pervasiveness through reorganization
Depends on:
1) Balance of individual's resources and deficits.
2) Differences in pre- and post-transition environments re perception, supports, and individual

Figure 2.1. Schlossberg's model for analysing human adaptation to transition

(Schlossberg, 1981)

2.9.1.1 Model domains and elements

Over time and with collaboration with other researchers including Goodman & Anderson and Chickering, Schlossberg's model has been applied to many different transition situations, including school-to-work, school-to-tertiary education, career change, and work-to-retirement transitions, as evidenced in the literature (Burns, 2010; Kotewa, 1995; Lane, 1989; Rayle & Chung, 2008; Sargent & Schlossberg, 1988; Schlossberg, 1981, 2011; Schlossberg & Leibowitz, 1980). As a result, the domains of Schlossberg's model are now referred to as the '4S's' – situation, support, self, and strategies (Goodman, Schlossberg, & Anderson, 2006; Schlossberg, 2008, 2011). This model of transition helps tease out; 1) the type of transition; 2) the degree of life alteration; 3) where an individual is in the process, and; 4) the resources available to facilitate successful transition (Schlossberg, 2008). Additionally, in the case of an anticipated event such as school transition, Schlossberg and colleagues have described three phases of transition, known as:

- Moving in: The individual moves into a new situation where they must become familiar with new rules, expectations and norms.
- Moving through: The individual learns to reconcile and balance or replace the old rules, expectation and norms with the new rules, expectations and norms.
- Moving out: The individual sees the end of the transition and moves on with their life. (Goodman, et al., 2006)

According to the model, therefore, an individual's ability to cope with any transition depends on the balance of resources in the 4S domains (Goodman, et al., 2006; Schlossberg, 1981, 1984), with elements defined in Table 2.1.

While not in common use for analysing primary-to-secondary school transition, this model goes some way in addressing the gaps identified in the preceding literature review. Schlossberg's model fulfils the requirements for an ecological approach to transition, the measurement of multiple predictors and multiple outcomes, and facilitates longitudinal research (Goodman, et al., 2006), in which dips and recoveries in outcomes can be determined. Schlossberg's model is also general enough to apply to any life stage (Schlossberg, 2008) - indeed the author states that the importance of each variable in the model depends on the cohort's life-stage (Schlossberg, 1981). The model allows for examination of both successful and unsuccessful transitions and, given the number of variables in the '4S's', provides many entry points for future interventions that aim to increase positive outcomes for individuals in transition (Schlossberg, 1981; 1984). Additionally, two recent theses investigating the primary to secondary school transition have successfully utilised Schlossberg's model (Nolan, 2012; Towns, 2010). For these reasons, further work in the application of this model to explaining primary to secondary school transition is worthwhile and necessary if a unifying model is to be evidenced, and is therefore the model of choice for this research project.

2.10 Limitations of the current literature

Many of the studies reviewed for this proposal focussed on only one part of the transition experience such as peers, teachers, individual characteristics, and elements of these in relation to a particular outcome (social/emotional or academic). Barber & Olsen (Barber & Olsen, 2004) determined that there are relatively fewer primary to secondary transition studies in comparison to those investigating the beginning of formal schooling and the move from secondary school into the workforce or higher education. Few studies approached the primary-secondary transition from an ecological stance of multiple predictors and multiple outcomes, perhaps due to the lack of a specific guiding theory or model for adolescent transition, and only one unpublished thesis (Towns, 2010) investigated students' transition experiences in a kindergarten-to-Year 12 school. Much of the primary to secondary school literature employs cross-sectional quantitative or observational qualitative designs (Carolan, 2013), so even rarer were studies into the short- and longer-term effects of a poor transition. However, several authors stressed the need for longitudinal research to assess if changes in student outcomes can be evidenced over time (Benner, 2011; Benner & Graham, 2009; Coffey, 2009; de Bruyn, 2005). Arens, et al., (2013) further qualify this point to express the need for pre- and post-transition research to reveal academic, social and emotional dip and recovery points during transition, and the integration of ecological variables including the secondary school environment in future studies. The need for further research is also expressed in the 2006 'Transition Project' report, which suggests following participants past the end of high school into the workforce or tertiary education to provide data regarding the long-term outcomes of poor transition experiences (NSWDET, 2006). Finally, few of the articles were by Australian researchers, with most of the items originating in the United Kingdom, United States, or Europe, therefore not reflecting an Australian context and limiting the ability of insights from the current literature to be applied to the Australian education system.

Table 2.1 Schlossberg's model for analysing human adaptation to transition – domains, elements and definitions

Domain	Element	Definition
Situation: *Perception of transition*	Role change	A gain or loss of status, or an alteration in an individual's role in a situation.
	Affect	Positive and/or negative feelings due to anticipation of a situation.
	Source	Internal or external locus of control over the impending change of situation.
	Timing	The 'on-time' or 'off-time' developmental readiness of the individual to tackle the new situation.
	Onset	Gradual or sudden onset of the new situation, based on existing knowledge and preparation.
	Duration	Perceived duration of the changed situation – permanent, temporary, or uncertain.
	Degree of stress	Partly dependant on the elements above, but is concerned with concurrent stressors outside of the impending change .
Support: *Transition environment*	Internal support systems	The giving and receiving of stable social and emotional support from intimate others, family and friends.
	Institutional supports	Formal and community groups which an individual can turn to/ receive support from, in relation to the transition.
	Physical setting	The occupational and home environment, location, and arrangements of the facilities in which the individual experiences transition.
Self: *Interpersonal factors*	Psychosocial competence	Coping, resilience and psychological resources of the individual.
	Sex and sex role identification	Identification of gender, & internalisation/externalisation of to gender difference, stereotyping or cultural norms.
	Age and life stage	The individual's developmental capacity to respond to tasks as expected by society.
	State of health	Physical ability of an individual to adapt to situational change.
	Race/ethnicity	The impact on culture and minority group membership on levels of support from all sources.
	Socioeconomic status	The influence of socioeconomic differentials on the individual's access to resources for adapting to transition.
	Value orientation	The influence of functional values and beliefs of the individual on the transition experience.
	Previous experience of similar transitions	Attitudes and competencies developed to manage transition based on previous experience.
Strategies: *The process of adaptation*	Movement through phases of transition	Depends the individual's ability to balance resources and deficits in the context of their own perception, environment and individual resources. Adaptation is achieved through modification of the situation, controlling the meaning of the problem, and managing the stress of the transition.

(Schlossberg, 1981, 1984, 2011)

2.11 Summary

The transition from primary to secondary school is a time of change, personal growth, challenge and excitement. For many adolescents it can also be a time of vulnerability and uncertainty. Many predictors influence an adolescent’s transition experience including individual characteristics, peers, family, and school environment. An ecological approach to transition that encompasses the many predictors and outcomes of transition is necessary to fully explore these factors and describe how they impact on the social, emotional and academic domains of the transitioning adolescent. A positive perceived transition experience can lead to success across these domains, and in turn can positively influence the ongoing mental health, social well-being and academic success for the individual, and continuing on into later life. Given the lack of evidence-based literature regarding primary to secondary transition in the Australian context and the migration in 2015 of Western Australian Year 6 public school students to secondary school in Year 7, further research is timely.

CHAPTER THREE

METHODS AND PROCEDURES

3.1 Aim of the study

The aim of this study was to determine the predictors of a positive transition from primary to secondary school in the Western Australian educational context. The contributions of mental health, social well-being and academic results to transition experience were also examined. Gender, primary school origin and socio-economic status were investigated to determine if these had a confounding influence on transition experience.

3.2 Research questions and hypotheses

The purpose of this study therefore is to follow a cohort of students through the crucial primary to secondary school transition period and identify the significant predictors of transition to secondary school. The specific research questions and hypotheses developed for this research are as follows:

Research question one:
Does students' perception of transition at the end of Year 6 in 2013 have an impact on their transition experience at the commencement of Year 7 and six months post-transition, after controlling for gender and primary school origin?

> H_0: There is no relationship between perception of transition at the end of Year 6 and transition experience at commencement of Year 7, after controlling for gender and primary school origin.
>
> H_0: There is no relationship between perception of transition at the end of Year 6 and transition experience in Year 7 at six months post-transition, after controlling for gender and primary school origin.

Research question 2:

Does students' transition environment at the end of Year 6 in 2013 have an impact on their transition experience at the commencement of Year 7 and six months post-transition, after controlling for gender and primary school origin?

> H_0: There is no relationship between transition environment at the end of Year 6 and transition experience at commencement of Year 7 after controlling for gender and primary school origin.
>
> H_0: There is no relationship between transition environment at the end of Year 6 and transition experience in Year 7 at six months post-transition after controlling for gender and primary school origin.

Research question three:

Do students' interpersonal factors at the end of Year 6 in 2013 have an impact on their transition experience at the commencement of Year 7 and six months post-transition, after controlling for gender and primary school origin?

> H_0: There is no relationship between interpersonal factors at the end of Year 6 and transition experience at commencement of Year 7, after controlling for gender and primary school origin.
>
> H_0: There is no relationship between interpersonal factors at the end of Year 6 and transition experience in Year 7 at six months post-transition, after controlling for gender and primary school origin.

Research question four:

Do students' academic results in Year 6 in 2013 have an impact on their actual transition experience in Year 7 and six months post-transition, after controlling for gender and primary school origin?

> H_0: There is no relationship between academic results in Year 6 and transition experience at commencement of Year 7 after controlling for gender and primary school origin.
>
> H_0: There is no relationship between academic results in Year 6 and transition experience in Year 7 at six months post-transition, after controlling for gender and primary school origin.

3.3 Study design

Given the multifactorial nature of the transition process as described in the literature, a case study approach was taken to this research, and a large Western Australian private school catering for students from kindergarten to Year 12 was chosen to participate as the case study school. Data for this research was collected from and in relation to the 2014 of Year 7 students, who originated from within the primary campus located at the case study school, recognised 'feeder' primary schools in close proximity, and other government, private and independent schools nearby. In this research, data were collected from Year 7 students aged between 11 and 13 years of age, in the classroom setting. In Term 1, 2014, retrospective data relating to Year 6 experiences was collected with immediate post-transition Year 7 data, while Time 2 data was collected approximately six months later, and comprised the post-transition Year 7 information. Additional supporting data was collected from student record files and school administration. The design chosen for this proposed study was an explorative case study using baseline and post-transition surveys and artefact collection to gather data about the primary to secondary school transition experience in the 2014 Year 7 cohort, and is shown in Figure 3.2. This design enabled a large number of factors to be measured in a relatively small cohort in order to test Schlossberg's model.

	Term 4, 2013	**Term 1, 2014**	**Term 3,2014**
Cohort	-1 <- - - - - - - - - - - - -	0 ————————	1
	(retrospective as at Time 1)	Time 1	Time 2

Figure 3.1. Rising to the Challenge cohort study design

3.4 Sample selection

3.4.1 Selection of the case study school

The case study school was purposively chosen to participate in this research based on the characteristics that were amenable to the research questions of this study. The case study school has a 2014 enrolment of approximately 1700 students, and consists of a two-stream primary school and six-stream secondary school on one campus. Students have been transitioning from primary to secondary school in Year 7 at this secondary school since 2009, and in the primary school there are two classes of Year 6 students, most of whom are expected to move to the secondary campus in Year 7. There are also three recognised ‘feeder’ schools whose students are given preferential enrolment into Year 7 at the case study school, plus students from other local private, independent and government schools, who make up the remainder of the 2014 Year 7 cohort. In 2014 there were six classes of between 32 and 35 students (n=204*)* available to participate in the study.

3.4.1.1 The case study school context

A short discussion of the context of the case study school context is prudent at this juncture, as this informed the choice of school for this Master’s thesis. The school context informed the researcher as to preparations for transition made and the transitional culture that exists within the school both prior to and after moving to secondary school. The transitioning of students in Year 7 at the case study school commenced several years prior to this research, and therefore the school’s processes in managing this move are now well established. This particular school operates from a faith-based background, and while the matter of transitioning to secondary school in a faith-based school may be slightly different to that of a secular school and influence results due to possible higher levels of pastoral care, it also ensures that the sample of students surveyed for this research come from a more-or-less homogenous background in this regard. This homogeneity was important for the study since students in the sample came from a variety of primary schools. In addition, the case study school possessed the characteristics required for the novel part of this research – this being the ability to look at differences in the experiences of ‘continuous’, ‘feeder’ and ‘other’ primary school students who commenced their secondary education at the case study school at the same point in time.

The case study school begins preparation for transitioning ‘feeder’ students in Year 5. This is when enrolments are sought from the recognised ‘feeder’ primary schools and information visits, including a question-and-answer forum, are made by a senior case study school staff member and several ex-students of each primary school. Students at ‘feeder’ schools are encouraged to ask questions of the visiting staff and ex-students, and ex-students give a talk about life at secondary school. ‘Continuous’ students are not required to re-enrol for entry to secondary school, and ‘other’ schools are not approached – rather, the individual families approach the school directly for enrolment information.

Towards the end of Year 6, the primary schools of all students enrolled into Year 7 are sent an information request form. This form allows the case study school to gain information about the literacy and numeracy levels, educational supports required, pastoral care needs, special skills, and behavioural or social issues than may need attention by the new school for each student. A dedicated Year 7 co-ordinator facilitates this process, with the assistance of student services administration staff. The Year 7 co-ordinator is a member of the secondary school teaching staff who is widely experienced with the needs of adolescents and will stay with the group throughout Year 7. Additionally, comprehensive school information, including the school’s prospectus and policies, are available on the case study school’s website. The ‘Middle Learning Centre’ (Year 7-9) webpage includes a commitment to meeting the needs of individual students and the building of strong and positive relationships between staff and students.

At the end of Year 6, an information meeting is held by the Year 7 co-ordinator for parents on the school premises, and families are provided with a curriculum document that provides an introduction to Year 7, staff contact details, a description of the learning environment including teaching programs, homework and assessments, lockers, service learning, extra-curricular activities, and life balance. This document also contains a section on the importance of parents as learning partners for their children. Around this time, all Year 6 students enrolled for Year 7 attend an orientation day where students are split into their Form (class) groups for the following year, and get to meet their Form teacher. Orientation day activities are managed by the Year 7 co-ordinator and are geared toward getting to know other students, their future teachers, and being able to find their way around the school with a map, and experiencing ‘a day in the life of a secondary school student’.

Finally, on the first day of Year 7, a ‘welcome’ assembly is held for the entire cohort, and students begin learning about what is required in secondary school through orientation workshops over the next week interspersed with regular classes. A second parent meeting was also held in the first weeks of the school term to ensure parents are up-to-date with the expectations of Year 7 going forward, and general school information. The Year 7 co-ordinator facilitates all of these activities, and continues to be the main point of contact for parents and other teachers throughout Year 7, until the students are allocated their Form teachers for the rest of their time at secondary school on their commencement of Year 8.

3.4.1.2 School demographics

According to the Australian national school rating website “MySchool” *(*available at www.myschool.edu.au), the case study school has an Index of Community Socio-Educational Advantage (ICSEA) rating in 2013 of 922 (median = 1000*).* The ICSEA rating system was implemented by the Australian Curriculum Assessment and Reporting Authority (ACARA) in 2008, and uses measures of student-level standardised achievement, parent education and occupation, school geographical location, and percentage of Indigenous students to quantify socio-educational advantage and allow comparison of schools on a national level (Australian Curriculum Assessment and Reporting Authority, 2014). The 2013 ICSEA distribution of students shows that 34% of students at this school are in the bottom quartile (relatively disadvantaged), 54% in the middle quartiles, and 12% of students in the top quartile (relatively advantaged) as shown in Table 3.2, below. This independent data positions the school close to ‘average’ among similar schools in Australia relative to educational advantage, making it a suitable choice for this study

Table 3.1. 2013 Index of Community Socio-Educational Advantage (ICSEA) of case study school

Case study school ICSEA value	992			
Average national ICSEA value	1000			
	Bottom quarter	**Middle quarters**		**Top quarter**
School distribution	34%	30%	24%	12%
Australian distribution	25%	25%	25%	25%

(Australian Curriculum Assessment and Reporting Authority, 2014)

3.4.2 Recruitment

The case study school was approached firstly by email and then in a face-to-face meeting with the school principal to discuss the research project and to provide further information about the project commitment for the school. Once in-principle agreement for participation had been reached with the school, applications for both the Edith Cowan University Human Research Ethics Committee and the Catholic Education Office were submitted and subsequently approved. Written consent was then obtained from the case study school (Appendix 1).

In the 2014 Year 7 cohort, there were six classes of up to 35 students, resulting in a convenience sample of 204 students. All in-coming Year 7 students as at 31st December 2013 were eligible to participate in the study. Any student enrolled after the 1st January 2014 was excluded from the study, as it could not be ascertained that they attended the same transition activities that previously enrolled students had participated in prior to commencing Year 7 (Arthur, et al., 2010). In this cohort, no students were enrolled after the 1st January 2014. Eligible students from the case study school were recruited in early 2014 prior to the start of the school year via mail out from the school's completed list of Year 7 enrolments for 2014. A mailing list was provided by the school and families were sent an information letter (Appendix 2), opt-out consent form (Appendix 2) and reply-paid envelope for return of the consent form should they choose not to participate in this research. The one-stage opt-out consent process was requested by the school principal and approved by the Edith Cowan University Human Research Ethics Committee and Catholic Education Office to facilitate a high participation rate, as this research was considered of importance to the case study school. Of the 204 students in the 2014 Year 7 cohort, 16 (8%) families withdrew their consent for their adolescent to participate in the research, with the most commonly cited reason being that they did not want information from their child's school records file being accessed for any reason other than for school purposes.

3.5 Theoretical model

The theoretical model for this research has been adapted from Schlossberg's (1984) model and informed by the literature reviewed for this work. For this thesis, the domains of 'situation', 'supports' and 'self' were measured, with academic results included as the literature supports their use as a key indicator of transition success. The strategies that students employ to adapt to secondary school were not measured, as this required distinctly time intensive qualitative techniques outside the scope of this thesis. The proposed theoretical model for this thesis is presented in Figure 3.3.

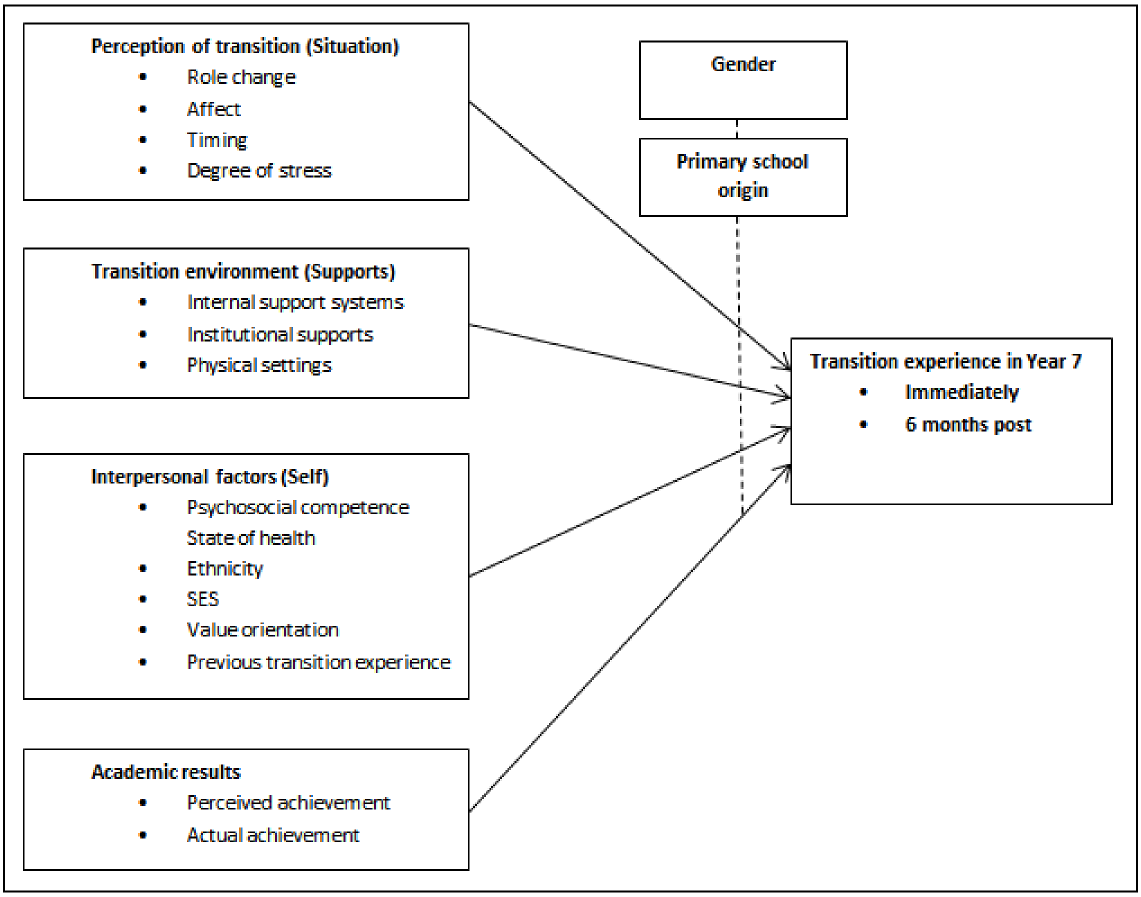


Figure 3.2. Master's thesis theoretical model for analysis

3.6 Measures

Self-report surveys were used to collect data from the Year 7 cohort in Week 3 of Term 1, 2014, and in Week 2 of Term 3, 2014. Additional data was collected through the extraction of Year 6 pre-transition and Year 7 first semester post-transition academic results (Mathematics and English) from report copies held in participating student record files. Artefacts in the form of policy documents, maps, and transition information resources were also collected from the school to document evidence relating to transition preparation, school environment and student attendance over the transition period.

3.6.1 Survey development

There is currently no one valid and reliable instrument available to measure primary to secondary transition. Therefore, using the literature reviewed for this project and Schlossberg's model, surveys were developed by selecting previously published and validated scales corresponding to the constructs to be measured, along with questions previously used in studies conducted by the Child Health Promotion Research Centre (CHPRC), based at Edith Cowan University in Perth, Western Australia. The elements of each dimension of Schlossberg's model (1981) were matched to well-known and validated measures (Appendix 3) including the 'Kessler Psychological Distress Scale' (K-10) (Kessler et al., 2002), 'Loneliness and Social Dissatisfaction Questionnaire' (Cassidy & Asher, 1992), 'Perception of Peer Support Scale' (Ladd, Kochenderfer, & Coleman, 1996), 'Self-Description Questionnaire' (Marsh, 1990) and the 'Revised Olweus Bully/Victim Questionnaire' (Olweus, 1996). Several questions were also extracted from surveys used in the CHPRC's Supportive Schools Project (2005-2007) which were based on the work of Akos (Akos, 2002; Akos & Galassi, 2004) that included questions about primary to secondary school transition. Finally, new questions were written to address any remaining elements in the model. The baseline and final surveys were written to specifically measure each of the elements in the dimensions of Schlossberg's model (Figure 4.3).

3.7 Dependent variables

There were two dependent variables measured as part of this research. These variables were 'transition experience' measured at baseline which was within three weeks of commencing at the new secondary school, and 'actual transition experience' measured at six months post-transition being six months after moving to the new secondary school. This researcher acknowledges the collection of baseline data in the last term of Year 6 would provide the most accurate results for this cohort. The privacy and ethical requirements of the differing school systems that WA primary schools operate in, the project timeline, and the most amenable window for baseline data collection occurring only in the first part of the school year meant much of the baseline data would be retrospectively collected for this project.

The dependent variable 'transition experience' was measured by one question posed in the baseline survey, and based on the previous work of Akos and Galassi (2002; 2004). To assess 'transition experience', students were asked, 'how was the move from primary school for you?' to which students could choose from response options of 'difficult', 'somewhat difficult', 'somewhat easy' and 'easy'. The purpose of this variable was to measure students' subjective perception of their transition experience soon after commencing at secondary school. Similarly, the dependent variable 'actual transition experience' was measured by this same question posed in the post-transition survey administered in Year 7, Term 3 at the case study school. The purpose of this question was to gauge students' subjective perceptions of their transition experience six months post-transition into secondary school.

3.8 Independent variables

The survey questions for this research were matched to the elements of each domain of Schossberg's model (1981) as shown in Figure 3.3 in order to capture the complexity of the transition experience. The academic progress of participants was measured by separate questions and review of each student's record file. Any domain elements that were homogenous for all participants, e.g. the timing of transition, were removed from the model. Demographic variables of sex and socio-economic status were also removed, as they were conditions of the research questions

3.8.1 Situation: perception of transition

Role change

The element of this domain relating to role change was measured using questions based on the work of Akos & colleagues (Akos, 2002; Akos & Galassi, 2004). The two role change questions asked participants to choose from a list the items they 1) were looking forward to or were happy about, and 2) were concerned or had worries about, in relation to secondary school. Both questions included a list of possible responses based on the literature reviewed from with the participants could choose as many that applied. For a full list of responses, see Appendix 4. This variable was measured at baseline and six month post-transition to allow comparison between pre-transition expectations and post-transition actual experiences of secondary school transition.

Effect of transition

The effect of transition was measured using two qualitative questions that asked students 'what they liked about their new school' and what 'the disliked about their new secondary school'. Responses were thematically analysed and then aggregated into categories representing the main theme in student's answers. The number of categories for each student was then calculated to provide an indication of how positively or negatively students' were feeling towards secondary school. These questions were included in both surveys to allow for comparison of any changes in response over time.

Timing of transition

The timing of transition was measured by asking the month and year of birth to determine whether the participant was situated in the transition school age requirement of 11-13 years, and was included in both surveys to allow for missing or incomplete data from the baseline collection. The source, onset and duration of transition (as per Schlossberg's model) were not measured in this cohort as these elements are mandated in legislation and are outside the control of the child, their family or the case study school. These results were aggregated into year quarters for use in data analysis.

Degree of stress

An additional question from the Supportive Schools Project was also included that asked if there had been any major occurrences in the last six months (yes/no) such as a death or separation of parents. This question was posed to determine external stress factors outside of the move from primary to secondary school, and was included in both surveys.

3.8.2 Supports: transition environment

Internal support systems

Participants' internal support systems were measured using three questions. In addition, these questions were used previously in the Supportive Schools Project specifically in relation to adolescent transition experience. Family connectedness was measured using a scale based on the work of McNeely, et al, (McNeely, Nonnemaker, & Blum, 2002) and validated (α=0.88) by Waters & Cross (Waters & Cross, 2010). This scale consists of 15 items (Appendix 4) with a Likert-style five-item response set of 'strongly disagree' to 'strongly agree'. The second question was a seven item scale of loneliness (Appendix 4) derived from the 'Loneliness and Social Dissatisfaction Questionnaire' (α≥0.9) authored by Cassidy & Asher (Cassidy & Asher, 1992), with 5-point Likert-style responses ranging from 'strongly agree' to 'strongly disagree'. The third internal support question was an adapted 11 item scale (Appendix 4) based on Ladd & Coleman's (1996) research examining children's perceptions of peer support (α≥0.85). The response set for this question was 'lots of times', 'sometimes' and 'never'. These three scales were posed in both surveys to measure changes in internal support systems immediately post-transition and six months post-transition.

Institutional supports

Institutional supports were measured by a five item connectedness to school scale adapted from the work of authors Resnick (1997) and McNeely (2002), and validated (α=0.8) by Waters & Cross (2010). This question asked, 'How do you feel about your school?' Participants were presented with five statements, being 'I feel close to people at this school', 'I feel like I am part of this school', 'I am happy to be at this school', 'The teachers at this school treat students fairly', and 'I feel safe at this school' to which five responses ranging from 'strongly agree' to strongly disagree' were provided. An additional question regarding involvement in extra-curricular school activities from the Supportive Schools Project was also posed, asking 'in an average week did you participate in any activities (such as sports, youth groups, drama groups, church groups, etc.) outside of school hours?' with a request to write down any activities the student participated in. A teacher support scale was also included, and based on the bullying work published by Olweus (Olweus, 1996) and also validated (α=0.83) by Waters & Cross (2010). The teacher support scale asks, 'At my school, there is a teacher of some other adult who...'. Four levels of agreement ranging from 'not at all true' to 'very much true' and an 'unsure' option are provided in response to the statements: 'really cares about me', ' tells me when I do a good job', 'notices when I am not there', 'always wants me to do my best', 'listens to me when I have something to say', and 'believes that I will be a success'. Additionally a new question was written for this research which asked if participants had received any information about moving into secondary school and where that information had come from in order to ascertain pre-transition preparation activities.

Physical settings

The physical settings of the pre- and post-transition environment were determined by one question that asked, 'I feel safe at this school', to which the participant could respond 'strongly agree', 'agree', 'neither agree or disagree', 'disagree' or 'strongly disagree'. This question was previously included as part of the school connectedness scale and based on the work of Resnick (1997) and McNeely (2002). Written answer questions were also included for thematic analysis, and asked what the participant liked and disliked about being at secondary school. All of the questions in this section were included in both surveys so that the characteristics of both the pre- and post-transition environment could be determined.

3.8.3 Self: interpersonal factors

Psychosocial competence

Psychosocial competence was indicated by the Kessler Psychological Distress Scale (K-10) (Kessler, et al., 2002). This measure utilises 10 items (Appendix 4) with five point Likert-style responses of, 'all of the time', 'most of the time', 'some of the time', a little of the time', and 'none of the time'. Kessler reports the scale to have a coefficient of α=0.93 (Kessler, et al., 2002) and therefore was suitable to measure the amount of concurrent stress of participants based on the previous four weeks for baseline and six months post-transition.

Sex/role identification

The case study school in this research has an ideology that prevented any question regarding sex or gender role identification being posed. For the purpose of this thesis, demographic data collected in the question, ‘Are you male or female?’ was used for this element in the ‘self’ domain. Given the hypotheses posed for this research uses gender as a factor for examination of analysis results, this variable was excluded from the ‘self’ domain.

Age/life stage

Age/life stage was previously measured by the question ‘Please write the month and year you were born’. The resulting data was aggregated in quarter-years for data analysis.

State of health

The state of health of participants was not measured in either survey to avoid possible overstatement of illness, however was later extracted from student record file at the case study school. This data provided details of any on-going health issues for each participant. Unfortunately, due to a recent change in the case study school’s student management software, school staff were unable to provide information about student absentees without including students whose consent to participate had been withdrawn.

Race/ethnicity

Students’ race/ethnicity was measured by country of birth and asked in the question ‘Were you born in Australia?’ This allowed for those students who, while identifying as Australian (or other) citizens, have a family or cultural background from outside Australia. If the answer was ‘no’, a request was made for the participant to write the name of the country where they were born. These data were then classified into two categories, being ‘born in Australia’ and ‘not born in Australia’.

Socioeconomic status

In the baseline survey, the six item family affluence scale and related perceived wealth question from the Health Behaviour of School-aged Children study were included in the baseline survey as a measure of socioeconomic status (Currie et al., 2008). This scale asks participants ‘Does your family own a car, truck or van? ‘Do you have a bedroom for yourself?’, ‘How many computers does your family own?’ ‘How many bathrooms (room with a bath/shower or both) are in your home?', 'Does your family have a dishwasher at home?', 'How many times did you and your family travel out of Australia for a holiday/vacation last year?', and for perceived wealth students were asked 'How wealthy do you think your family is?' These items have proven to be easy for children to answer and have high response rates (Currie, et al., 2008) over requesting parental education or income level, and even in light of a low alpha coefficient (α=0.31) evidenced in published validation studies, this scale provides a usable option over others for measuring socioeconomic status (Boudreau & Poulin, 2009).

Value orientation

Participants' value orientations were measured by the use of the previously validated honesty/trustworthiness (α=0.78) and general (α=0.74) scales of the Self-Description Questionnaire II, which is specifically designed for use with young adolescents (Marsh, 1992). Each scale contains 10 items (see Appendix 4) for which participants choose from the following responses: 'false: not like me at all; isn't like me at all', 'mostly false', 'more false than true'. 'more true than false', 'mostly true', and 'true: this statement describes me very well; it is very much like me'

Previous transition experience

Participants were asked in a new question if they had moved schools previously in an effort to determine if they had any prior transition experiences to draw on. Participants were also asked the name of the primary school they attended in Year 6 to determine if they were 'continuous', 'feeder' or 'other' students.

Academic progress

Participants' perception of their mathematics and English academic progress in relation to others in their grade was measured in one question, drawn from the Supportive Schools Project in the survey at baseline. This question asked, 'Compared to other students in your Year 6 group, which of the following describes most of the results on your last school report in Year 6?' with a choice of the following responses: 'better than most other students in my class', 'about the same as most other students in my class', 'not as good as most other student in my class', and 'I don't know'. Actual academic progress in relation to students' mathematics and English grades were then extracted from student record files at a later date, from the last available pre-transition primary school report and from the first secondary school post-transition report in Semester 1, Year 7.

With the exception of specific questions relating to pre-transition experience, all questions were repeated in the final 6 months post-transition survey (Appendix 5).

3.8.4 Other measures

Remaining data to complete the model was collected on a catalogue sheet designed for the purpose (Appendix 6). Student records were perused and information regarding health status, school Mathematics and English results pre- and post- transition was collected for inclusion in the ‘Self: characteristics of the individual’ domain. Additionally, school documents and templates were collected to inform the overall school context in which the transition to secondary school occurred.

3.8.5 Reliability and validity

The surveys developed for this project included 17 questions from the Supportive Schools Project (SSP) instrument. Face and content validity of the original questions had been undertaken by senior academic CHPRC staff at the time of the SSP, and questions had been previously subjected to a test-retest protocol with 177 students in Year 7 as part of the SSP. Given that the instrument development for this research was undertaken during the six week break between the 2013 and 2014 school years, and needed to be ready for baseline survey administration immediately the students started school, further test-retest procedures were not undertaken. New items for this instrument consisted of two questions relating to Year 6 transition experience, and a values orientation scale consisting of two subscales of the Self-Description Questionnaire II (20 items) (Marsh, 1992). Senior academic staff at the CHPRC familiar with the research topic and adolescent mental health and well-being examined the instruments prior to the commencement of data collection for this current research. In response to their feedback regarding the length of the survey, the 10 item K-10 (Kessler, et al., 2002) distress scale was substituted into the baseline survey to replace a much longer scale for psychological distress used in the original SSP instrument.

The amended baseline survey (Appendix 4) was piloted online in January 2014 via Qualtrics online survey software to a convenience sample of 19 adolescents around the same age of the cohort, and who had already recently transitioned to secondary school. Once again, the time constraints did not allow a large pilot sample to be sourced. Nevertheless, Cronbach’s alpha reliability analyses were able to be performed on all scales in the pilot survey (Table 3.3). An alpha of 0.70 or greater was reported for each measure, except for school connectedness that reported an alpha of 0.699. Alphas of this level were considered satisfactory, therefore suggesting each item was measuring a common dimension (Friis & Sellers, 1996).

Table 3.2. Pilot survey scale reliability results

Scale measures	Cronbach's alpha (α)
Peer support	0.824
Loneliness & social dissatisfaction	0.803
School connectedness	0.699
Teacher connectedness	0.871
Family connectedness	0.893
Self-description	0.692
K-10	0.938

Feedback from participants resulted in some minor changes to wording to clarify some of the questions and to improve comprehension, and the Family Affluence Scale (seven questions) (Currie, et al., 2008) was substituted for two questions asking about parental education levels to measure socioeconomic status. These changes are reflected in the baseline and final surveys located in Appendices 4 and 5.

3.9 Data collection

3.9.1 Survey administration

All surveys used in this research project were loaded onto Qualtrics online survey software for deployment to the pilot convenience sample, and for baseline and post-test data collection for the case study school Year 7 cohort. This researcher and one other postgraduate student, both of whom have significant experience in research activities in the classroom, administered student surveys at baseline (Week 3, Term 1, 2014) and six months post-transition (Week 2, Term 3, 2014). Before and after each data collection, the administrators met to discuss any administration issues to ensure a consistent approach for each class group. During baseline survey administration, an unexpected school assembly resulted in two classes of students having 10 minutes less time to complete their surveys. The result of this was that demographic questions were missed for most of these two classes. Consequently, given that demographics were unlikely to change considerably before the post-transition administration in six months' time, the decision was made to use only the post-transition demographic data in analysis of results.

Classroom teachers remained in the classroom at each administration to ensure duty of care to the students was maintained, and for behaviour management. At the beginning and end of each administration, students were directed to speak to an adult they trust or call the Kids Helpline should anything in the survey raise an issue they would like to talk about. Administrators read the survey preamble aloud to the students, handed out individual login cards with name, survey link and password to students with consent, and assisted students to access the online survey through their laptop computer. Students without consent for the survey were given work by their teacher, completed a fun activity sheet provided by the administrator, or were allowed to complete other tasks during this time. Paper surveys were held in reserve by the administrators in case of computer or internet problems, and if used were entered immediately after the administration. At baseline, 22 paper surveys were completed and at post-transition, 10 paper surveys were completed. Once the survey was complete, each student returned his or her login card (and paper survey if used) with name sticker removed. Each student in the class, regardless of participation in the survey, received a small stationary item as a thank you and a Kids Helpline card. Students who were absent on the day were later collected into a group for a separate administration, following the procedure previously described.

Table 3.4 presents the baseline and post-test response rates for the Year 7 cohort. Of the 204 students at the case study school who were eligible to participate in the baseline survey, 14 (6.8%) were refused parental consent to participate, and two students (1.0%) did not commence Year 7 at the case study school. In total, 188 students participated in the baseline survey, resulting in a response rate of 92.2%. At post-test, of 188 students eligible to participate, two students had left the school, and were lost to follow-up, while four students were absent and subsequently did not complete the survey despite follow-up attempts. Overall, 89% of the 2014 Year 7 cohort completed both surveys.

Table 3.3. Year 7 student baseline and post-test survey response rates

	Baseline %(n)	**Post-test %(n)**	**Overall %(n)**
Total sample	100.0(204)	100.0(188)	100.0(204)
No consent	6.8(14)	0.0(0)	6.9(14)
Left school	1.0(2)	1.0(2)	1.9(4)
Not completed (absent)	0.0(0)	2.3(4)	1.9(4)
Completed (with consent)	92.2(188)	96.7(182)	**89.3(182)**

3.9.2 Other data collection

At the completion of each data collection, school staff collected school reports for each participant. These were made available to the researcher for extraction of Maths and English results onto a purposely-designed form (Appendix 6). Additional information regarding ongoing health issues was also collected on this form. Data regarding school absences was unable to be collected as a change in school computer software meant that each day of the previous six months would need to be perused to collect this information. The allocation of time required to do this was outside the abilities of this project, and would have meant access to all student information, not just those students with consent.

Information regarding the case study school's context of transition was obtained from the school website and Year 7 co-ordinator, and included proforma letters sent to families, online booklets, school map, agenda for transition day activities, and the PowerPoint presentation used at the Year 7 student, parent and teacher information meeting.

3.10 Data analysis

Responses to both surveys were downloaded from Qualtrics online survey software into SPSS for Windows (version 22) for data cleaning, preliminary analysis, and regression analyses. Students' academic results and health status were entered manually into the SPSS data file, and matched by individual case code to survey results

3.10.1 Data cleaning

Using a standardised data cleaning protocol, all data were examined for errors and duplications, which were then corrected. The number of surveys in the data file was checked to ensure that it matched the number of participants with consent. Question numbers were verified to ensure that data had downloaded in the same format as the original survey, and crosschecked against paper surveys. A missing values analysis identified questions with high percentages of missing values, and these were scrutinised in comparison to the survey questions to determine if missing values were expected, e.g. in the case of a question with multiple responses. Cases were either excluded list-wise for missing items during analysis for response sets that were out of the ordinary, or in the case of mean scores, a condition was imposed where means were calculated for all cases that had answered a minimum of 80% of the question, as per CHPRC data analysis protocols. Invalid choices were not examined as Qualtrics does not allow any input other than the provided response options for quantitative data. Any outliers were reviewed for impact on the data, however since few were recorded and produced little influence on results, they were included in analysis. Frequencies were produced for all variables to ensure that responses were in the expected range for each question. Finally, qualitative answers with no response were completed excluded from the analysis on a question-question basis.

3.10.2 Univariate analysis

Frequencies of all questions in the baseline and post-transition surveys were obtained to determine if the data of this cohort was normally distributed. Normality tests for each continuous variable were produced and frequencies for categorical variables were reviewed. In all cases, data was significantly non-normal, indicating non-parametric analysis techniques should be used. Scale items were collapsed to provide an overall score for each scale, and descriptive statistics produced for all items. Questions with written answers were analysed for emergent themes, and then coded so that frequencies could be completed for these variables.

3.10.3 Bivariate analysis

Independent variables from baseline and post-transition data were tested against grouping variables of gender, primary school origin and socioeconomic status to determine if any significant relationships were present. Each independent variable from the baseline survey was also tested against its counterpart from the six months post-transition survey to identify any significant relationships over time. A series of chi-square, Kruskal-Wallace H and Mann-Whitney U tests were performed, according to the variable being tested.

3.10.4 Multivariate analysis

To resolve the hypotheses postulated for this study, SPSS was used to determine the significance of independent variables in predicting the dependent variables either measured directly or compiled from the data. Based on preliminary results, several variables were required to be collapsed to produce meaningful results. Multinomial logistic regression techniques were used to test these hypotheses as the dependent variables were categorical in nature.

3.11 Summary

This chapter has detailed the methods associated with the ‘Rising to the Challenge’ research project. A case study school was selected to participate based on its overall amenability to the research questions. Schlossberg’s transition model was chosen for this research as it posits an ecological approach to adolescents’ experience of primary to secondary school transition. Previously validated measures were used in the construction of the baseline and final self-report survey, and new questions were included to capture pre-transition data, and to measure independent and dependant variables. Other data collected included students’ academic results, and school documents relating to the transition to secondary school. Data was collected immediately post-transition, and again at six months post-transition from 188 students with parental consent, and additional data collected from student record files. Statistical analyses were undertaken to determine if the data was normally distributed, and to describe and fit the proposed theoretical model of the hypotheses using multinomial logistic regression techniques.

CHAPTER FOUR

RESULTS

The results of the baseline and post-test data collections conducted in Term 1 and Term 3, 2014 with Year 7 students are described in this chapter. Response rates and demographic characteristics are provided in the first instance, followed by variables grouped within each domain of Schlossberg's model (Figure 2.1). Descriptive statistics are presented and discussed.

4.1 Demographic characteristics of the sample

The demographic characteristics of the student cohort were measured by several questions in the baseline survey. Due to unadvised timetable changes on one of the days of baseline data collection, a 10 minute shortened class time meant that two of the eight classes of students had difficulty in completing all questions in the survey. For these students, incomplete demographic items were in the section located at the end of the baseline survey, and between 18% and 23% of students did not partially or fully complete these questions. In order to rectify this, demographic questions were asked again in the post-transition survey. Since demographic characteristics would not be expected to change significantly over 6 months, data from baseline and post-transition surveys were merged and used to determine the overall demographic characteristics of the sample. Demographic characteristics were measured by one question for gender, one question for primary school of origin, and six questions for socioeconomic status comprising the Family Affluence scale (Currie, et al., 2008).

4.1.1 Gender

This item was measured simply by asking, 'Are you male or female?' It was considered inappropriate to delve into gender identification any further given the ideology of the school and age of the students, and was outside the overall scope of this project. Due to incomplete baseline survey results, this question was repeated in the post-transition survey, and these results were used to provide a more complete picture of the gender make-up of the cohort. The overall results of this question are presented in Tables 4.1 and 4.2.

Table 4.1 Student gender at post-transition

Are you male or female?	%(n)
Male	44.0(77)
Female	56.0(98)

Table 4.2 Student gender by primary school origin and socioeconomic status

Are you male or female?	Males (n=77) %(n)	Females (n=95) %(n)
Primary school origin		
Case study school ('continuous') (n=50)	14.5(25)	14.5(25)
Feeder school ('feeder') (n=71)	15.1(26)	26.2(45)
Non-feeder school (n=51)	15.1(26)	14.5(25)
Socioeconomic status		
Low family affluence (n=13)	2.9(5)	4.6(8)
Middle family affluence (n=115)	28.9(50)	37.6(65)
High family affluence (n=45)	12.1(21)	13.9(24)

Within the cohort of students with consent to participate in this research, 44% were male and 56% were female. Table 4.2 shows the proportion of males and females in the demographic categories of primary school origin and SES. Within the cohort, the proportion of males and females who were 'continuous' or 'other' students was 15% for each of males and females, however for 'feeder' students, 15% were male and 26% were female. For socioeconomic status, low family affluence was reported for 3% for males and 5% of females, middle family affluence was reported for 29% of males and 38% of females, and high family affluence was reported for 12% of males and 14% of females in this study group. Chi-square testing did not reveal any significant relationships between gender and primary school origin or socioeconomic status.

4.1.2 Primary school origin

To determine the primary school origin of students, a question was asked at baseline for students to write down the name of the primary school at which they completed Year 6. Written responses were then recoded to represent the categories required for the research questions of this study. These categories were based on whether the student was a ‘continuous’ student – who already attended the case study school during their final year of primary schooling (Year 6), and had moved on to the secondary school for Year 7; ‘feeder’ student – who attended the recognised ‘feeder’ school affiliated with, but not on the same site as, the case study school; or an ‘other’ student – who completed their last year of primary schooling at a state government primary school, independent school, or private school other than those recognised ‘feeder’ schools. The results for this question are below in Tables 4.3 and 4.4.

Table 4.3 Year 7 cohort primary school of origin

What is the name of the primary school where you completed Year 6?	**(n=175) %(n)**
Case study school (‘continuous’)	29.1(51)
Feeder school (‘feeder’)	40.6(71)
Non-feeder school (‘other’)	30.3(53)

Table 4.4 Student primary school origin by gender and socioeconomic status

Primary school of origin	**Continuous students %(n)**	**(n=172) Feeder students %(n)**	**Other Students %(n)**
Gender ^{a}			
Males (n=77)	14.5(25)	15.1(26)	15.1(26)
Females (n=95)	14.5(25)	26.2(45)	14.5(25)
Socioeconomic status			
Low family affluence (n=13)	0.0(0)	4.6(8)	2.9(5)
Middle family affluence (n=114)	19.7(34)	27.2(47)	19.1(33)
High family affluence (n=45)	9.8(17)	9.2(16)	7.5(13)

$^a p<0.05$ females

The Year 7 cohort was made up of 29% ‘continuous’ students, 41% ‘feeder’ students and 30% ‘other’ students in 2014. Males made up similar proportions across primary school categories, with ‘continuous’ (15%), ‘feeder’ (15%) and ‘other’ (15%) primary school males each making up 45% of the total cohort. Females from ‘continuous’ (15%) and ‘other’ (15%) primary schools were also of the same proportion and made up 30% of the total cohort, while females from ‘feeder’ schools made up the largest proportion of both females and the student sample overall at 26%. The low family affluence group was made up of ‘feeder’ (5%) and ‘other’ (3%) students only, with no students in the ‘continuous’ group, but the high and middle family affluence groups contained students from all primary school types. The high family affluence group was made up of similar proportions of ‘continuous’ (10%), ‘feeder’ (9%) and ‘other’ (8%) primary students. The middle family affluence group represented the largest overall group of students (66% of total cohort) with similar proportions of ‘continuous’ (20%) and ‘other’ (19%) students, and the largest proportion of students in this group from ‘feeder’ (27%) primary schools. Chi-square tests revealed significant results for gender, with the proportion of females significantly higher than males in this cohort (χ^2=8.421, p=0.015). No other significant results were found.

4.1.3 Socioeconomic status

To measure the socioeconomic status of students, the Family Affluence scale (Currie, et al., 2008) was chosen for this study due to the ease with which younger students can answer the questions, and the subsequent reduced number of missing items (Boudreau & Poulin, 2009). Six questions that comprise the scale were asked, with two items having dichotomous responses, one item having three responses, and three items having four response categories. The answers to these questions were summed to provide a score for socioeconomic status, and then categorised as described in the literature (Boyce, Torsheim, Currie, & Zambon, 2006; Currie, et al., 2008) into low family affluence, middle family affluence, or high family affluence. Results for these questions are shown below in Table 4.5. A large proportion of students claimed their family had two or more vehicles (81%) and they had their own bedroom (81%). The proportion of students who claimed they had more than two computers at home was 69%, one or two computers at home was 29% and 2% of students claimed they did not have any computers at home. Similar proportions of students claimed they either had one bathroom (23%) or more than two bathrooms at home (22%), while the majority had two bathrooms at home (55%). In relation to having a dishwasher at home, 47% of students said they did have a dishwasher while 53% reported they did not. The final question asked about overseas holiday travel, and 38% stated they did not go overseas for a holiday in the last year at all, while 21% said they went once, 14% said they went twice, and 27% said they went overseas more than three times overseas last year.

Table 4.5 Year 7 students' responses for Family Affluence Scale

Does your family own a car, truck or van?	(n=175) %(n)
No	0.0(0)
Yes, one	18.9(33)
Yes, two or more	81.1(142)
Do you have your own bedroom for yourself?	**(n=172) %(n)**
No	19.2(33)
Yes	80.8(139)
How many computers does your family own?	**(n=174) %(n)**
None	2.4(4)
One	9.2(16)
Two	19.5(34)
More than two	69.0(120)
How many bathrooms are in your home?	**(n=173) %(n)**
One	23.1(40)
Two	54.9(95)
More than two	22.0(38)
Does your family have a dishwasher at home?	**(n=173) %(n)**
No	52.6(91)
Yes	47.4(82)
How many times did you and your family travel out of Australia for a holiday last year?	**(n=175) %(n)**
Not at all	37.7(66)
Once	21.1(37)
Twice	13.7(24)
More than twice	27.4(48)

As this scale is designed to measure many different facets of socioeconomic status, factor analysis was deemed not suitable for these questions (KMO=0.65). Reliability for this scale is also historically low to moderate (Boudreau & Poulin, 2009; Boyce, et al., 2006), and in this sample of Year 7's was α=0.463. The distribution of family affluence summed scores was significantly different from normal ($p<0.001$). The summed scores were subsequently categorised into low, middle, and high family affluence based on the literature (Boudreau & Poulin, 2009; Currie, et al., 2008). The resulting family affluence categories, by gender and primary school origin, are shown in Table 4.6.

Table 4.6 Family affluence categories by gender and primary school origin

Family affluence categories		**Low family affluence %(n)**	**Middle family affluence %(n)**	**High family affluence %(n)**
Gender [a]				
	Males (n=76)	2.9(5)	28.9(50)	12.1(21)
	Females (n=97)	4.6(8)	37.6(65)	13.9(24)
Primary school origin [a]				
	Continuous	0.0(0)	19.7(34)	9.8(17)
	Feeder	4.6(8)	27.2(47)	9.2(16)
	Other	2.9(5)	19.1(33)	7.5(13)

[a]$p<0.05$ males, females, continuous, feeder, other

The majority of students in this cohort were of middle affluence with 29% of males and 38% of females in this category, 12% of males and 14% of females in the high affluence category and 3% of males and 5% of females in the low affluence category. Overall 8% of students identified as low family affluence, 66% of students were middle affluence and 26% of students were in the high affluence category. 'Feeder' school students had the highest proportion of middle affluence students (27%) over that of 'continuous' (20%) or 'other' (19%) students, and the 'continuous' students were the only group to have no students identifying as low family affluence.

Chi-square tests within gender and primary school origin revealed that the proportion of males (29%) and females (38%) in the middle family affluence group was significantly higher than males and females in low or high family affluence groups (males: $\chi^2=41.079$, $p<0.001$; females: $\chi^2=53.464$, $p<0.001$). The proportions of middle affluence students regardless of primary school origin were also significantly higher than the proportions of low or high family affluence students (‘continuous’: χ^2=5.667, p=0.17; ‘feeder’: χ^2=35.859, p<0.001; ‘other’: χ^2=24.471, p<0.001).

4.2 Situation: perception of the transition

The four elements investigated for this domain were role change, effect of transition, timing of transition, and degree of stress on the participants. Validated scales and short answer questions described previously were used to examine the expectations and eventualities of students’ experiences in moving from primary to secondary school.

4.2.1 Role change

The expectancies and outcomes of the role change experienced by participants and the gains and losses associated with it were measured using two multiple item questions based on the work of Akos & Galassi (2004).

4.2.1.1 Positive expectations and actual experiences of transition

At baseline, one question asked students about their positive expectations of secondary school and provided a list of statements requiring a ‘yes’ or ‘no’ answer. At post-transition, this question was presented in the past tense to measure actual experiences (Figure 4.1).

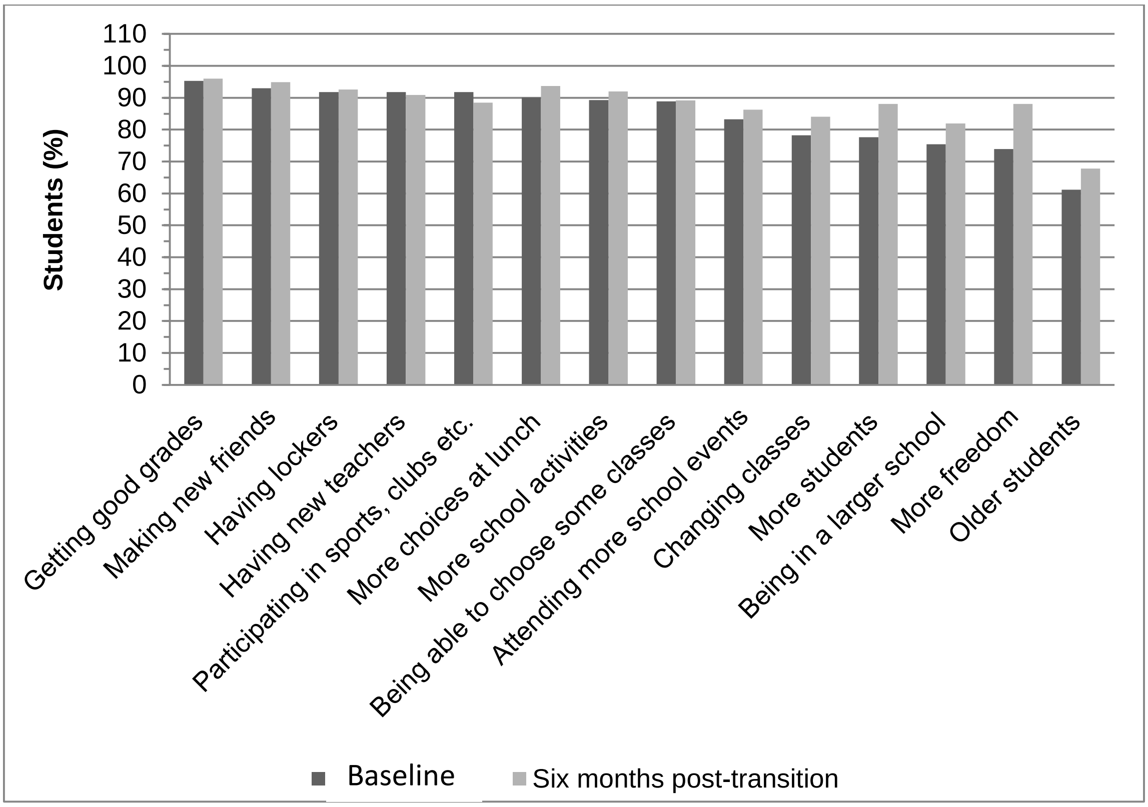


Figure 4.1 Students' positive transition expectations at baseline and outcomes six months post-transition in Year 7

Table 4.7 shows that at baseline, almost all students who responded 'yes' to each item looked forward to getting good grades (95%), making new friends (93%), and having lockers (92%); and at six months post-transition these expectations had been fulfilled for 96%, 95%, 93% of students respectively. Having more choices at lunch (baseline 90%; post-transition 94%), more school activities (baseline 89%; post-transition 92%), changing classes (baseline 78%; post-transition 84%), more students (baseline 78%; post-transition 88%), being in a larger school (baseline 75%, post-transition 82%), and having more freedom (baseline 74%; post-transition 88%) were also fulfilled for most students at post-transition. Additionally, while 92% of students were looking forward to having new teachers, and participating in sports, clubs, etc. by post-transition these proportions had decreased slightly to 91% and 86% respectively. While proportionally smaller, the majority of students also looked forward to attending more school events (83%) and being around older students (61%), and at post-transition these responses had increased to 86% and 68%. The proportion of students who responded 'being able to choose some classes', remained stable at 89%. Finally, Chi-square tests for baseline to post-transition data revealed significant positive associations for being in a larger school ($\chi^2=10.281$, p=0.001) and older students ($\chi^2=7.737$, p=0.005)

Data were also reviewed using the demographic categories of gender, primary school origin, and socio-economic status, with results shown in Tables 4.8, 4.9 and 4.10. For gender, transition expectations for males decreased proportionally from baseline to post-transition for all items except attending more school events, which increased from 44% to 46% at post-transition. For females, all items increased proportionally except having new teachers, which remained relatively stable (baseline 54%; post-transition 55%), and attending more school events which decreased from baseline (57%) to post-transition (54%). Significant associations were found in baseline data for gender and school activities, with equal outcomes for males and females ($\chi^2=7.130$, p=0.008).

Table 4.7 Student responses for positive expectations and outcomes at baseline and six months post transition in Year 7

Positive expectations and outcomes for transition	Baseline (n=171)		Six months post-transition (n=177)	
	Yes %(n)	No %(n)	Yes %(n)	No %(n)
Getting good grades	95.3(162)	4.7(8)	96.0(167)	4.0(7)
Making new friends	93.0(159)	7.0(12)	94.9(166)	5.1(9)
Having lockers	91.8(157)	8.2(14)	92.6(162)	7.4(13)
Having new teachers	91.8(157)	8.2(14)	90.9(159)	9.1(16)
Participating in sports, clubs etc.	91.8(156)	8.2(14)	88.5(154)	11.5(20)
More choices at lunch	90.1(154)	9.9(17)	93.7(163)	6.3(11)
More school activities	89.3(151)	10.7(18)	92.0(161)	8.0(14)
Being able to choose some classes	88.9(152)	11.1(19)	89.2(157)	10.8(19)
Attending more school events (e.g. sports, social events)	83.3(140)	16.7(28)	86.3(151)	13.7(24)
Changing classes	78.2(133)	21.8(37)	84.1(149)	15.9(28)
More students	77.6(132)	22.4(38)	88.1(155)	11.9(21)
Being in a larger school [a]	75.4(129)	24.6(42)	81.9(145)	18.1(32)
More freedom	73.9(139	16.5(31)	88.1(156)	11.9(21)
Older students [b]	61.2(104)	38.8(66)	67.8(118)	32.2(56)

Baseline to post-transition: [a, b]$p<0.05$

Table 4.8 Student responses for positive expectations and outcomes at baseline and six months post transition in Year 7, by gender

Positive expectations and outcomes for transition, by gender		**Baseline (n=163)**			**Six months post-transition (n=173)**	
	Male %(n)	**Female %(n)**	**Total %(n)**	**Male %(n)**	**Female %(n)**	**Total %(n)**
Getting good grades	45.7(69)	54.3(82)	95.0(151)	43.6(72)	56.4(93)	95.9(165)
Making new friends	47.3(71)	52.7(79)	93.8(150)	42.7(70)	57.3(94)	94.8(164)
Having lockers	45.6(67)	54.4(80)	91.9(147)	43.8(70)	56.3(60)	92.5(160)
Having new teachers	45.9(67)	54.1(79)	91.3(146)	45.2(71)	54.8(86)	90.8(157)
Participating in sports, clubs etc.	48.3(70)	51.7(75)	91.2(145)	45.4(69)	54.6(83)	88.4(152)
More choices at lunch	49.3(71)	50.7(73)	90.0(144)	46.6(75)	53.4(86)	93.6(161)
Being able to choose some classes	45.1(65)	54.9(79)	88.9(152)	44.5(69)	55.5(86)	89.1(155)
More school activities [a]	50.0(70)	50.0(70)	88.6(140)	44.0(70)	56.0(89)	91.9(159)
Attending more school events (eg. football games, social events)	43.5(57)	56.5(74)	83.4(131)	45.6(68)	54.4(81)	86.1(149)
More freedom	49.6(65)	50.4(66)	82.4(131)	46.1(71)	53.9(83)	88.5(154)
More students	47.6(59)	52.4(65)	78.0(124)	46.4(71)	53.6(82)	87.9(153)
Changing classes	49.6(61)	50.4(62)	77.4(123)	45.9(67)	54.1(79)	83.9(146)
Being in a larger school	49.2(59)	50.8(61)	75.0(120)	43.4(62)	56.6(81)	82.2(143)
Older students	51.6(49)	48.4(46)	59.7(95)	43.6(51)	56.4(68)	68.0(117)
Other	53.6(30)	46.4(26)	56.6(56)	45.0(27)	55.0(44	67.4(60)

Baseline: [a]$p<0.05$ males and females

In relation to primary school origin, ‘continuous’ students remained stable between baseline and post-transition for being in a larger school (baseline 29%; post-transition 27%) and more students (baseline 33%; post-transition 31%), while stable results were also recorded for ‘feeder’ (baseline 40%; post-transition 40% and baseline 39%; post-transition 40%) and ‘other’ students (baseline 32%; post-transition 31% and baseline 28%; post-transition 29%).

‘Other’ students’ expectations of being with older students decreased from baseline (31%) to post-transition (23%) while ‘continuous’ (baseline 31%; post-transition 34%) and ‘feeder’ (baseline 39%; post-transition 43%) students’ expectations increased at six months post-transition. The expectation and outcomes of getting good grades remained relatively stable between baseline and post-transition for ‘continuous’ (baseline 28%; post-transition 29%), ‘feeder’ (baseline 41%; post-transition 41%) and ‘other’ students (baseline 31%; post-transition 30%).

For making new friends, ‘continuous’ students recorded a slight increase between expectation and outcome of 28% to 30% at post-transition, while ‘other’ students recorded a decrease of 32% to 29% at post-transition and ‘feeder’ students remained stable at 40% to 41% across both time points. In relation to expectations of more freedom, ‘continuous’ (baseline 29%; post-transition 30%) and ‘feeder’ (baseline 40%; post-transition 40%) students remained stable, while ‘other’ students recorded a slight decrease from 32% to 30% at post-transition. In all other categories, ‘continuous’ students registered slight increases between baseline and post-transition, while ‘feeder’ and ‘other’ students registered slight decreases in the vicinity of 1-2%.

Chi-square testing revealed that ‘feeder’ students had significantly higher positive expectations about being with more students at secondary school than either ‘continuous’ or ‘other’ students (χ^2=8.436, p=0.015), while at post-transition ‘feeder’ students had significantly increased outcomes about being able to choose some classes (χ^2=6.871, p=0.032), and being with older students (χ^2=7.179, p=0.028).

Table 4.9 Student responses for positive expectations and outcomes at baseline and six months post transition in Year 7, by primary school origin

Positive expectations and outcomes for transition, by primary school origin	Baseline (n=163)			Six months post-transition (n=173)		
	Continuous %(n)	**Feeder %(n)**	**Other %(n)**	**Continuous %(n)**	**Feeder %(n)**	**Other %(n)**
Getting good grades	27.9(43)	40.9(63)	31.2(48)	28.8(47)	41.1(67)	30.1(49)
Making new friends	28.3(43)	40.1(61)	31.6(48)	30.2(49)	40.7(66)	29.0(47)
Having lockers	26.7(40)	41.362)	32.0(48)	29.7(47)	40.5(64)	29.7(47)
Having new teachers	27.5(41)	42.3(63)	30.2(45)	31.6(49)	39.4(61)	29.0(45)
Participating in sports, clubs etc.	25.7(38)	42.6(63)	31.8(47)	30.5(46)	41.1(62)	28.5(43)
More choices at lunch	25.2(37)	42.2(62)	32.7(48)	28.9(46)	40.9(65)	30.2(48)
Being able to choose some classes [b]	28.1(41)	39.7(58)	32.2(47)	31.4(48)	37.9(58)	30.7(47)
More school activities	27.3(39)	40.6(58)	32.2(46)	31.0(49)	39.9(63)	29.1(46)
Attending more school events (e.g. sports, social events)	26.9(36)	42.5(57)	30.6(41)	29.9(44)	40.8(60)	29.3(43)
More freedom	28.6(38)	39.8(53)	31.6(42)	29.6(45)	40.1(61)	30.3(46)
Being in a larger school	28.6(38)	39.8(53)	31.6(42)	26.9(41)	40.1(57)	31.0(44)
More students [a]	33.1(42)	38.6(49)	28.3(36)	30.5(46)	40.4(61)	29.1(44)
Changing classes	27.8(35)	43.7(55)	28.6(36)	31.3(45)	41.0(59)	27.8(40)
Older students [c]	30.6(30)	38.8(38)	30.6(30)	34.2(39)	43.0(49)	22.8(26)

Baseline: [a]p<0.05 ‘feeder’

Post-transition: ${}^{b,c}p<0.05$ ‘feeder

At baseline and post-transition, the proportion of low family affluence students whose positive expectations of getting good grades, remained stable over time (baseline 7%; post-transition 9%), as did high family affluence students (baseline 28%; post-transition 26%) and middle family affluence students (66% for both surveys). Similarly, stable positive expectations and outcomes for having new teachers were reported for low family affluence students (baseline 8%; post-transition 9%), high family affluence students (baseline 27%; post-transition 26%) and middle family affluence students (baseline 65%; post-transition 65%). This stable trend was also seen with being able to choose some classes (low: 7 to 8%; high: 29% to 27%; middle 65%). Making new friends remained stable in low (baseline 8%; post-transition 8%), middle (baseline 65%; post-transition 65%), and high (baseline 27%; post-transition 27%) family affluence groups.

Relatively stable results were also found for attending more school events (low: 7% to 7%; middle: 67% to 67%; high: 27% to 26%), changing classes (low: 8% to 8%; middle: 66% to 66%; high: 26% to 27%) and more school activities (low: 9% to 8%; middle: 67% to 65%; high 25% to 26%). In relation to having lockers, the expectation at baseline to outcome at post-transition for the middle family affluence group decreased from 66% to 64%, while the low and high family affluence groups increased from 5% to 9% and 26% to 27% respectively. Expectations and outcomes for being in a larger school for low family affluence students increased from 5% to 6%, and for middle family affluence students increased from 68% to 69%, however for high family affluence students this decreased from 27% to 24% respectively. While having more freedom remained stable between baseline (8%) and post-transition (8%) for low affluence students, there was a decrease for middle affluence students (baseline 68%; post transition 66%) and an increase for high affluence students (baseline 24%; post-transition 26%). All remaining results remained relatively stable across all affluence categories.

Table 4.10 Student responses for positive expectations and outcomes at baseline and six months post transition in Year 7, by socio-economic status

Positive expectations and outcomes for transition, by SES	Baseline (n=163)			Six months post-transition (n=173)		
	Low family affluence %(n)	Middle family affluence %(n)	High family affluence %(n)	Low family affluence %(n)	Middle family affluence %(n)	High family affluence %(n)
Getting good grades	6.5(10)	66.0(101)	27.5(42)	8.5(14)	66.1(109)	25.5(42)
Making new friends	7.9(12)	64.9(98)	27.4(41)	7.9(13)	65.2(107)	26.8(44)
Having lockers	4.7(11)	66.4(99)	26.2(39)	8.8(14)	64.4(103)	26.9(43)
More freedom	8.3(11)	68.2(90)	23.5(31)	8.4(13)	65.6(101)	26.0(40)
Having new teachers	8.1(12)	64.9(96)	27.0(40)	8.9(14)	65.0(102)	26.1(41)
Participating in sports, clubs etc.	8.2(12)	63.9(94)	27.9(41)	7.2(11)	65.1(99)	27.6(42)
More choices at lunch	7.5(11)	65.8(96)	26.7(39)	8.1(13)	66.5(107)	25.5(41)
Being able to choose some classes	6.9(10)	64.6(93)	28.5(41)	8.4(13)	65.2(101)	26.5(41)
More school activities	8.5(12)	66.9(95)	24.6(35)	8.2(13)	65.4(104)	26.4(42)
Attending more school events (e.g. sports, social events)	6.8(9)	66.7(88)	26.5(35)	7.4(11)	67.1(100)	25.5(38)
More students	4.8(6)	68.3(86)	27.0(34)	6.5(10)	66.7(102)	26.8(41)
Changing classes	8.0(10)	65.6(82)	26.4(33)	7.5(11)	65.8(96)	26.7(39)
Being in a larger school [a]	4.9(6)	68.0(83)	27.0(33)	5.6(8)	69.2(99)	25.2(36)
Older students	6.2(6)	63.9(62)	29.9(29)	6.0(7)	65.5(76)	28.4(33)

Post-transition: [a]$p<0.05$ high family affluence

Chi-square testing revealed that high family affluence students' results post-transition were significantly higher for being in a larger school than both low and middle family affluence groups (χ^2=7.496, p=0.024). No other significant associations were found.

Wilcoxon signed-ranks test were performed to determine any significant associations between baseline and post-transition data and demographic categories. For gender, males showed a significant decrease in expectations over outcomes for having more students at school (baseline 1.21, post-transition 1.08, z= -2.673, p=0.08), while females showed a significant decrease in being with older students (baseline 1.46, post-transition 1.32, z= -2.200, p=0.028). For primary school origin, 'feeder' and 'other' students showed a significant decrease in expectations over outcomes for being with more students ('feeder': baseline 1.26, post-transition 1.14, z=-2.324, p=0.020; 'other': baseline 1.29, post-transition 1.14, z=-2.309, p=0.021). Finally, for socio-economic status, students from the middle affluence group also showed a significant decrease in expectations over outcomes for being with more students (baseline 1.20, post-transition 1.11, z=-2.132, p=0.33).

4.2.1.2 Negative expectations and actual experiences of transition

At baseline, one question asked students about their negative expectations of secondary school and provided a list of statements requiring a 'yes' or 'no' answer. At post-transition, this question was presented in the past tense to measure actual experiences (Figure 4.2).

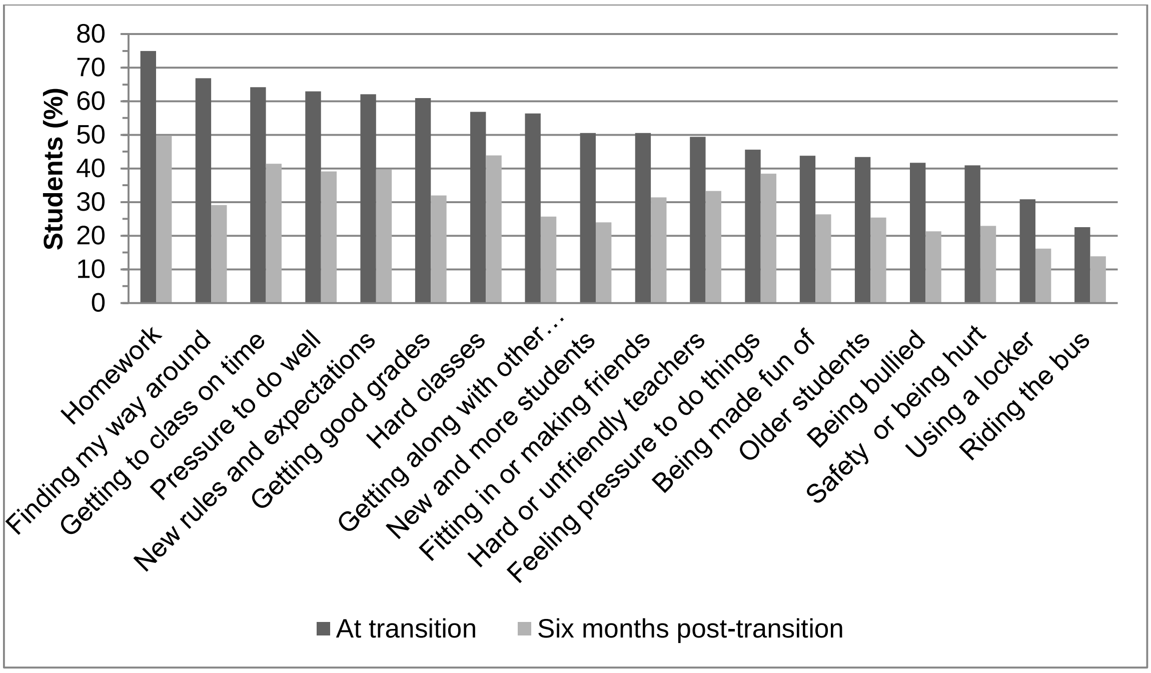


Figure 4.2 Students' negative transition expectations at baseline and outcomes six months post-transition in Year 7

Table 4.11 Student responses for negative expectations and outcomes at baseline and six months post transition in Year 7

Negative expectations and outcomes for transition	Baseline (n=163)		Six months post-transition (n=175)	
	Yes %(n)	No %(n)	Yes %(n)	No %(n)
How much homework I would have [b]	75.0(120)	25.0(40)	49.7(86)	50.6(87)
Finding my way around or getting lost [a]	66.9(109)	33.1(54)	29.1(51)	70.9(124)
Getting to class on time [b]	64.2(102)	35.8(57)	41.4(72)	58.6(102)
Pressure to do well [b]	63.0(102)	37.0(60)	39.1(68)	60.9(106)
New rules and expectations [a]	62.1(100)	37.9(61)	39.7(69)	60.3(105)
Getting good grades [a]	61.0(97)	39.0(62)	32.0(55)	68.0(117)
Hard classes [b]	56.9(91)	43.1(69)	43.9(76)	56.1(97)
Getting along with other students [a]	56.4(92)	43.6(71)	25.7(45)	74.3(130)
New and more students [b]	50.6(82)	49.4(80)	24.0(42)	76.0(133)
Fitting in or making friends [b]	50.6(82)	49.4(80)	31.4(55)	68.6(120)
Hard or unfriendly teachers [a]	49.4(80)	50.6(82)	33.3(58)	66.7(116)
Feeling pressure to do things I don't want to do [a]	45.6(73)	54.4(87)	38.5(67)	61.5(107)
Older students [a]	43.4(69)	56.6(90)	25.4(44)	74.6(129)
Being made fun of [a]	43.8(70)	56.3(90)	26.4(46)	73.6(126)
Being bullied [b]	41.7(68)	58.3(95)	21.3(37)	78.7(137)
Safety or being hurt by other students [b]	40.9(67)	59.1(97)	22.9(40)	77.1(135)
Riding the bus	22.6(36)	77.4(123)	13.9(24)	86.1(149)
Using a locker [a]	30.8(49)	69.2(110)	16.2(28)	83.8(145)

Baseline to post-transition: [a]$p<0.05$

Baseline to post-transition: [b]$p<0.001$

Table 4.11 shows at baseline, 75% of students had negative expectations about the amount of homework they would get, however this had decreased at six months post transition to 50%. Similarly, all other items in this question evidenced significant drops in the proportion of students whose negative expectations did not eventuate at post-transition.

Chi-square tests were performed to determine any significant relationships between baseline and post-transition results for each item. Negative outcomes at post-transition showed significant decreases from negative expectations at baseline for finding their way around or getting lost (χ^2=11.590, p=0.001), getting along with other students (χ^2=11.362, p=0.004), pressure to do well (χ^2=17.907, p<0.001), safety or being hurt by other students (χ^2=15.179, p<0.001), being bullied (χ^2=15.955, p<0.001), fitting in or making friends (χ^2=15.400, p<0.001), new and more students (χ^2=12.842, p<0.001), hard or unfriendly teachers (χ^2=11.597, p<0.05), hard classes (χ^2=13.221, p<0.001), new rules and expectations (χ^2=9.643, p<0.05), amount of homework (χ^2=13.259, p<0.001), feeling pressure to do things students don't want to do (χ^2=10.466, p<0.05), being made fun of (χ^2=6.292, p<0.05), using a locker (χ^2=10.787, p<0.05), getting to class on time (χ^2=13.603, p<0.001), older students (χ^2=5.164, p<0.05), and getting good grades (χ^2=8.314, p<0.05).

Data were also reviewed using the demographic categories of gender, primary school origin and socio-economic status, with results shown in Table 4.12, 4.13 and 4.14. At baseline, 36% of males and 40% of females had negative expectations about the amount of homework they would get, but at six months post-transition this had decreased to 19% for males and 31% of females. A similar decreasing trend was seen in all items of this question leading to the overall conclusion that negative expectations at baseline did not translate into negative outcomes at six months post-transition. For males, the proportional decrease from baseline to post-transition was between 6-17%, and for females was between 3-13%.

Chi-square testing was undertaken for each time point. At baseline, females had significantly higher negative expectations than males about finding their way around or getting lost (χ^2=11.350, p=0.001), safety or being hurt by other students (χ^2=5.497, p=0.019), being bullied (χ^2=5.814, p=0.018), hard or unfriendly teachers (χ^2=8.099, p=0.004), hard classes (χ^2=5.519, p=0.019), getting good grades (χ^2=5.915, p=0.015), and being made fun of (χ^2=6.785, p=0.009). At six months post-transition, females had significantly higher negative outcomes than males for getting along with other students (χ^2=4.581, p=0.032), pressure to do well (χ^2=6.108, p=0.013), safety or being hurt by other students (χ^2=8.429, p=0.004), being bullied (χ^2=4.490, p=0.034), new rules and expectations (χ^2=4.413, p=0.038), feeling pressure to do things students don't want to do (χ^2=5.485, p=0.019), and getting to class on time (χ^2=4.977, p=0.026).

Table 4.12 Student responses for negative expectations and outcomes at baseline and six months post transition in Year 7, by gender

Negative expectations and outcomes for transition, by gender	Baseline (n=156)			Six months post-transition (n=173)		
	Male %(n)	Female %(n)	Total %(n)	Male %(n)	Female %(n)	Total %(n)
How much homework I would have	35.5(54)	40.1(61)	75.7(115)	18.6(32)	31.4(54)	50.0(86)
Finding my way around or getting lost ^{a}	25.3(39)	41.6(64)	66.9(103)	11.6(20)	17.3(30)	28.9(50)
Getting to class on time ^{b}	26.7(30)	36.0(54)	62.7(94)	13.4(23)	27.3(47)	40.7(70)
Pressure to do well ^{b}	27.5(42)	34.6(53)	62.1(95)	12.2(21)	26.7(46)	39.0(67)
New rules and expectations ^{b}	28.8(44)	33.3(51)	62.1(95)	13.4(23)	26.7(46)	40.1(69)
Getting good grades ^{a}	24.0(36)	35.3(53)	59.3(89)	10.6(18)	21.8(37)	32.4(55)
Hard classes ^{e}	23.2(35)	33.8(51)	57.0(86)	16.4(28)	27.5(47)	43.9(75)
Getting along with other students ^{b}	25.3(39)	30.5(47)	55.8(86)	7.5(13)	17.9(31)	25.4(44)
New and more students	24.2(32)	26.1(40)	50.3(77)	9.8(17)	13.9(24)	23.7(41)
Fitting in or making friends	22.9(35)	26.1(40)	49.0(75)	10.4(18)	20.8(36)	31.2(54)
Hard or unfriendly teachers ^{a}	17.6(27)	30.7(47)	48.4(74	11.6(20)	21.5(37)	33.1(57)
Feeling pressure to do things I don’t want to do ^{b}	18.4(28)	27.0(41)	45.4(69)	12.2(21)	26.2(45)	38.4(66)
Older students	19.9(30)	22.5(34)	42.4(64)	8.2(14)	16.4(28)	24.6(42)
Being made fun of ^{a}	15.2(23)	26.5(40)	41.7(63)	9.3(16)	16.9(29)	26.2(45)
Being bullied ^{c}	14.3(22)	25.3(39)	39.6(61)	5.8(10)	15.0(26)	20.8(36)
Safety or being hurt by other students ^{c}	14.2(22)	25.2(39)	39.4(61)	5.2(9)	17.3(30)	22.5(39)
Using a locker	12.7(19)	16.0(24)	28.7(43)	7.0(12)	9.3(16)	16.3(28)
Riding the bus	10.7(16)	10.7(16)	21.3(32)	4.7(8)	8.8(15)	13.5(23)

Baseline: $^{a}p<0.05$

Post-transition: $^{b}p<0.05$

Baseline to post-transition: $^{c}p<0.05$

Wilcoxon signed-ranks test were performed to determine any significant associations over time between baseline and post-transition data and gender. For gender, significant decreases from baseline to post-transition were found for finding their way around or getting lost, with males reporting 36% and females reporting 42% at baseline and 19% and 17% respectively at post-transition (males: z=-3.772, p<0.001; females: z=-6.325, p<0.001). This trend was also seen for getting along with other students, with males reporting 25% to 8% (z=-4.459, p<0.0001), and females 31% to 19% (z=-4.382, p<0.001); pressure to do well, with males 28% decreasing to12% (z=-4.315, p<0.001) and females 35% decreasing to 27% (z=-2.921, p=0.003). Additionally, safety or being hurt for males reduced from 14% to 5% (z=-3.130, p=0.002) and for females from 25% to 17% (z=-3.528, p<0.001), and being bullied for males reduced from 14% to 6% (z=-2.524, p=0.012) and for females from 25% down to 15% (z=-3.528, p<0.001).

Several social items reported significance included fitting in or making friends, with males reporting 23% at baseline reducing to 10% post-transition (z=-3.530, p<0.001) and for females from 26% down to 21% (z=-2.646, p=0.008) at post-transition. In relation to new and more students, males reported a reduction in proportion from 24% at baseline to 9% post-transition (z=-3.922, p<0.001) and females reported a reduction from 22% to 14% (z=-3.536, p<0.001). Significance in expectations and outcomes were also found for the amount of homework for males and females with significant decreases found for males from 36% to 19% (z=-4.315, p<0.001) and females from 40% to 31% (z=-2.921 p=0.003), getting to class on time for males from 26% to 13% (z=-3.402, p=0.001) and for females from 36% to 27% (z=-3.286, p=0.001), and also older students, which for males was from 20% to 8% (z=-3.262, p=0.001) and females from 23% to 16% (z=-2.401, p=0.016).

For males only, significant decreases from baseline to post-transition were found for new rules and expectations, from 29% at baseline to 13% at six months post-transition (z=-3.656, p<0.001) and riding the bus from 11% to 5% (z=-2.714, p=0.007). For females only, significant decreases were found for hard or unfriendly teachers, from 34% to 22% (z=-2.611, p=0.009), being made fun of, from 27% to 17% (z=-3.656, p<0.001), and getting good grades, from 36% to 22% (z=-3.286, p=0.001). Finally, females also reported a significantly decreased result post-transition in relation to hard classes from 34% to 28% (z=-2.785, p=0.005).

In primary school origin categories, all proportions decreased from baseline to post-transition, with ‘continuous’ students decreasing between 2-11%, ‘feeder’ students decreasing between 1-14%, and ‘other’ students decreasing between 1-16%. Chi-square tests were performed to determine if there were any significant relationships between primary school origin and each time point. At baseline, ‘feeder’ (21%) and ‘other’ (20%) students’ negative expectations about fitting in or making friends were significantly higher than ‘continuous’ (8%) students (χ^2=9.565, p=0.008). In relation to being made fun of, post-transition ‘feeder’ (13%) students’ negative outcomes were significantly higher than ‘continuous’ (3.5%) or ‘other’ (9%) students (χ^2=6.219, p=0.045), and also for riding the bus where ‘feeder’ students reported 8% whereas ‘continuous’ students reported 3% and ‘other’ students reported 2% (χ^2=6.077, p=0.048).

Wilcoxon signed-ranks test were performed to determine any significant associations over time between baseline and post-transition data, and primary school origin. All primary school categories reported significant decreases from baseline to post-transition for environmental items being; finding their way around or getting lost, which was 15% for ‘continuous’ students at baseline and 5% at post-transition (z=-3.411, p=0.001), for ‘feeder’ students at baseline 28% and at post-transition 14% (z=-4.491, p<0.001), and for ‘other’ students from 24% to 9% (z=-4.600, p<0.001) at post-transition. Getting to class on time also reported significance for all primary school categories (‘continuous’: baseline 14.5%, post-transition 8.8%, z=-2.324, p=0.020; ‘feeder’: baseline 25.7%, post-transition 17.6%, z=-2.858, p=0.004; ‘other’: baseline 23.0%, post-transition 13.5%, z=-2.982, p=0.003).

Social items reported significance between expectations and outcomes by Wilcoxon signed-rank tests in all primary school categories. For getting along with other students, ‘continuous’ students reduced from 13% to 7% (z=-2.840, p=0.005), ‘feeder’ students from 23% to 12% (z=-3.674, p<0.001) and ‘other’ students from 21% to 6% (z=-4.315, p<0.001) at post-transition. Significant results were found with both ‘feeder’ and ‘other’ students reported fitting in or making new friends outcomes reducing at post-transition for ‘feeder’ students from 21% at baseline to 14% at post-transition (z=-2.711, p=0.007) and for ‘other’ students from 20% to 9% (z=-3.578, p<0.001), and also for new and more students, with ‘feeder’ students decreasing from 22% to 8% (z=-4.041, p<0.001) and ‘other’ students decreasing from 19% to 8% (z=-3.441, p=0.001). For ‘continuous’ and ‘feeder’ categories, being made fun of reported a significant result (‘continuous’: baseline 9.2%, post-transition 3.5%, z=-2.887, p=0.004; ‘feeder’: baseline 19.6%, post-transition 12.9%, z=-2.985, p=0.003).

Academic items reported significance in several items including pressure to do well. For this item, ‘continuous’ students decreased from 14% to 9% (z=-2.673, p=0.008), ‘feeder’ students from 27% to 16% (z=-3.138, p=0.002) and ‘other’ students from 23% to 14% (z=-3.153, p=0.002). For amount of homework, ‘continuous’ students decreased from 18% to 11% (z=-3.000, p=0.003), ‘feeder’ students from 31% to 23% (z=-2.558, p=0.011) and ‘other’ students from 27% to 16% (z=-3.300, p=0.001). Getting good grades also reported a significant decrease from baseline to post-transition for ‘continuous’ students, 13% to 8% (z=-2.138, p=0.033, ‘feeder’ students from 29% to 15% (z=-4.131, p<0.001) and ‘other’ students from 18% to 8% (z=-3.441, p=0.001). For ‘continuous’ and ‘feeder’ categories, significant results were reported for hard classes (‘continuous’: baseline 14.4%, post-transition 11.2%, z=-2.000, p=0.046; ‘feeder’: baseline 24.2%, post-transition 17.8%, z=-2.132, p=0.033).

Table 4.13 Students’ responses for negative expectations and outcomes at baseline and six months post transition in Year 7, by primary school origin

Negative expectations and outcomes for transition, by primary school origin	Baseline (n=156)			Six months post transition (n=173)		
	Continuous %(n)	Feeder %(n)	Other %(n)	Continuous %(n)	Feeder %(n)	Other %(n)
How much homework I would have	17.5(27)	31.2(48)	26.6(41)	10.6(18)	22.9(39)	15.9(23)
Finding my way around or getting lost	15.4(24)	27.6(43)	24.4(38)	5.3(9)	14.0(24)	9.4(16)
Getting to class on time	14.5(22)	25.7(39)	23.0(35)	8.8(15)	17.6(30)	13.5(23)
Pressure to do well	13.5(21)	26.5(41)	22.6(35)	8.8(15)	15.9(27)	13.5(23)
New rules and expectations	14.8(23)	25.8(40)	21.3(33)	10.0(17)	18.2(31)	11.2(19)
Getting good grades	12.5(19)	28.9(44)	18.4(28)	8.3(14)	14.9(25)	8.3(14)
Hard classes	14.4(22)	24.2(37)	18.3(28)	11.2(19)	17.8(30)	14.2(24)
Getting along with other students	12.8(20)	23.1(36)	20.5(32)	6.4(11)	12.3(21)	5.8(10)
New and more students	9.7(15)	21.9(34)	18.7(29)	6.4(11)	8.2(14)	8.2(14)
Fitting in or making friends [a]	8.4(13)	21.3(33)	20.0(33)	7.0(12)	13.5(23)	9.4(16)
Hard or unfriendly teachers	12.3(19)	22.6(35)	13.5(21)	5.7(11)	15.9(27)	10.6(18)
Feeling pressure to do things I don’t want to do	9.1(14)	22.1(34)	13.6(21)	8.8(15)	15.9(27)	12.9(22)
Older students	9.8(15)	20.3(31)	13.1(20)	5.9(10)	10.7(18)	7.7(13)
Being made fun of [b]	9.2(14)	19.6(30)	13.7(21)	3.5(6)	12.9(22)	8.8(15)
Being bullied	9.0(14)	18.6(29)	12.8(20)	4.1(7)	11.1(19)	5.3(9)
Safety or being hurt by other students	9.6(15)	19.7(31)	10.2(16)	7.6(13)	9.9(17)	4.7(8)
Using a locker	7.9(12)	13.2(20)	7.9(12)	4.1(7)	7.6(13)	3.5(6)
Riding the bus [b]	6.6(10)	8.6(13)	6.6(10)	2.4(4)	8.3(14)	1.8(3)

Baseline: [a] p<0.05

Post-transition: [b] p<0.05

Both ‘feeder’ and ‘other’ students recorded significant decreases for perceptions of safety or being hurt by other students, with ‘feeder’ students reporting a reduction of 20% to 10% at post-transition (z=-3.838, p<0.001) and ‘other’ students from 10% to 5% (z=-2.183, p=0.029). This was repeated for being bullied, with ‘feeder’ students decreasing from 19% to 11% from baseline to post-transition (z=-3.130, p=0.002) and ‘other’ students from 13% to 5% (z=-2500, p=0.012). New rules and expectations also decreased from baseline to post-transition, with ‘feeder’ students reporting 26% to 18% (z=-2.400, p=0.016) and ‘other’ students reporting 21% to 11% (z=-2.985, p=0.003).

For ‘continuous’ and ‘feeder’ categories, significant decreases were reported for hard or unfriendly teachers (‘continuous’: baseline 12.3%, post-transition 5.7%, z=-2.000, p=0.046; ‘feeder’: baseline 22.6%, post-transition 15.9%, z=-2.117, p=0.034) and for riding the bus (‘continuous’: baseline 6.6%, post-transition 2.4%, z=-2.111, p=0.035; ‘other’: baseline 6.6%, post-transition 1.8%, z=-2.333, p=0.020). Lastly, significant decreases were recorded for ‘feeder’ students in relation to feeling pressure to do things students don’t want to do (baseline 22.1%, post-transition 15.9%, z=-2.294, p=0.022) and older students (baseline 20.3%, post-transition 10.7%, z=-3.157, p=0.002), and for ‘other’ students in relation to using a locker (baseline 7.9%, post-transition 3.5%, z=-2.333, p=0.020).

Negative expectations and outcomes were also examined by socio-economic status (Table 4.14). At baseline and post-transition, low (baseline 4%; post-transition 5%) and high (baseline 16%; post-transition 14%) affluence students had stable, negative expectations about hard classes whereas middle (baseline 38%; post-transition 26%) students reported a decrease for this item. For riding the bus, for which low affluence students (baseline 1%; post-transition 2%) were stable, middle (baseline 15%; post-transition 10%) and high (baseline 7%; post-transition 2%) affluence students reported a decrease. In the item pressure to do well, the proportion of low affluence students remained the same (baseline 5%; post-transition 5%) between baseline and post-transition, while middle (baseline 41%; post-transition 25%) and high (baseline 17%; post-transition 9%) family affluence students decreased at six months post-transition. All other items in this question saw proportional decreases across all categories of family affluence between the time points. Chi-square tests revealed that middle affluence students (31%) were significantly more concerned about new and more students at transition than low (7%) or high (14%) affluence students (χ^2=6.326, p=0.042).

Wilcoxon signed-ranks test were performed to determine any significant associations over time between baseline and post-transition data, and socio-economic status. All three SES categories showed significant decreases between expectations and outcomes for finding their way around or getting lost, with low family affluence students decreasing from 5% to 4% (z=-2.000, p=0.046), middle family affluence students decreasing from 45% to 20% (z=-5.689, p<0.001) and high affluence students decreasing from 18% to 6% (z=-4.472, p<0.001) at post-transition. All SES categories showed a significant decrease for getting along with other students, with low family affluence students decreasing from 7% to 4% (z=-2.236, p=0.025), middle family affluence students decreasing from 38% to 26% (z=-5.032, p<0.001) and high affluence students decreasing from 16% at baseline to 14% at post-transition (z=-3.153, p=0.046). Similar decreases over time were reported for new and more students, with low family affluence students reporting a reduction from 7% to 4% (z=-2.000, p=0.046), middle family affluence students reducing from 31% to 14% (z=-4.003, p<0.001) and high affluence students showing a reduction of expectancies to outcomes of 14% to 6% (z=-2.840, p=0.005). Finally, getting to class on time fell from 5% to 4% for low affluence students (z=-2.000, p=0.046), 40% to 27% for middle affluence students (z=-3.781, p<0.001) and 18% to 11% for high affluence students (z=-2.183, p=0.029).

Wilcoxon signed-ranks testing revealed middle and high affluence categories reported significant decreases over time for pressure to do well, with middle affluence students reporting a decrease from 41% to 25% (z=-4.564, p<0.001) and high affluence students reporting a decrease from 17% to 9% at post-transition (z=-2.683, p=0.007). Significant decreases were also found for safety or being hurt by other students (‘middle’: baseline 25.6%, post-transition 13.9%, z=-4.243, p<0.001; ‘high’: baseline 11.5%, post-transition 6.9%, z=-2.840, p=0.033), being bullied (‘middle’: baseline 25.8%, post-transition 14.5%, z=-3.413, p=0.001; ‘high’: baseline 11.6%, post-transition 5.2%, z=-2.324, p=0.020). This was repeated for fitting in or making friends (‘middle’: baseline 33.8%, post-transition 20.2%, z=-3.781, p<0.001; ‘high’: baseline 11.7%, post-transition 6.4%, z=-2.183, p=0.029). Additionally, significant results were reported for these categories for new rules and expectations, with middle family affluence students reporting 67% at baseline and 26% at post-transition (z=-3.124, p=0.002) and 20% to 11% for high family affluence students (z=-2.683, p=0.007). Significant decreases were also identified for amount of homework, with middle affluence students reporting 50% at baseline and 33% at post-transition (z=-4.217, p<0.001) and 21% to 13% for high family affluence students at post-transition (z=-2.673, p=0.008). Finally, both categories also reported significant reductions in being made fun of. Middle affluence students reduced from 26% to 16% (z=-3.430, p=0.001) and high affluence students reduced from 14% to 7% (z=-2.236, p=0.025), For getting good grades, middle affluence students reported 42% at baseline and 23% at six months post-transition (z=-4.523, p<0.001) and high affluence students reported 15% at baseline and 7% at post-transition (z=-3.500, p<0.001).

Students in the middle family affluence category reported significant decreases by post-transition for hard or unfriendly teachers (baseline 31.8%, post-transition 19.8%, z=-3.182, p=0.001), hard classes (baseline 38.2%, post-transition 25.7%, z=-3.333, p=0.001), using lockers (baseline 17.9%, post-transition 11.0%, z=-2.449, p=0.014), and older students (baseline 28.9%, post-transition 14.0%, z=-4.523, p<0.001). Finally, only the high family affluence students reported significant decreases for riding the bus (baseline 6.6%, post-transition 2.3%, z=-2.828, p=0.005).

Table 4.14 Student responses for negative expectations and outcomes at baseline and six months post transition in Year 7, by socio-economic status

Negative expectations and outcomes for transition, by socio-economic status	Baseline (n=156)			Six months post transition (n=173)		
	Low family affluence %(n)	Middle family affluence %(n)	High family affluence %(n)	Low family affluence %(n)	Middle family affluence %(n)	High family affluence %(n)
How much homework I would have	5.2(8)	49.7(76)	20.9(32)	4.1(7)	33.3(57)	12.9(22
Finding my way around or getting lost	5.2(8)	44.5(69)	18.1(28)	2.9(5)	19.7(34)	6.4(11)
Getting to class on time	5.3(8)	40.4(61)	17.9(27)	3.5(6)	26.7(46)	11.0(19
Pressure to do well	5.2(8)	40.9(63)	16.9(26)	5.2(9)	25.0(43)	9.3(16)
New rules and expectations	5.8(9)	37.0(57)	19.5(30)	3.5(6)	25.6(44)	11.0(19
Getting good grades	3.3(5)	41.7(63)	15.2(23)	2.4(4)	22.9(39)	7.1(12)
Hard classes	3.9(6)	38.2(58)	15.8(24)	4.7(8)	25.7(44)	14.0(24
Getting along with other students	6.5(10)	33.5(55)	14.8(23)	3.5(6)	16.2(28)	6.4(11)
Fitting in or making friends	4.5(7)	33.8(52)	11.7(18)	4.6(8)	20.2(35)	6.4(11)
New and more students [a]	6.5(10)	30.5(47)	13.6(21)	3.5(6)	13.9(24)	6.4(11)
Hard or unfriendly teachers	3.9(6)	31.8(49)	13.6(21)	3.5(6)	19.8(34)	9.9(17)
Feeling pressure to do things I don't want to do	2.6(4)	28.1(43)	15.0(23)	4.1(7)	23.8(41)	11.0(19
Being made fun of	2.6(4)	26.3(40)	13.8(21)	4.1(7)	15.7(27)	7.0(12)
Older students	4.6(7)	28.9(54)	9.9(15)	3.5(6)	14.0(24)	8.2(14)
Being bullied	3.2(5)	25.8(40)	11.6(18)	1.7(3)	14.5(25)	5.2(9)
Safety or being hurt by other students	3.2(5)	25.6(40)	11.5(18)	2.3(4)	13.9(24)	6.9(12)
Using a locker	2.6(4)	17.9(27)	8.6(13)	1.2(2)	11.1(19)	4.1(7)
Riding the bus	0.7(1)	14.6(22)	6.6(10)	1.8(3)	9.9(17)	2.3(4)

Baseline to post-transition: [a]$p<0.05$ middle affluence

4.2.2 Effect of transition

The effect of transition was measured by two questions, one that asked what students' liked about being in secondary school and one that asked what students disliked about being in secondary school. Students were free to describe anything they liked or disliked about their secondary school to provide depth to this element of the model. These questions were included in the surveys at both time points, and analysed post data collection. Students often gave multiple responses, and the data was analysed for emerging themes (Tables 4.15 and 4.16).

At baseline, students liked being able to choose their subjects (36%), having lockers (17%), moving classes (15%), new academic challenges (14%) making new friends (13%), participating in a new range of sports (11%) and feeling more grown up (10%) at secondary school. At six months post-transition, a large proportion of students still enjoyed their new subjects (45%), and many still liked having their own lockers (10%), the academic challenge of secondary school (13%), and making new friends (11%). The proportion of students who reported liking a choice of subjects increased by 9% at six months post-transition, while the proportion who liked the academic challenge of secondary school or making new friends remained relatively stable between the two time points. Of the remaining themes that emerged from this question, the proportion of students who liked the school's extracurricular activities increased from 8% to 13% at post-transition, and the proportion of those who enjoyed the school facilities increased from 2% to 7%. Notably, the proportion of students who enjoyed moving classes decreased from 15% to 9% by six months post transition, as did the proportion of those students who liked having their own lockers, from 17% to 10% at post-transition. All other categories of student likes remained relatively stable over time.

The proportion of students who disliked the amount of homework in Year 7 remained stable between baseline (25%) and post-transition (26%), while those students who disliked moving classes decreased from 13% at baseline to 4% at six months post-transition. By post-transition, the proportion of students who disliked not knowing the way around or felt the school was too big had decreased from 11% to 8%. Students who disliked having a locker or carrying heavy books around both decreased at post-transition from 9% to 4%. The proportion of students who did not like having to change uniforms during the day for sport increased from 6% at baseline to 10% at six months post-transition, and all other categories of dislikes remained stable over time. Notably, at baseline a few students reported that the school environment was dirty and items were broken (2%), and this remained stable at six months post-transition, reporting at 3%. Finally, while only 2% of students reported being bullied in the school environment at baseline, by post-transition this had increased to 6%. Chi-square testing was undertaken for significant associations between baseline and post-transition data, however none were found.

Table 4.15 Student likes about their secondary school environment at baseline and six months post transition in Year 7

Please describe the main things you like about being in Year 7 in your new secondary school:	Baseline (n=179) %(n)	Six months post-transition (n=164) %(n)
Having a choice of subjects	36.3(65)	45.1(75)
Enjoys having lockers	16.8(30)	10.4(17)
Enjoys moving classes	14.5(26)	9.1(15)
Enjoys academic challenge	14.0(25)	13.4(22)
Making new friends	13.4(24)	11.0(18)
Enjoys range of sports	11.2(20)	7.3(12)
Feels more grownup	10.1(18)	6.1(10)
Enjoys and feels safe in environment	8.4(15)	8.5(14)
Likes canteen food and choices	7.8(14)	6.1(10)
Range of extracurricular activities	7.8(14)	12.8(21)
Friendly and helpful teachers	6.7(12)	3.7(6)
Feels that teachers and staff care about them	6.7(12)	4.3(7)
Opportunities for new experiences	6.1(1)	7.9(13)
Enjoys new responsibilities	3.9(7)	4.9(8)
Enjoys having homework	3.9(7)	0.6(1)
Enjoys school facilities (library, science labs, etc.)	2.2(4)	7.3(12)
More access to computers	1.7(3)	0.6(1)
Likes having family at the school	1.1(2)	0.0(0)
Longer lunch and recess	1.1(2)	3.7(6)
Stayed at the same school	0.6(1)	0.0(0)
School is more organised	0.6(1)	3.0(5)

Table 4.16 Student dislikes about their secondary school environment at baseline and six months post transition in Year 7

Please describe the main things you dislike about being in Year 7 in your new secondary school:	Baseline (n=126) %(n)	Six months post-transition (n=119) %(n)
Too much homework	24.6(31)	26.1(31)
Dislikes moving classes	12.7(16)	4.2(5)
Not knowing the way around/school too big	11.1(14)	8.4(10)
Dislikes using lockers	8.7(11)	4.2(5)
Carrying heavy books around	8.7(11)	4.2(5)
Too much and harder work	7.1(9)	6.7(8)
Having to make new friends	7.1(9)	0.0(0)
Having to change uniforms during the day	6.3(8)	10.9(13)
All of the rules	5.6(7)	7.6(9)
Not knowing enough to keep up	3.2(4)	2.5(3)
Longer days	4.0(5)	2.5(3)
No time to play at lunch	3.2(4)	0.8(1)
Not feeling settled	2.4(3)	0.8(1)
Crowded locker areas	2.4(3)	1.7(2)
Conflict with others	2.4(3)	3.4(4)
Not being in classes with friends	2.4(3)	2.5(3)
Strict teachers	2.4(3)	2.5(3)
Lots of students	2.4(3)	0.0(0)
Feeling left out	1.6(2)	1.7(2)
Litter/ dirty facilities/ broken furniture	1.6(2)	(3.4)4
Long canteen lines	1.6(2)	1.7(2)
Swearing in the playground	1.6(2)	0.0(0)
Feeling intimidated by older students	1.6(2)	0.0(0)
Travelling to and from school	1.6(2)	0.0(0)
Being bullied	1.6(2)	6.7(8)
Complicated timetable	0.8(1)	0.8(1)
Dislikes the school	0.8(1)	0.8(1)
Doesn’t like religious things	0.8(1)	0.0(0)
Long classes	0.8(1)	0.8(1)

4.2.3 Timing of transition

The timing of transition from primary to secondary school was measured by one question that asked the month and year of birth of participants. These results were then collated into half-years to determine if the students were in the age cohort currently mandated by the Western Australian Department of Education for moving to secondary school (11 years 6 months – 12 years 6 months). Results show that 98% of students were within the mandated age-range for moving to secondary school, while 1% (n=1) was younger, and 2% (n=3) were older (Table 4.17). The youngest student was from a ‘feeder’ school, while one of the oldest students was a ‘continuous’ student, and two were from a ‘feeder’ school. The two older students of ‘feeder’ primary school origin were not born in Australia.

Table 4.17 Students’ reported age categories at six months post-transition

Month and year of birth:	**Age range (yy.m-yy.m)**	**% (n)**
July - December 2002	11.0 - 11.6	0.6(1)
January - June 2002	11.6 – 12.0	45.8(77)
July - December 2001	12.0 - 12.6	51.8(87)
Earlier than June 2001	12.7 and over	1.6(3)

4.2.4 Degree of stress

The degree of stress concurrent with, but not related to, the transition process was measured by one question which asked participants if anything they perceived as a major life problem had occurred in the six months prior to transition. Students responded with a simple ‘yes/no’ answer and this question was asked in both surveys (Table 4.18). At baseline, 16% of males and 19% of females reported a major problem in the six months prior to beginning secondary school. Baseline data reveals that the proportion of females (19%) who had experienced major problems in the previous six months was higher than males (16%). At six months post-transition, reports of major problems in the last six months had decreased for males to 9% and increased for females to 21%. For primary school origin, both ‘continuous’ (baseline 11%; post-transition 8%) and ‘feeder’ (baseline15%; post-transition 14%) students reported decreases in the proportion of students who reported major problems in the last six months, while ‘feeder’ students were relatively stable across ‘yes’ (baseline 8%; post-transition 7%) and ‘no’ (baseline 22%; post-transition 22%) responses. Students of low (baseline 3%; post-transition 2%) and middle family affluence (baseline 25%; post-transition 18%) also recorded decreases in major problems from baseline to post-transition, while high family affluence students recorded an increase in major problems (baseline 6%; post-transition 10%) between time points.

Chi-square tests for gender, primary school origin and SES were performed for the data at each time point and revealed that females (21%) experienced significantly more major problems in the six months prior to the survey than males (9%) at post-transition (χ^2=5.004, p=0.025). Chi-square tests were also performed for changes over time for gender, primary school origin and SES. Males reported significantly less major problems in the six months prior to the survey from baseline (16%) to post-transition (9%) (χ^2=12.557, p<0.001), as did ‘continuous’ (baseline 18%; post-transition 21%, χ^2=7.277, p=0.007) and ‘feeder’ students (baseline 25%; post-transition 28%, χ^2=11.140, p=0.001), and middle family affluence students (baseline 25%; post transition 18%, χ^2=16.571, p<0.001).

Table 4.18 Student responses for major problems in the previous six months at baseline and six months post transition in Year 7

So we can find out how things have been going for you lately, please indicate if you have experienced any major problems (e.g. parents separating, someone dying) in your life in the last 6 months.	**Baseline (n=169)**		**Six months post-transition (n= 167)**	
	Yes %(n)	**No %(n)**	**Yes %(n)**	**No %(n)**
Gender [a]				
Male (n=74)	15.5(26)	28.6(48)	9.0(15)	34.1(57)
Female (n=94)	18.5(13)	37.5(63)	21.0(35)	35.9(60)
Primary school origin				
Continuous (n=49)	11.2(19)	17.8(30)	7.8(13)	21.0(35)
Feeder (n=69)	15.4(26)	25.4(43)	14.4(24)	28.1(47)
Other (n=51)	7.7(13)	22.5(38)	7.2(12)	21.6(36)
Socio-economic status				
Low family affluence (n=13)	3.0(5)	4.7(8)	2.4(4)	5.4(9)
Middle family affluence (n=111)	24.9(42)	40.8(69)	18.1(30)	47.6(79)
High family affluence (n=45)	5.9(10)	20.7(35)	9.6(16)	16.9(28)

Post-transition: [a]p<0.05 females

4.2.5 Summary statement

Descriptive results were presented in this chapter for the ‘situation’ domain. Results were described, factor analysis was undertaken for scale items, and significance testing was used to detect if any significant relationships existed within each data set, and also over time between baseline and six months post-transition. Variables were also examined by gender and primary school origin. For ‘role change’ positive and negative expectations and outcomes of transition revealed significant results. No significant results were reported for the ‘effect of change’. The ‘timing of transition’ was not dispersed enough for significance testing or further analysis, and so was excluded from further consideration. Finally, the ‘degree of stress’ experienced concurrently by adolescents, but not related to the transition itself, revealed significant results.

4.3 Supports: characteristics of pre- and post-transition environments

This section of Schlossberg’s model described the characteristics of the pre- and post-transition environment of the students. The three elements investigated for supports were internal support systems, institutional supports, and physical settings. Validated scales and short answer questions described previously were used to examine students’ perceptions of the support they received from friends, family and school during the transition from primary to secondary school.

4.3.1 Internal support systems

Students’ internal support systems were assessed by three quantitative questions measuring peer support (Ladd, et al., 1996), loneliness (Cassidy & Asher, 1992) and family connectedness (McNeely, et al., 2002). To add depth to each element, students were also asked what they liked and disliked about being in Year 7, other students and teachers at the school.

4.3.1.1 Peer support

To measure the support of friends, the 11 item Peer Support Scale (Ladd, et al., 1996) was used in both surveys (Table 4.19). At baseline and post-transition, the majority of students reported others would help them ‘lots of times’ if they were hurt at school (baseline 60%; post-transition 69%), if others were treating them badly (baseline 60%; post-transition 64%), ask them to join in when alone (baseline 54%; post-transition 60%), share his/her things (baseline 54%; post-transition 65%), ask them to work with them in group work (baseline 50%; post-transition 59%)

or explain something they didn't understand (baseline 50%; post-transition 57%). At baseline, responses were split between 'lots of times' (46%) and 'sometimes' (48%) as to whether others would help if something was bothering a student, however the post-transition results show 'lots of times' increasing to 57% and 'sometimes' decreasing to 39%. Similarly, students reported they would be invited 'lots of times' (46%) or 'sometimes' (49%) to do things with others at baseline, and at post-transition results revealed an increase to 54% for 'lots of times' and decrease to 42% for 'sometimes' responses. Additionally, at baseline 65% of students responded that Year 7 students would choose them on their team at school 'sometimes', however post-transition responses were split with 47% of students responding 'lots of times' and 54% of students responding 'sometimes'. Students also reported that 51% of Year 7 students would tell them they are good at things 'sometimes', and then at post-transition responded similarly for 'all of the time' (56%). Similarly, being missed if not at school 'sometimes' accounted for 50% of responses at baseline, and at post-transition the majority of responses were for 'lots of times' (53%). Finally, a number of students (10%) at baseline reported they would 'never' be missed by other Year 7's if they weren't at school. Similar to baseline results, post-transition results showed than 9% of students reported that they would 'never' by missed by other Year 7's if they weren't at school, while 'never' being asked to join in when you are alone rose from 1% at baseline to 7% at post-transition.

Chi-square tests were performed to determine the significant associations between each item and gender, primary school origin, and socio-economic status. At baseline, a significantly higher proportion of female students (47%) reported other students would miss them if they weren't at school 'lots of times' compared to male students (29%)(χ^2=6.581, p=0.037). Additionally, 53% of 'feeder' students and 41% of 'other' students stated they would never be missed by other Year 7's if they weren't at school, compared to only 6% of 'continuous' students (χ^2=10.367, p=0.035). No significant relationship between these items and gender, primary school origin and SES were found in the post-transition results. There was however a significant relationship between baseline and post-transition results for the item 'miss you if you weren't at school', which reported an increase in proportion from 40% (baseline) to 52% (post-transition) for 'lots of times' and corresponding decrease in proportion for 'sometimes' from 50% (baseline) to 38% (post-transition) (χ^2=19.723, p=0.001).

An Exploratory Factor Analysis utilising principal axis factor analysis was used to determine the underlying dimensions of peer support for baseline data. Final estimates of communalities were iterated from squared multiple item correlations to convergence. The item pool was deemed suitable for factor analysis (baseline KMO=0.84). Using Kaiser's criterion (Eigenvalues ≥1.0) together with Cattell's scree test, three factors were extracted accounting for 53% of the common variance factor for baseline data, and one factor accounting for 47% of the common variances for the post-transition data. For the baseline results, Varimax rotated factor loadings ranged from 0.325 to 0.577 (Table 4.20). These three factors can be described as the provision of emotional support, participation, and degree of social inclusion. Reliability analysis for these factors reported moderate reliability (Nunnaly, 1978; Santos, 1999) for emotional support (baseline α=0.73; post-transition α=0.75), participation (baseline α=0.64; post-transition α=0.77) and degree of social inclusion (baseline α=0.76; post-transition α=0.66) in this sample.

Table 4.19 Student responses for peer support scale at time of transition and six months post-transition in Year 7

	At transition (baseline) (n=186)			**Six months post-transition (n=181)**		
Are there students in Year 7 who would:	**Lots of times %(n)**	**Sometimes %(n)**	**Never %(n)**	**Lots of times %(n)**	**Sometimes %(n)**	**Never %(n)**
Choose you on their team at school?	32.3(60)	65.1(121)	2.7(5)	47.0(85)	52.5(95)	0.6(1)
Tell you you're good at doing things?	47.3(88)	51.1(95)	1.6(3)	56.4(102)	40.9(74)	2.8(5)
Explain something if you didn't understand?	50.0(93)	47.3(88)	2.7(5)	56.6(103)	42.3(77)	1.1(2)
Invite you to do things with them?	46.2(86)	48.9(91)	4.8(9)	53.8(98)	42.3(77)	3.8(7)
Help you if you are hurt?	60.0(111)	38.9(72)	2.2(1)	69.2(126)	28.6(52)	2.2(4)
Miss you if you weren't at school? $^{a, b}$	39.5(73)	50.3(93)	10.3(19)	52.7(96)	37.9(69)	9.3(17)
Help you if something is bothering you?	46.4(85)	48.7(91)	3.8(7)	57.7(105)	38.5(70)	3.8(7)
Ask to work with you on group work?	50.0(93)	47.8(89)	2.2(4)	59.3(108)	37.9(69)	2.7(5)
Help you if other students were treating you badly?	60.4(113)	34.2(64)	5.3(10)	63.7(116)	32.4(59)	3.8(7)
Ask you to join in when you are alone?	53.8(100)	45.7(85)	0.5(1)	60.2(109)	33.1(60)	6.6(12)
Share his/her things with you?	53.8(100)	43.5(81)	2.7(5)	65.2(118)	32.6(59)	2.2(4)

Baseline: $^{a}p<0.05$ gender, $^{b}p<0.05$ primary school origin

Table 4.20 Factor solutions for peer support scale

Are there students in Year 7 who would:	Peer support Emotional support	Participation	Degree of social inclusion
Choose you on their team at school?	.577	.168	.008
Invite you to do things with them?	.539	.316	.282
Ask you to join in when you are alone?	.496	.244	.364
Share his/her things with you?	.325	.190	.231
Miss you if you weren't at school?	.138	.557	.186
Help you if you are hurt?	.284	.496	.088
Help you if other students were treating you badly?	.293	.475	.226
Tell you you're good at doing things?	.317	.350	.230
Ask to work with you on group work?	.425	.009	.585
Help you if something is bothering you?	-.031	.412	.573
Explain something if you didn't understand?	.126	.183	.383

A mean score was calculated for emotional support, participation, and degree of social inclusion by averaging the items within each factor for students who had completed at least 80% of the items within each factor (Table 4.21). All mean scores were significantly different to normal (p<0.001). Non-parametric Mann-Whitney tests were used with factor mean scores and gender, while Kruskal-Wallis tests were used with primary school origin and socio-economic status to determine significant differences. Testing revealed that primary school origin was significantly related to the level of emotional support (χ^2=6.980, p=0.031), and participation (χ^2=7.445, p=0.024) at baseline for 'continuous' students, while at post-transition primary school origin and gender were significantly related to participation (χ^2=7.502, p=0.023; χ^2=4.923, p=0.027) with females and students from 'continuous' schools reporting greater participation.

Wilcoxon signed-ranks tests of baseline and post-transition results revealed significant overall increases in emotional support (baseline 2.43, post-transition 2.53, z=-3.32, p=0.001), participation (baseline 2.47, post-transition 2.56, z=-2.96, p=0.003) and degree of social support (baseline 2.46, post-transition 2.55, z=-2.48, p=0.013) from baseline to post-transition (Figure 4.3). Factors were also tested to discriminate for significance within demographic categories. Wilcoxon signed-rank tests produced results indicating that on the basis of gender, females reported a significant increase in emotional support (baseline 2.41, post-transition 2.58, =-4.03, p<0.001) and participation (baseline 2.50, post-transition 2.62, z=-2.88, p=0.004). In relation to primary school origin, students from ‘other’ primary schools also reported a significant increase in emotional support (baseline 2.39, post-transition 2.58, z=-3.286, p=0.001) and participation (baseline 2.39, post-transition 2.59, z=-2.91, p=0.004). Additionally, ‘continuous’ students reported a significant increase in social support (baseline 2.48, post-transition 2.63, z=-2.156, p=0.031). In relation to socio-economic status, those students of middle family affluence reported a significant increase in emotional support (baseline 2.41, post-transition 2.50, z=-2.47, p=0.013). Finally, the high family affluence group reported a significant increase in emotional support (baseline 2.48, post-transition 2.62, z=-2.40, p=0.016) and participation (baseline 2.41, post-transition 2.55, z=-2.510, p=0.012).

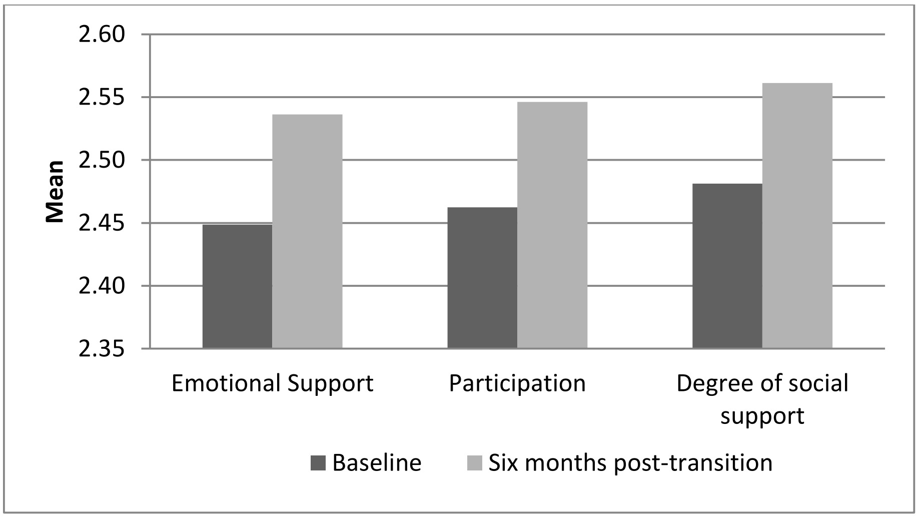


Figure 4.3 Peer support at baseline and six months post-transition in Year 7

Students’ written responses regarding their likes and dislikes about other students at the school were categorised by emerging themes after each data collection (Table 4.22). At baseline and post-transition the most commonly reported ‘likes’ about other students were that they were friendly (baseline 51%; post-transition 45%), nice and kind (baseline 48%; post-transition 48%), fun to be with (baseline 17%; post-transition 15%), caring (baseline 16%; post-transition 24%) and helpful (baseline 9%; post-transition 15%). For these categories, friendliness decreased from 51% to 45% at post-transition while caring increased from 16% to 24%. The most commonly reported ‘dislikes’ of other students were being mean, gossipy or rude (baseline 22%; post-transition 39%), exclusion (baseline 14%; post-transition 9%), and acting immaturely (baseline 13%; post-transition 13%). In these categories, the proportion of students who reported others as being mean, gossipy or rude increased from 22% to 37%, while exclusion decreased from 14% to 9% and acting ‘cool’ decreased from 11% to 5%.

Table 4.21 Factor mean scores for peer support scale at time of transition and six months post-transition in Year 7

	Peer support – at transition			**Peer support – 6 months post-transition**		
	Emotional support mean(sd)	**Participation mean(sd)**	**Degree of social support mean(sd)**	**Emotional support mean(sd)**	**Participation mean(sd)**	**Degree of social support mean(sd)**
Gender [c]						
Male (n=77)	2.46(0.39)	2.42(0.38)	2.42(0.44)	2.48(0.47)	2.46(0.48)	2.50(0.43)
Female (n=98)	2.41(0.37)	2.50(0.41)	2.52(0.37)	2.58(0.38)	2.62(0.41)	2.59(0.41)
Primary school origin [a, b, c]						
Continuous (n=51)	2.55(0.37)	2.59(0.35)	2.48(0.46)	2.60(0.39)	2.67(0.40)	2.63(0.41)
Feeder (n=71)	2.39(0.33)	2.43(0.43)	2.44(0.38)	2.45(0.44)	2.45(0.47)	2.49(0.44)
Other (n=53)	2.39(0.37)	2.39(0.37)	2.49(0.39)	2.58(0.42)	2.59(0.42)	2.57(0.39)
Socio-economic status						
Low family affluence (n=14)	2.50(0.43)	2.48(0.44	2.54(0.37)	2.48(0.47)	2.49(0.39)	2.57(0.44)
Middle family affluence (n=116)	2.41(0.35)	2.48(0.39)	2.43(0.40)	2.50(0.44)	2.54(0.46)	2.52(0.44)
High family affluence (n=46)	2.48(0.41)	2.41(0.41)	2.53(0.41)	2.62(0.34)	2.55(0.44)	2.62(0.36)

Baseline: [a]$p<0.05$ emotional support, [b]$p<0.05$ participation

Post-transition: [c]$p<0.05$ participation

Table 4.22 Students' reported likes and dislikes about the students at their new school at baseline and six months post-transition in Year 7

Please describe the main things you like about the students at your new secondary school:	At transition (n=174) %(n)	Six months post-transition (n=166) %(n)
Friendly	51.1(89)	45.2(72)
Nice and kind	48.3(84)	47.6(79)
Fun to be with	17.2(30)	15.1(25)
Caring	16.1(28)	24.1(40)
Helpful	8.6(15)	14.5(24)
Accept me as I am	8.0(14)	2.4(4)
Polite & respectful	4.6(8)	1.8(3)
Honest	2.3(4)	1.8(3)
Patient & understanding	2.3(4)	3.0(5)
Make me feel safe & comfortable	1.1(2)	1.8(3)
Share things with me	0.6(1)	1.8(3)
Fair	0.6(1)	1.8(3)
Known to me	0.0(0)	0.6(1)

Please describe the main things you dislike about the students at your new secondary school:	(n=119) %(n)	(n=106) %(n)
Are mean, gossipy or rude	21.8(26)	36.8(39)
Exclude me from their group	14.3(17)	9.4(10)
Act immature	12.6(15)	13.2(5)
Act cool to be popular	10.9(13)	4.7(5)
Are bossy	6.7(8)	0.0(0)
Don't care about school/others	6.7(8)	1.9(2)
Break the rules	4.2(5)	5.7(6)
Frighten, bully or tease	4.2(5)	22.6(24)
Have no manners	3.4(4)	2.8(3)
Drop litter	2.5(3)	0.0(0)
Think they are better than me	1.7(2)	7.5(8)
Ask for money	0.8(1)	0.0(0)
There are too many students	0.8(1)	0.9(1)
Boy/girl tensions	0.0(0)	3.8(4)

Other categories that emerged from the student ‘likes’ were being accepted as I am, which decreased from baseline (8%) to post-transition (4%), and being polite and respectful which had also decreased by post-transition (baseline 5%; post-transition 2%). The remaining categories remained stable over time. For student ‘dislikes’, being frightened, bullied or teased increased dramatically from 4% to 23% at post-transition. Dislike of other students not caring about school or others decreased by six months post-transition from 7% to 2%, while other students ‘who think they are better than me’ increased from 2% to 8%. The proportion of students who disliked bossy students decreased to 0% from a baseline measure of 7%, and boy/girl tensions increased from 0% to 4% at post-transition. All other ‘dislike’ categories remained stable between the two time points.

The number of ‘likes’ and ‘dislikes’ were summed into positive or negative expectations to provide a measure of how much the students liked or disliked things about their fellow students and analysed by the demographic categories of gender, primary school origin and SES, as shown below in Tables 4.23 and 4.24. At baseline, 87% of males and 86% of females reported one or two things they liked about the students at their secondary school, and this majority continued to report up to two things they liked at post-transition with 87% and 83% respectively. At baseline and post-transition, 27% had three or more ‘likes’ about other students. At baseline and post-transition, the majority of students, regardless of primary school origin, had one or two things they liked about other students, with ‘continuous’ students reporting 90% at baseline and 69% at six months post-transition, ‘feeder’ students reporting 94% and 83%, and ‘other’ students reporting 70% and 80% respectively. For this item, ‘other’ students were the only category to show an increase in proportion at post-transition. All family affluence categories showed that the majority of students had one or two things they liked about the students at their school at both baseline and post-transition, with low family affluence reporting 90% increasing to 100% at post-transition, middle family affluence reporting 87% decreasing to 83%, and high family affluence reporting 83% at both time points. Chi-square tests were undertaken to determine if any significant relationship existed within or between baseline and post-transition, however none were found.

Table 4.23 Student responses categorised into number of 'likes' about other students at transition and six months post-transition in Year 7

Number of student 'likes' about other students	At transition 1 %(n)	 2 %(n)	 3 or more %(n)	Six months post-transition 1 %(n)	 2 %(n)	 3 or more %(n)
Gender						
Male (n=67)	61.2(41)	25.4(17)	13.4(9)	42.0(29)	44.9(31)	13.0(9)
Female (n=89)	45.7(42)	40.2(37)	14.1(13)	40.4(36)	42.7(38)	16.9(15)
Primary school origin						
Continuous (n=47)	59.6(28)	29.8(14)	10.7(5)	25.8(22)	43.1(22)	8.3(4)
Feeder (n=65)	52.3(34)	41.5(27)	6.2(4)	46.9(30)	35.9(23)	17.2(11)
Other (n=48)	45.8(22)	24.5(13)	27.1(13)	30.4(14)	50.0(23)	19.5(9)
Socio-economic status						
Low family affluence (n=10)	60.0(6)	30.0(3)	10.0(1)	40.0(4)	60.0(6)	0.0(0)
Middle family affluence (n=106)	52.8(56)	34.0(36)	13.2(14)	43.9(47)	39.3(42)	16.8(18)
High family affluence (n=42)	50.0(21)	33.3(14)	16.7(7)	37.5(15)	45.0(19)	15.0(6)

For student ‘dislikes’, at baseline, 87% of males and 83% of females reported one thing they disliked about the other students in the secondary school. By six months post-transition, males had decreased slightly to 84% while females had increased to 87%. In relation to primary school origin, 85% of ‘continuous’ students reported one dislike, and at post-transition this had decreased to 74%, however the number of students with two things they disliked about their fellows had increased from 15% to 27%. Both ‘feeder’ and ‘other’ students reported increases in the proportion of students who had one thing they disliked (feeder: baseline 87%, post-transition 93%; other: baseline 80%, post-transition 87%). While low family affluence students remained stable across the two time points, the middle (baseline 86%; post-transition 90%) family affluence category reported an increase in the proportion of students who had one thing they disliked about other students. Chi-square tests were undertaken to determine if any significant relationship existed within or between baseline and post-transition, however none were found.

Table 4.24 Student responses categorised into number of ‘dislikes’ about other students at transition and six months post-transition in Year 7

Number of student ‘dislikes’ about other students	At transition		Six months post-transition	
	1 %(n)	2 %(n)	1 %(n)	2 %(n)
Gender				
Male (n=38)	86.8(33)	13.2(5)	84.2(32)	15.8(6)
Female (n=61)	82.7(43)	17.3(9)	86.9(53)	13.1(8)
Primary school origin				
Continuous (n=27)	85.2(23)	14.8(4)	73.1(19)	26.9(7)
Feeder (n=38)	86.8(33)	13.2(5)	92.7(38)	7.3(3)
Other (n=25)	80.0(20)	20.0(5)	87.5(28)	12.5(4)
Socio-economic status				
Low family affluence (n=7)	71.4(5)	28.6(2)	80.0(4)	20.0(2)
Middle family affluence (n=66)	86.4(57)	13.6(9)	90.0(63)	10.0(7)
High family affluence (n=24)	81.3(13)	18.8(3)	75.0(18)	25.0(6)

4.3.1.2 Loneliness

To measure students' degree of loneliness at secondary school, the seven item Loneliness and Social Dissatisfaction Scale (Cassidy & Asher, 1992) was included in baseline and post-transition surveys, and results are presented in Tables 4.25 and 4.26. At baseline, 41% of students reported that they 'strongly disagreed' that they felt lonely at secondary school, and at six months post transition this had increased to 54%. The proportion of students who answered this item as 'neither agree nor disagree' had also decreased from 16% to 10% at post-transition. The majority of students 'strongly agreed' in both surveys that they had lots of friends to talk to (baseline 51%; post-transition 55%),'strongly disagreed' that they had nobody to talk to in class (baseline 56%; post-transition 59%), that they didn't have anyone to spend time with at secondary school (baseline 62%; post-transition 70%), or felt lonely at secondary school (baseline 62%; post-transition 69%). While 37% of students 'strongly disagreed' it was hard to make friends at secondary school, at six months post-transition this had increased to 52%, while the proportion of students who agreed with this item had reduced from 13% to 4% at post-transition. Students also reported strong disagreement to feeling left out of things at secondary school (46%) at baseline, and this increased to 55% post-transition, however 4% of students agreed with this item at post-transition compared to less than 1% at baseline. Chi-square tests produced non-significant results for changes between items from baseline to post-transition time points.

Chi-square tests were performed to determine the significant associations between each item and gender, primary school origin, and socio-economic status. No significant associations were found at baseline or post-transition. Most items comprising this scale are negatively worded with responses ranging from 'strongly agree' (=1) to 'strongly disagree' (=5) so for further analysis, item 'b' was recoded so responses would fit with the remainder of the items

Table 4.25 Students' responses for loneliness scale at baseline in Year 7

For each sentence, choose the answer that shows how much you agree or disagree:	Loneliness - baseline (n=186) Strongly agree %(n)	Agree %(n)	Neither agree or disagree %(n)	Disagree %(n)	Strongly disagree %(n)
I feel alone at secondary school	2.2(4)	6.4(12)	16.0(30)	33.0(62)	41.5(78)
I have lots of friends to talk to at secondary school	50.8(94)	29.7(55)	12.4(23)	3.8(7)	3.2(6)
It's hard for me to make friends at secondary school	3.8(7)	13.4(25)	19.4(36)	26.3(49)	37.1(69)
I have nobody to talk to in my classes	2.2(4)	3.2(6)	11.3(21)	27.4(51)	55.9(104)
I don't have anyone to spend time with at secondary school	1.6(3)	1.6(3)	5.9(11)	28.6(53)	62.2(115)
I'm lonely at secondary school	0.5(1)	4.3(8)	7.0(13)	26.5(49)	61.6(114)
I feel left out of things at secondary school	0.5(1)	4.9(9)	18.5(34)	29.9(55)	46.2(85)

Table 4.26 Students' responses for loneliness scale six months post-transition in Year 7

	Loneliness – six months post transition (n=182)				
For each sentence, choose the answer that shows how much you agree or disagree:	**Strongly agree %(n)**	**Agree %(n)**	**Neither agree or disagree %(n)**	**Disagree %(n)**	**Strongly disagree %(n)**
I feel alone at secondary school	3.3(6)	4.4(8)	10.4(19)	28.0(51)	53.8(98)
I have lots of friends to talk to at secondary school	54.9(100)	31.3(57)	7.1(13)	1.6(3)	4.9(9)
It's hard for me to make friends at secondary school	3.3(6)	4.4(8)	16.0(29)	24.3(44)	51.9(94)
I have nobody to talk to in my classes	3.3(6)	2.2(4)	11.5(21)	23.6(43)	59.3(108)
I don't have anyone to spend time with at secondary school	1.1(2)	2.7(5)	6.0(11)	18.7(34)	70.3(128)
I'm lonely at secondary school	1.1(2)	3.9(7)	7.7(14)	18.2(33)	69.1(125)
I feel left out of things at secondary school	4.4(8)	4.4(8)	14.8(27)	20.9(38)	55.5(101)

An Exploratory Factor Analysis utilising principal axis factor analysis was used to determine the underlying dimensions of loneliness for baseline data. Final estimates of communalities were iterated from squared multiple item correlations to convergence. The item pool was deemed suitable for factor analysis (baseline KMO=0.89). Using Kaiser's criterion (Eigenvalues ≥1.0) together with Cattell's scree test, one factor was extracted accounting for 61% of the common variance factor for baseline data. For the baseline results, factor loadings ranged from 0.586 to 0.890 (Table 4.27). This factor can be described as loneliness and reliability analysis for the scale reported good reliability (Nunnaly, 1978; Santos, 1999) at baseline (α=0.882) and post-transition (α=0.867).

Table 4.27 Factor solutions for loneliness scale at baseline and six months post-transition in Year 7

For each sentence, choose the answer that shows how much you agree or disagree:	Loneliness
I'm lonely at secondary school	.890
I don't have anyone to spend time with at secondary school	.795
I feel left out of things at secondary school	.768
I feel alone at secondary school	.742
It's hard for me to make friends at secondary school	.691
I have nobody to talk to in my classes	.654
I have lots of friends to talk to at secondary school	.586

A mean score was calculated for loneliness by averaging the items in the factor for students who had completed at least 80% of the items in the factor (Table 4.28). All mean scores were significantly different to normal ($p<0.001$) at baseline and post-transition. Non-parametric Mann-Whitney tests were used with factor mean scores and gender, while Kruskal-Wallis tests were used with primary school origin and socio-economic status to determine significant differences. Testing revealed that primary school origin was significantly related to loneliness ($\chi^2=6.401$, $p=0.041$) at post-transition with 'continuous' students reporting significantly less loneliness than 'feeder' or 'other' students.

Table 4.28 Factor mean scores for loneliness scale at baseline and six months post-transition in Year 7

	Loneliness – baseline mean(sd)	Loneliness – six months post transition mean(sd)
Gender		
Male (n=77)	4.30(0.72)	4.38(0.81)
Female (n=98)	4.20(0.68)	4.32(0.67)
Primary school origin [a]		
Continuous (n=51)	4.40(0.56)	4.94(0.70)
Feeder (n=71)	4.24(0.68)	4.26(0.70)
Other (n=53)	4.08(0.83)	4.36(0.73)
Socio-economic status		
Low family affluence (n=13)	3.93(0.98)	3.84(1.09)
Middle family affluence (n=116)	4.20(0.72)	4.36(0.72)
High family affluence (n=45)	4.33(0.57)	4.39(0.68)

Post-transition: [a]$p<0.05$ loneliness

A Wilcoxon signed-ranks test also revealed that feeling less lonely significantly increased from baseline (4.21) to post-transition (4.32) (z=-3.138, p=0.002) (Figure 4.4).

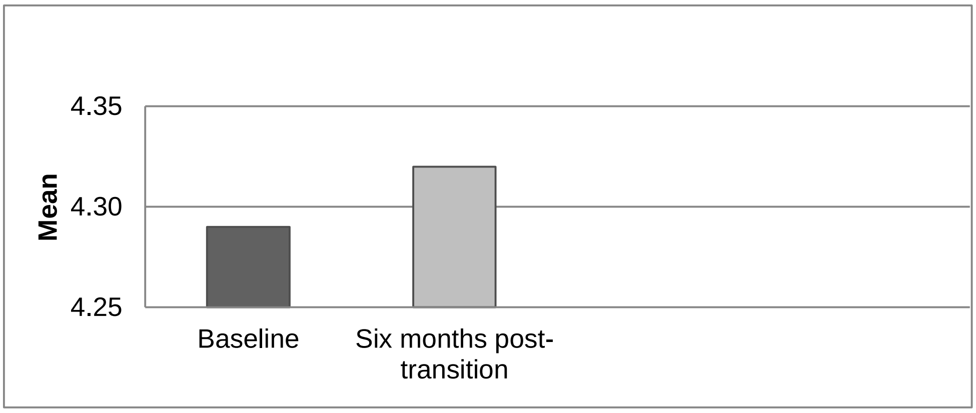


Figure 4.4 Increase in feeling less lonely from baseline to six months post-transition in year 7

4.3.1.3 Family connectedness

The connectedness of students to their families was measured using the Family Connectedness Scale (McNeely, et al., 2002) at baseline and post-transition, with results presented in Tables 4.29 and 4.30, below. At both baseline and six months post-transition, the majority of students responded ‘strongly agree’ to being very close to their family (baseline 66%; post-transition 69%), being an important member of their family (baseline 56%; post-transition 67%), that someone in their family cares what happens to them (baseline 71%; post-transition 77%), they had a good relationship with all of their family (baseline 54%; post-transition 55%), that everyone in their family was a valuable member (baseline 68%; post-transition 69%), and they have at least one family member who takes an interest in their school work (baseline 61%; post-transition 71%). Similarly, most students also ‘strongly agreed’ that they do things with at least one other family member (baseline 59%; post-transition 75%) and that there was almost always a parent or other adult at home before school (baseline 66%; post-transition 67%), after school (baseline 60%; post-transition 61%), at dinner time (baseline 71%; post-transition 77%) and in the evening after dinner (baseline 72%; post-transition 75%). At baseline, 42% of students ‘strongly agreed’ they could discuss their problems with a family member, and at six months post-transition this proportion had increased to 50%; however the proportion of students who strongly disagreed with this item had also increased from 3% to 7%, while a similar percentage continued to respond ‘neither agree or disagree’ (baseline 18%; post-transition 15%). Many students indicated in both surveys they ‘strongly agreed’ that at least one person in their family listens to their opinions (baseline 44%; post-transition 60%) and at least one person in their family listens to their problems (baseline 48%; post-transition 58%). Finally, while the proportion of students who ‘strongly disagreed’ (41%) or ‘disagreed’ (31%) that no one in their family understands their problems at baseline, this decreased to 37% and 29% at post-transition, and strong agreement with this item increased from 5% to 12% respectively. Chi-square testing however revealed non-significant results for all items in relation to changes in proportion between baseline and post-transition results. Chi-square tests were also performed to determine the significant associations between each item and gender, primary school origin, and socio-economic status. No significant associations were found at baseline or post-transition.

Table 4.29 Students' responses for family connectedness scale at baseline

I feel;	Family connectedness – baseline (n=186) Strongly agree %(n)	Agree %(n)	Neither agree or disagree %(n)	Disagree %(n)	Strongly disagree %(n)
Very close to my family	66.1(123)	24.5(46)	7.4(14)	1.6(3)	0.0(0)
I am an important member of my family	56.1(105)	30.5(57)	10.7(20)	1.6(3)	1.1(2)
Someone in my family cares what happens to me	71.4(132)	20.0(37)	5.9(11)	2.2(4)	0.5(1)
I am able to discuss my problems with a family member	42.2(78)	28.2(53)	18.1(34)	7.4(14)	3.2(6)
I have a good relationship with all my family	53.8(100)	30.6(57)	11.3(21)	2.7(5)	1.6(3)
No-one in my family understands my problems	4.9(9)	5.4(10)	17.8(33)	30.8(57)	41.1(76)
Everyone in my family are valuable members	67.6(125)	21.6(40)	9.7(18)	1.1(2)	0.0(0)
At least one person in my family listens to my opinions	44.1(82)	36.0(67)	9.7(18)	7.5(14)	2.7(5)
At least one person in my family listens to my problems	47.5(87)	31.1(57)	12.0(22)	6.6(12)	2.7(5)
At least one member in my family takes an interest in my school work	60.5(112)	27.6(51)	5.9(11)	4.9(9)	1.1(2)
I do things with at least one other family member (e.g. shopping)	59.1(110)	27.4(51)	8.1(15)	4.8(9)	0.5(1)
There is almost always a parent or other adult at home before school	62.5(115)	23.9(45)	9.2(17)	2.7(5)	1.1(2)
There is almost always a parent or other adult at home after school	55.9(104)	28.0(52)	8.6(16)	5.9(11)	1.6(3)
There is almost always a parent or other adult at home at dinner time	70.8(131)	21.6(40)	7.0(13)	0.5(1)	0.0(0)
There is almost always a parent or other adult at home in the evening after dinner	71.5(133)	21.0(39)	5.9(11)	1.6(3)	0.0(0)

Table 4.30 Student responses for family connectedness scale six months post-transition in Year 7

	Family connectedness – six month post-transition (n=182)				
I feel;	**Strongly agree %(n)**	**Agree %(n)**	**Neither agree or disagree %(n)**	**Disagree %(n)**	**Strongly disagree %(n)**
Very close to my family	68.7(123)	21.8(39)	4.5(8)	3.9(7)	1.1(2)
I am an important member of my family	66.7(118)	19.8(35)	9.0(16)	1.7(3)	2.8(5)
Someone in my family cares what happens to me	76.7(138)	13.3(24)	5.6(10)	1.7(3)	2.8(5)
I am able to discuss my problems with a family member	50.3(90)	22.3(40)	15.1(27)	5.6(10)	6.7(12)
I have a good relationship with all my family	55.0(99)	25.0(45)	11.1(20)	5.6(10)	3.3(6)
No-one in my family understands my problems	12.4(22)	7.9(14)	14.0(25)	28.7(51)	37.1(66)
Everyone in my family are valuable members	68.7(123)	22.9(41)	5.6(10)	2.2(4)	0.6(1)
At least one person in my family listens to my opinions	60.0(108)	23.3(42)	9.4(17)	3.9(7)	3.3(6)
At least one person in my family listens to my problems	58.4(104)	25.8(46)	9.6(17)	3.4(6)	2.8(5)
At least one member in my family takes an interest in my school work	71.1(128)	17.2(31)	6.7(12)	2.2(4)	2.8(5)
I do things with at least one other family member (e.g. shopping)	75.0(135)	17.8(32)	4.4(8)	0.0(0)	2.8(5)
There is almost always a parent or other adult at home before school	66.9(119)	15.7(28)	9.6(17)	4.5(8)	3.4(6)
There is almost always a parent or other adult at home after school	60.9(109)	19.0(34)	14.5(26)	2.8(5)	2.8(5)
There is almost always a parent or other adult at home at dinner time	76.5(137)	16.8(30)	3.9(7)	2.2(4)	0.6(1)
There is almost always a parent or other adult at home in the evening after dinner	74.7(133)	17.4(31)	6.2(11)	1.7(3)	0.0(0)

Table 4.31 Varimax rotated factor solutions for family connectedness scale

I feel	Family connectedness – baseline		
	Family interaction	Family monitoring	Family care
Very close to my family	.732	.103	.036
I have a good relationship with all of my family	.732	.136	.105
I am an important member of my family	.685	.195	.107
Someone in my family cares what happens to me	.643	.151	.273
Everyone in my family are valuable members	.565	.269	.062
No one in my family understands my problems	.500	.038	.349
I am able to discuss my problems with a family member	.429	.110	.210
There is almost always a parent or other adult at home at dinner time	.123	.888	.056
There is almost always a parent or other adult at home in the evening after dinner	.110	.817	.062
There is almost always a parent or other adult at home after school	.153	.534	.232
There is almost always a parent or other adult at home before school	.216	.432	.194
I do things with at least one other family member	.172	.425	.226
At least one person in my family takes an interest in my school work	.103	.337	.309
At least one person in my family listens to my problems	.206	.263	.885
At least one person in my family listens to my opinions	.237	.252	.775

An Exploratory Factor Analysis utilising principal axis factor analysis was used to determine the underlying dimensions of family connectedness for baseline results. Final estimates of communalities were iterated from squared multiple item correlations to convergence. The item pool was considered suitable for factor analysis (baseline KMO=0.82), and using Kaiser's criterion (Eigenvalues ≥1.0) together with Cattell's scree test, three factors were extracted accounting for 57% of the common variance factor for baseline data. For the baseline results, factor loadings ranged from 0.337 to 0.732 (Table 4.31). These factors can be described as family interaction, family monitoring and family care. Reliability analysis for the three factors reported good reliability at baseline (family interaction α=0.816; family monitoring α=0.888; family care α=0.772) and post-transition (family interaction α=0.863; family monitoring α=0.910; family care α=0.824) (Nunnaly, 1978; Santos, 1999).

A mean score was calculated for each factor by averaging the items within the factor for students who had completed at least 80% of the items in the factor (Table 4.32). All mean scores were significantly different to normal ($p<0.001$) at baseline and post-transition. Non-parametric Mann-Whitney tests were used with factor mean scores and gender, while Kruskal-Wallis tests were used with primary school origin and socio-economic status to determine significant differences. No significant relationships were found. Over time, Wilcoxon signed-rank testing revealed an overall significant increase in family care (baseline 4.13, post-transition 4.33, $z=-2.642$, $p=0.008$) from baseline to six months post-transition, while family monitoring and family interaction results were not significantly different from baseline to post-transition (Figure 4.5)

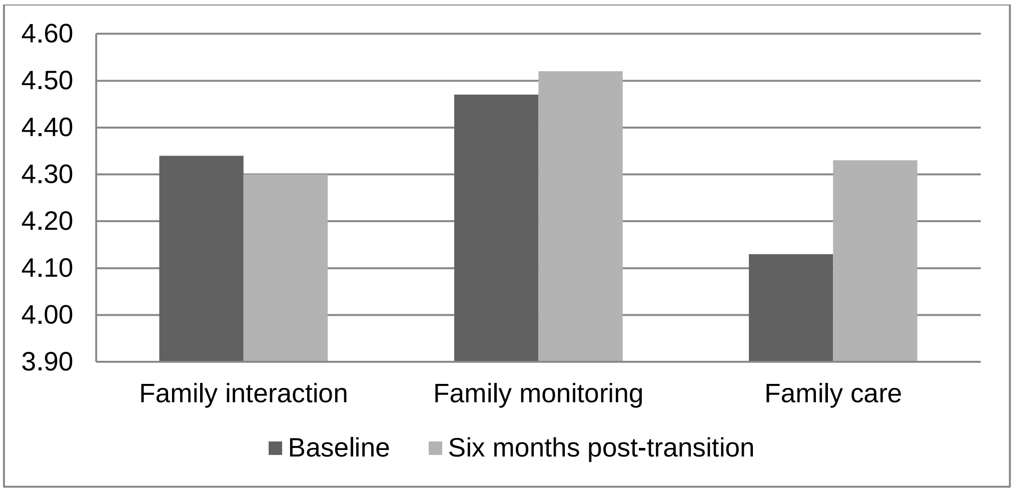


Figure 4.5 Family connectedness at baseline and six months post-transition in Year 7

Table 4.32 Factor mean scores for family connectedness scale at baseline and six months post-transition in Year 7

	Family connectedness – baseline			Family connectedness – 6 months post-transition		
	Family interaction mean(sd)	**Family monitoring mean(sd)**	**Family care mean(sd)**	**Family interaction mean(sd)**	**Family monitoring mean(sd)**	**Family care mean(sd)**
Gender						
Male (n=75)	4.33(0.68)	4.47(0.57)	4.18(1.05)	4.26(0.80)	4.49(0.65)	4.36(0.94)
Female (n=97)	4.38(0.56)	4.47(0.57)	4.09(0.95)	4.37(0.71)	4.56(0.62)	4.34(0.98)
Primary school origin						
Continuous (n=51)	4.39(0.53)	4.55(0.58)	4.38(0.78)	4.50(0.45)	4.72(0.36)	4.56(0.70)
Feeder (n=71)	4.36(0.64)	4.44(0.54)	4.06(0.95)	4.22(0.80)	4.40(0.82)	4.23(1.03)
Other (n=51)	4.36(0.66)	4.46(0.58)	3.99(1.18)	4.28(0.89)	4.53(0.63)	4.35(0.96)
Socio-economic status						
Low family affluence (n=13)	4.04(0.62)	4.41(0.38)	3.65(0.99)	3.93(0.97)	4.31(0.69)	4.17(1.09)
Middle family affluence (n=114)	4.38(0.63)	4.45(0.56)	4.19(0.98)	4.36(0.67)	4.52(0.64)	4.35(0.92)
High family affluence (n=46)	4.33(0.62)	4.47(0.57)	4.12(0.99)	4.27(0.87)	4.58(0.65)	4.35(0.97)

4.3.2 Institutional Supports

Students’ institutional supports were assessed by questions measuring teacher support, connectedness to school, and involvement in extra-curricular activities. One question was also asked regarding transition activities undertaken prior to commencing at the new secondary school, and was included only in the baseline survey.

4.3.2.1 Teacher support

To measure participants’ perceptions of teacher support, the six item Teacher connectedness scale (McNeely, et al., 2002) was administered in both surveys (Tables 4.33 and 4.34). At both time points, many students agreed that it was ‘pretty much true’ or ‘very much true’ that there was a teacher or some other adult at school who really cares about them (baseline 60%; post-transition 70%), tells them when they do a good job (baseline 76%; post-transition 83%), always wants them to do their best (baseline 85%; post-transition 84%), and believes they will be a success (baseline 69%; post-transition 74%). The majority of students also reported that it was ‘pretty much true’ or ‘very much true’ that there was a teacher or some other adult who would notice if they weren’t at school (baseline 58%; post-transition 66%), and listens when they have something to say (baseline 81%; post-transition 79%). Conversely, post-transition results for students answering ‘a little true’ to ‘listens to me when I have something to say’ decreased from 13% to 11% six months post-transition. The proportion of students who answered ‘not at all true’ also increased post-transition in five out of the six items of the scale. In these items, the proportion of students responding negatively rose at post-transition for ‘really cares about me’ (4% to 6%), ‘tells me when I do a good job’ (3% to 5%), ‘always wants me to do a good job’ (1% to 6%), ‘listens to me when I have something to say’ (1% to 4%), and ‘believes I will be a success’ (3% to 5%). The proportion of students who answered ‘not at all true’ to a teacher or other adult noticing when they are not at school stayed stable across both surveys at 6%. Chi-square tests on these items for change between baseline and post-transition returned non-significant results.

Table 4.33 Students' responses for teacher connectedness scale at baseline in Year 7

At my school, there is a teacher or some other adult who:	Teacher connectedness - baseline (n=185) Not at all true %(n)	A little true %(n)	Pretty much true %(n)	Very much true %(n)	Unsure % (n)
Really cares about me	4.3(8)	15.8(29)	32.6(60)	27.7(51)	19.6(36)
Tells me when I do a good job	2.7(5)	16.2(30)	35.7(66)	40.5(75)	4.9(9)
Notices when I'm not there	5.9(11)	16.2(30)	23.8(44)	34.1(63)	20.0(37)
Always wants me to do my best	1.1(2)	7.6(14)	21.1(39)	64.3(119)	5.9(11)
Listens to me when I have something to say	1.1(2)	13.0(24)	33.2(61)	47.8(88)	4.9(9)
Believes that I will be a success [a]	2.7(5)	9.7(18)	28.1(52)	41.1(76)	18.4(34)

[a] $p<0.05$ gender

Table 4.34 Students' responses for teacher connectedness scale at post-transition in Year 7

At my school, there is a teacher or some other adult who:	School connectedness - six months post-transition (n=182) Not at all true %(n)	A little true %(n)	Pretty much true %(n)	Very much true %(n)	Unsure % (n)
Really cares about me	6.1(11)	11.6(21)	40.3(73)	29.8(54)	12.2(22)
Tells me when I do a good job	4.4(8)	8.8(16)	35.9(65)	47.0(85)	3.9(7)
Notices when I'm not there	6.1(11)	14.4(28)	30.9(58)	35.4(64)	13.3(24)
Always wants me to do my best	5.6(10)	3.3(6)	18.3(33)	66.1(119)	6.7(12)
Listens to me when I have something to say	3.9(7)	10.5(19)	33.1(60)	45.9(83)	6.6(12)
Believes that I will be a success	5.0(9)	10.5(19)	28.7(52)	45.3(82)	10.5(19)

Chi-square tests were performed to determine the significant associations between each item and gender, primary school origin, and socio-economic status. At baseline, a significantly higher proportion of females (62%) than males (39%) reported that school staff believed they will be a success (χ^2=9.597, p=0.048). No other significant relationships were found at baseline or post-transition.

An Exploratory Factor Analysis utilising principal axis factor analysis was used to determine the underlying dimensions of teacher connectedness for baseline data. Final estimates of communalities were iterated from squared multiple item correlations to convergence. The item pool was deemed suitable for factor analysis (baseline KMO=0.79). Using Kaiser's criterion (Eigenvalues ≥1.0) together with Cattell's scree test, one factor was extracted accounting for 44% of the common variance for baseline data. For the baseline results, factor loadings ranged from 0.482 to 0.689 (Table 4.35). This factor can be described as teacher connectedness, and reliability analysis reported moderate reliability (baseline α=0.73; post-transition α=0.81).

Table 4.35 Factor solutions for teacher connectedness scale

At my school, there is a teacher or some other adult who:	Teacher connectedness
Believes that I will be a success	.689
Listens to me when I have something to say	.665
Tell me when I do a good job	.558
Always wants me to do my best	.525
Really care about me	.487
Notices when I am not there	.482

A mean score was calculated for teacher connectedness by averaging the items within the factor for students who had completed at least 80% of the items in the factor (Table 4.36). All mean scores were significantly different to normal (p<0.001) at baseline and post-transition. Non-parametric Mann-Whitney tests were used with factor mean scores and gender, while Kruskal-Wallis tests were used with primary school origin and socio-economic status to determine significant differences. At baseline, 'continuous' school students reported significantly higher teacher connectedness than 'feeder' or 'other' school students (χ^2=7.222, p=0.027). A Wilcoxon signed-ranks test showed a significant increase in teacher connectedness over time from baseline to six months post-transition (baseline 3.96, post-transition 4.02, z=-2.37, p=0.018).

Table 4.36 Factor mean scores for teacher connectedness scale at baseline and six months post-transition in Year 7

	Teacher connectedness – baseline mean(sd)	**Teacher connectedness – six months post transition mean(sd)**
Gender		
Male (n=75)	3.87(0.74)	3.89(0.99)
Female (n=97)	4.04(0.73)	4.18(0.76)
Primary school origin [a]		
Continuous (n=51)	4.12(0.82)	4.19(0.98)
Feeder (n=70)	3.98(0.74)	3.98(0.96)
Other (n=51)	3.85(0.61)	4.00(0.81)
Socio-economic status		
Low family affluence (n=13)	3.87(0.57)	4.00(0.97)
Middle family affluence (n=115)	3.98(0.73)	4.06(0.84)
High family affluence (n=45)	3.98(0.79)	3.98(0.95)

Baseline : [a]$p<0.05$ teacher connectedness

Students' written responses regarding their likes and dislikes about teachers at the school were categorised by emerging themes after each data collection (Table 4.37). At baseline and six months post-transition, the most commonly reported 'likes' about teachers were being nice, kind and friendly (baseline 57%; post-transition 41%), helpful (baseline 27%; post-transition 50%), caring, compassionate and supportive (baseline19%; post-transition 45%), 'fun to be with' (baseline 15%; post-transition 11%), and clear and understandable in class (baseline 7%; post-transition 17%). The most commonly reported 'dislikes' about teachers reported by students were being mean, are grumpy or shout (baseline 34%; post-transition 37%), being very strict (baseline 31%; post-transition 18%), give too much homework (baseline 19%; post-transition 15%) and give unfair punishments (baseline 14%; post-transition 12%). All other categories of 'likes' and 'dislikes' remained relatively stable between the two surveys.

Table 4.37 Students reported like and dislikes about the teachers at their new school at baseline and six months post-transition in Year 7

Please describe the main things you like about the. teachers at your new secondary school:	**Baseline (n=167) %(n)**	**Six months post-transition (n=119) %(n)**
Nice, kind & friendly	56.9(95)	41.2(49)
Helpful	26.9(45)	50.4(60)
Caring, compassionate and supportive	19.8(33)	45.4(54)
Fun to be with	15.0(25)	10.9(13)
Want us to learn & makes classes interesting	12.0(20)	27.7(33)
Clear & understandable in class	7.2(12)	16.8(20)
Trustworthy & respectful	4.2(7)	3.4(4)
OK	3.0(5)	0.0(0)
Everything about the teachers is great	2.4(4)	2.5(3)
Fair with homework	2.4(4)	0.0(0)
Better than primary teachers	1.8(3)	2.5(3)
Give prizes/incentives for doing the right thing	1.8(3)	0.0(0)
Good role models	0.6(1)	0.0(0)
Please describe the main things you dislike about the teachers at your new secondary school:	**(n=86) %(n)**	**(n=97) %(n)**
Mean, are grumpy or shout	33.7(29)	37.1(36)
Very strict	31.4(27)	17.5(17)
Give too much homework	18.6(16)	15.1(15)
Give unfair punishment	14.0(12)	12.4(12)
Don't make instructions clear	5.8(5)	5.2(5)
Uncaring	5.8(5)	3.1(3)
Scary and intimidating or weird	4.7(4)	2.1(2)
Talk too much	4.7(4)	4.1(4)
Unhelpful	2.3(2)	5.2(5)
Have favourites	2.3(2)	4.1(4)
Are often late to class	1.2(1)	0.0(0)
Don't mark work	1.2(1)	0.0(0)
Boring classes	0.0(0)	4.1(4)
Have high demands	0.0(0)	5.2(5)

The number of 'likes' and 'dislikes' were summed to provide a measure of how much the students liked or disliked things about their teachers and analysed by the demographic categories of gender, primary school origin and SES, as shown in Tables 4.38 and 4.39. At transition, 40% of males and 52% of females had one or two things they liked about the teachers at their new secondary school and these proportions remained stable at post-transition with 41% and 51% respectively. For primary school origin, around one-third of each category had one or two things they liked about the teachers at baseline ('continuous' 28%, 'feeder' 36%, 'other' 28%), and remained stable at post-transition ('continuous' 30%, 'feeder' 35%, 'other' 27%). Finally, for socio-economic status results remained relatively stable across both time points. Chi-square testing revealed no significant relationships were present within and between data points.

Table 4.38 Students' responses categorised into number of 'likes' about teachers at baseline and six months post-transition in Year 7

	Baseline			**Six months post-transition**		
Number of student 'likes' about teachers	**1 %(n)**	**2 %(n)**	**3 or more %(n)**	**1 %(n)**	**2 %(n)**	**3 or more %(n)**
Gender						
Male (n=65)	27.1(42)	12.9(20)	1.9(3)	23.4(36)	16.9(26)	1.9(3)
Female (n=90)	25.5(39)	26.5(41)	6.5(10)	33.1(51)	18.2(28)	6.4(10)
Primary school origin						
Continuous (n=48)	15.3(24)	12.7(20)	1.9(3)	19.5(30)	10.4(16)	1.3(2)
Feeder (n=62)	20.4(32)	15.3(24)	3.2(5)	22.1(34)	13.0(20)	5.2(8)
Other (n=44)	17.2(27)	10.8(17)	3.2(5)	14.9.(23)	11.7(18)	1.3(2)
Socio-economic status						
Low family affluence (n=12)	5.2(8)	2.6(4)	0.0(0)	3.9(6)	1.9(3)	1.3(2)
Middle family affluence (n=104)	31.6(49)	28.4(44)	7.1(10)	35.7(55)	26.0(44)	5.1(8)
High family affluence (n=39)	16.1(25)	7.7(12)	1.3(2)	16.9(26)	7.1(11)	1.9(3)

Students generally reported one 'dislike' about their teachers at transition with 32% of males and 46% of females providing a response, and by six months post-transition the proportion of both males and females with one 'dislike' had increased slightly to 35% and 47% respectively. A larger proportion of females (baseline 17%; post-transition 16%) than males (baseline 7%;

post-transition 2%) also reported having two things they ‘disliked’ about the teachers at their new secondary school, and this remained relatively constant over time. The proportion of ‘continuous’ student reported have one or two things they ‘disliked’ about their teachers at baseline was 29% and increase slightly to 33% at post-transition. ‘Feeder’ students also reported a slight increase in proportion for one or two ‘dislikes’ from 35% to 39% at post-transition, however ‘other’ students reported a decrease from 35% to 28% at post-transition. Students in the middle family affluence group had one or two ‘dislikes’ about their new teachers at baseline (68%) and post-transition (69%), while low and high family affluence groups reported one ‘dislike’, and remained fairly stable over time (low: baseline 5%; post-transition 4%; high: baseline 23%; post-transition 20%). Again, Chi-square testing revealed no significant relationships were present within and between data points.

Table 4.39 Students’ responses categorised into number of ‘dislikes’ about teachers at transition and six months post-transition in Year 7

Number of student ‘dislikes’ about teachers	**Baseline**		**Six months post-transition**	
	1 %(n)	**2 or more %(n)**	**1 %(n)**	**2 or more %(n)**
Gender				
Male (n=30)	31.6(25)	6.4(5)	34.8(31)	2.2(2)
Female (n=49)	45.6(36)	16.5(13)	47.2(42)	15.7(14)
Primary school origin				
Continuous (n=27)	20.0(16)	9.1(8)	28.9(26)	4.4(4)
Feeder (n=38)	28.8(23)	6.3(5)	30.0(27)	8.9(8)
Other (n=25)	28.8(23)	6.3(5)	23.3(21)	4.4(4)
Socio-economic status				
Low family affluence (n=5)	5.1(4)	1.3(1)	4.4(4)	1.1(1)
Middle family affluence (n=66)	49.4(39)	19.0(15)	57.8(52)	11.1(10
High family affluence (n=24)	22.8(18)	2.5(2)	20.0(18)	5.5(5)

4.3.2.2 Connectedness to school

School connectedness was measured in baseline and post-transition surveys using the five item School Connectedness scale (McNeely, et al., 2002), and results are presented in Table 4.40. At baseline and six months post-transition, most students ‘strongly agreed’ or ‘agreed’ with feeling close to people at the school (baseline 74%; post-transition 86%), feeling like they are a part of the school (baseline 78%; post-transition 82%), and feeling safe at school (baseline 83%; post-transition 85%). Additionally, the proportion of students who ‘neither agreed’ or ‘disagreed’ with these items fell at post-transition, with ‘I feel close to people at this school’ decreasing from 19% to 10%, ‘I feel like I am part of this school’ decreasing from 16% to 11%, and ‘I feel safe at this school’ decreasing from 14% to 9%. At baseline, the majority of students also ‘strongly agreed’ or ‘agreed’ that they were happy at school (baseline 83%), and that teachers treat students fairly (baseline 83%), however at six months post-transition the proportion of students who ‘strongly agreed’ or ‘agreed’ with these items had decreased to 82% and 75% respectively. While the proportion of students who ‘neither agreed nor disagreed’ with ‘I am happy to be at this school’ decreased post-transition from 12% to 9%, the proportion of students who ‘disagreed’ or ‘strongly disagreed’ with the item increased from 5% to 10%. Chi-square tests were performed to locate any significant differences between the items across the two time points, however all returned non-significant results.

Chi-square tests were performed to determine the significant associations between each item and gender, primary school origin, and socio-economic status. No significant associations were revealed for baseline or post-transition data.

Table 4.40 Student responses for school connectedness scale at time of transition and six months post-transition in Year 7

			School connectedness - baseline (n=186)					School connectedness - six months post-transition (n=182)		
How do you feel about your school?	**Strongly agree %(n)**	**Agree %(n)**	**Neither agree or disagree %(n)**	**Disagree %(n)**	**Strongly disagree %(n)**	**Strongly agree %(n)**	**Agree %(n)**	**Neither agree or disagree %(n)**	**Disagree %(n)**	**Stron disagr %(n**
I feel close to people at this school	41.9(78)	32.3(60)	19.4(36)	5.9(11)	0.5(1)	47.8(86)	37.8(68)	10.0(18)	2.8(5)	1.7(3
I feel like I am part of this school	42.7(79)	35.7(66)	16.2(30)	3.2(6)	2.0(4)	46.9(84)	34.6(62)	11.2(20)	2.4(6)	3.9(7
I am happy to be at this school	52.2(97)	31.2(58)	11.8(22)	3.2(6)	1.6(3)	46.9(84)	34.6(62)	8.9(16)	5.0(9)	4.5(8
The teachers at this school treat students fairly	38.9(72)	44.3(82)	14.1(26)	2.2(4)	0.5(1)	33.9(61)	40.6(73)	15.6(28)	3.3(6)	6.7(1
I feel safe at this school	51.4(95)	31.9(59)	14.1(26)	2.2(4)	0.5(1)	46.7(84)	38.3(69)	8.9(16)	1.7(3)	4.4(8

Table 4.41 Factor solutions for school connectedness at time of transition and six months post-transition in Year 7

How do you feel about your school?	School connectedness
I am happy to be at this school	.787
I feel like I am part of this school	.749
I feel close to people at this school	.727
I feel safe at this school	.589
The teachers at this school treat students fairly	.457

An Exploratory Factor Analysis utilising principal axis factor analysis was used to determine the underlying dimensions of teacher connectedness for baseline data. Final estimates of communalities were iterated from squared multiple item correlations to convergence. The item pool was deemed suitable for factor analysis (baseline KMO=0.79). Using Kaiser's criterion (Eigenvalues $\geq$1.0) together with Cattell's scree test, one factor was extracted accounting for 55% of the common variance for baseline data. For the baseline results, factor loadings ranged from 0.457 to 0.787 (Table 4.41). This factor can be described as school connectedness, and reliability analysis reported good reliability (baseline α=0.80; post-transition α=0.85).

A mean score was calculated for teacher connectedness by averaging the items within the factor for students who had completed at least 80% of the items in the factor (Table 4.42). All mean scores were significantly different to normal ($p<0.001$) at baseline and post-transition. Non-parametric Mann-Whitney tests were used with factor mean scores and gender, while Kruskal-Wallis tests were used with primary school origin and socio-economic status to determine significant differences. At baseline, 'continuous' school students reported significantly higher school connectedness than 'feeder' or 'other' school students (χ^2=18.720, p=0.00). The factor was also tested to discriminate for significant relationships within demographic categories between survey time points, all of which returned non-significant results. Overall, a Wilcoxon signed-rank test determined there were no significant changes in school connectedness between baseline and post transition.

Table 4.42 Factor mean scores for school connectedness scale at baseline and six months post-transition in Year 7

	School connectedness – baseline mean(sd)	School connectedness – six months post-transition mean(sd)
Gender		
Male (n=76)	4.17(0.70)	4.19(0.85)
Female (n=97)	4.25(0.60)	4.14(0.75)
Primary school origin [a]		
Continuous (n=51)	4.55(0.45)	4.34(0.74)
Feeder (n=70)	4.07(0.65)	4.01(0.91)
Other (n=52)	4.09(0.69)	4.19(0.67)
Socio-economic status		
Low family affluence (n=13)	4.02(0.64)	4.21(0.67)
Middle family affluence (n=115)	4.18(0.68)	4.15(0.86)
High family affluence (n=45)	4.29(0.57)	4.13(0.71)

Baseline: [a]$p<0.05$

4.3.2.3 Involvement in extra-curricular activities

Students were asked one question regarding involvement in extra-curricular activities (Table 4.43). At baseline, 30% of males and 31% of females reported participating in extra-curricular activities, while at six months post-transition this had increased to 33% and 34% respectively. At baseline, 19% of ‘continuous’ students reported participating in extra-curricular activities and this increased to 24% post transition. A very small increase in the proportion of students participating in extra-curricular activities was also evidenced for ‘other’ (baseline 17%; post-transition 19%), and ‘feeder’ (baseline 24%; post-transition 25%) students. The middle family affluence group represented 42% of students involved in extra-curricular activities across both surveys, while low family affluence students increased very slightly in levels of extra-curricular activity participation (baseline 4%; post-transition 5%). The proportion of high family affluence students’ participation in extra-curricular activities increased from baseline (14%) to six months post-transition (20%). Chi-square tests were performed for gender, primary school origin and SES in relation to extra-curricular participation however no significant relationships were

Table 4.43 Students' responses for participation in extra-curricular activities at baseline and six months post transition in Year 7

In Term 4 of Year 6 (Term 2 of Year 7), in an average week did you participate in any activities (such as sports, youth groups, drama groups, church groups etc.) outside of school hours?	Extra-curricular activities - baseline (n=144)			Extra-curricular activities – six months post-transition (n=169)		
	Yes %(n)	**No %(n)**	**Total %(n)**	**Yes %(n)**	**No %(n)**	**Total %(n)**
Gender						
Male	28.9(41)	18.3(26)	47.2(67)	32.5(55)	11.2(19)	43.8(74)
Female	31.0(44)	21.8(31)	52.8(75)	34.3(58)	21.9(37)	56.2(95)
Primary school origin						
Continuous	19.4(28)	7.6(11)	27.1(39)	23.7(40)	5.9(10)	29.6(50)
Feeder	24.3(35)	16.7(24)	41.0(59)	24.9(32)	16.6(17)	41.4(49)
Other	16.7(24)	15.3(22)	31.9(46)	18.9(32)	10.1(17)	29.0(49)
Socio-economic status						
Low family affluence	4.2(6)	2.8(4)	7.0(10)	4.7(8)	2.4(4)	7.1(12)
Middle family affluence	42.3(60)	24.6(35)	66.9(95)	42.0(71)	24.3(41)	66.3(112)
High family affluence	14.1(20)	12.0(17)	26.1(37)	20.1(34)	6.5(11)	26.6(45)

evident for either baseline or post-transition data. Overall, however, there was a significant increase from baseline (34%) to post transition (63%) in participation in extra-curricular activities (χ^2=17.869, p<0.001)

Of those students who responded ‘yes’ to this question, those who provided details of their extra-curricular activities were also reviewed, and results are shown below in Tables 4.44 and 4.45. Of this group, 46% were males and 54% were females at baseline, while at post-transition the group was made up of 47% males and 53% females. The majority of students (87%) participated in up to two extra-curricular activities per week, and a small proportion of students (14%) reported between three and six activities per week. The highest proportion of students involved in extra-curricular activities came from the ‘feeder’ primary schools at baseline (42%) and post-transition (36%). The majority of students involved in extra-curricular activities were also of middle affluence at baseline (73%), however this majority decreased at post-transition (61%). Chi-square tests did not reveal any significant associations at either time point, or between time points.

Additionally, the full range of extra-curricular activities were categorised post data collection in Figure 4.6. Ball team sports (netball, basketball, soccer, football) were the most common extra-curricular activity undertaken at baseline (28%) and increasing at six months post-transition (31%). Martial arts also increased from 6% to 7% post-transition, as did drama from 3% to 5%. Participation in dancing (baseline 16%; post-transition 10%), swimming (baseline 12%; post-transition 5%), racquet sports (baseline 6%; post-transition 5%), musical instruments (baseline 7%; post-transition 5%); ice sports (baseline 3%; post-transition 1%), and athletics (baseline 6%; post-transition 5%) all decreased at six months post-transition. The proportion of students participating in music (6%), youth groups (4%), gymnastics (3%) and cricket (2%) remained the same at both time points. At post-transition, students reported participating in a new activity: belonging to academic clubs (8%). Chi-square tests of these items revealed no significant relationships over time.

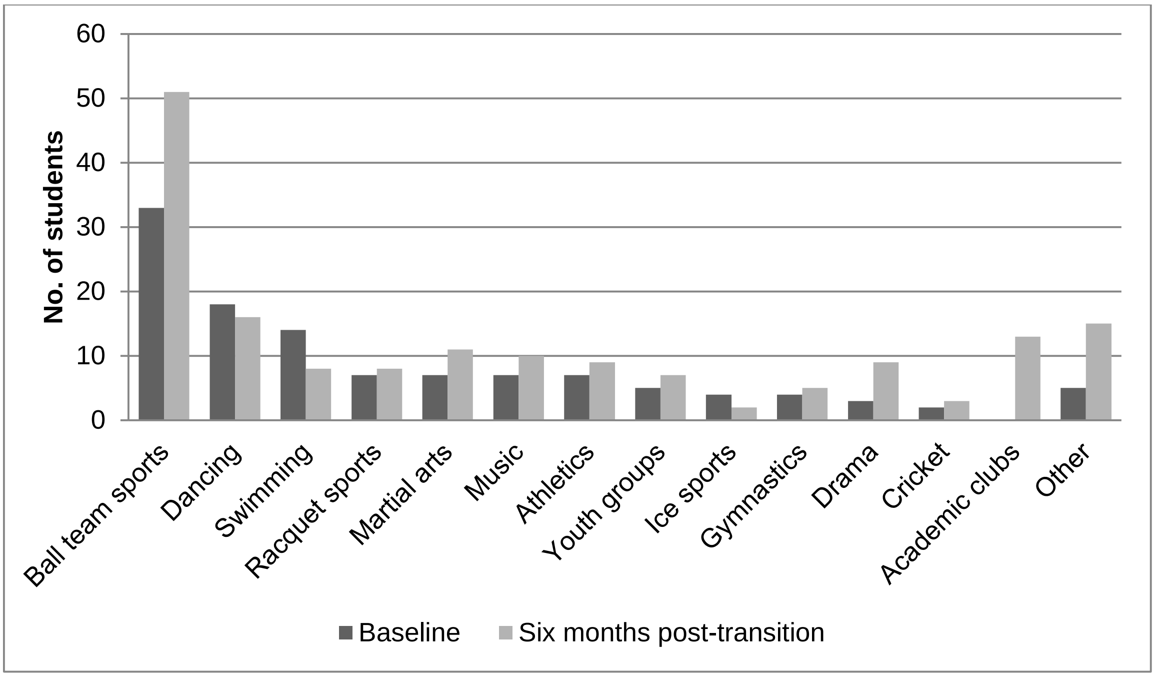


Figure 4.6 Students' extra-curricular activities at transition and six months post-transition in Year 7

Table 4.44 Student reported number of extra-curricular activities at baseline

'Yes' - Number of activities per student	Extra-curricular activities - baseline (n=74) 1 %(n)	2 %(n)	3 %(n)	4 or more %(n)	Total %(n)
Gender					
Male	29.2(21)	12.5(9)	2.8(2)	1.4(1)	45.8(33)
Female	30.6(22)	13.9(10)	5.6(4)	4.2(5)	54.2(39)
Primary school origin					
Continuous	17.6(13)	9.5(7)	4.1(3)	2.8(2)	33.8(25)
Feeder	28.4(21)	8.1(6)	4.1(3)	1.4(1)	41.9(31)
Other	13.5(10)	9.5(7)	0.0(0)	1.4(1)	24.3(18)
Socio-economic status					
Low family affluence	4.1(3)	1.4(1)	0.0(0)	0.0(0)	5.5(4)
Middle family affluence	42.5(31)	19.2(14)	5.5(4)	5.5(4)	72.6(53)
High family affluence	12.3(9)	6.8(5)	2.7(2)	0.0(0)	21.9(18)

Table 4.45 Student reported number of extra-curricular activities at six months post transition in Year 7

'Yes' - Number of activities per student	Extra-curricular activities - six months post-transition (n=105) 1 %(n)	2 %(n)	3 %(n)	4 or more %(n)	Total %(n)
Gender					
Male	23.3(24)	13.6(14)	6.8(7)	2.9(3)	46.6(48)
Female	26.3(27)	17.5(18)	6.8(7)	3.0(3)	53.4(55)
Primary school origin					
Continuous	16.2(17)	9.5(10)	4.8(3)	2.9(3)	33.3(35)
Feeder	21.0(22)	8.6(9)	28.6(4)	4.8(3)	36.2(38)
Other	13.3(14)	12.4(13)	4.8(4)	0.0(0)	30.5(32)
Socio-economic status					
Low family affluence	2.9(3)	2.9(3)	1.0(1)	0.0(0)	6.7(7)
Middle family affluence	30.8(32)	18.3(19)	9.6(10)	2.0(2)	60.6(63)
High family affluence	16.3(17)	9.6(10)	2.9(3)	3.9(4)	32.7(34)

4.3.2.4 Transition activities (baseline only)

This question was asked at baseline in order to measure the transition activities that students were involved in during the last two years of primary school. Students were asked if they had received any information about moving to secondary school (yes/no) and results are shown below in Table 4.46. For those students who had received information about transition, 41% were males and 58% were females, with 17% of males saying they did not receive any information compared to only 2% of females. By primary school origin, both ‘continuous’ (30%), ‘feeder’ (43%), and ‘other’ (28%) students received information about moving to secondary school, however 21% of students who identify as coming from ‘other’ primary schools reported they did not receive any information about moving to secondary school, compared to ‘continuous’ and ‘feeder’ students who reported at 2%. For students who identified as high family affluence, 14% reported they did not receive any information about moving to secondary school, which both ‘middle’ and ‘low’ family affluence groups reported at 7%. Chi-square test were performed to identify any significant relationships, and revealed that the proportion of females (59%) who received information about going to secondary school was significantly higher than males (42%) (χ^2=11.258, p=0.001). Additionally, the proportion of ‘other’ (21%) students who said they did not receive any information about going to secondary school was significantly higher than either ‘continuous’ (4%) or ’feeder’ (4%) students (χ^2=11.479, p=0.003).

Table 4.46 Students’ responses for transition activities at baseline

In Year 5 or Year 6, did you receive any information about going to secondary school?	**Baseline (n=178)**	
	Yes %(n)	**No %(n)**
Gender [a]		
Males (n=75)	41.4(63)	17.1(13)
Females (n=91)	58.6(89)	2.2(2)
Primary School Origin [b]		
Continuous (n=48)	30.1(46)	4.2(2)
Feeder (n=68)	42.5(66)	4.4(3)
Other (n=53)	27.5(42)	20.8(11)
Socio-economic status		
Low family affluence (n=14)	8.5(13)	7.1(1)
Middle family affluence (n=144)	66.7(103)	7.3(8)
High family affluence (n=44)	24.8(38)	13.6(6)

Baseline: [a]p<0.05 females, [b]p<0.05 other students

The data of students who responded ‘yes’ to this question and then selected items from the response list provided is shown below in Table 4.47. Of the students who answered ‘yes’ to the first part of the question, the most common transition activities they participated in were discussion with their primary school teacher (Year 5 54%; Year 6 96%). Around half or less of the students had some information in Year 5 (the year of formal enrolment in secondary school) however, most students received transition information in Year 6. In addition to the responses above, in Year 6, 92% of students reported participating in an orientation day at their new secondary school, 91% talked to their parents or caregivers about transition, 87% attended an information evening at their new secondary school, 78% received information booklets about their new school, 67% talked to their siblings, and 54% had a visit from secondary school staff or students at their primary school. Chi-square tests revealed a significant increase in the proportion of students who reported being visited by staff or students from the secondary school between Year 5 (54%) and Year 6 (96%) (χ^2=20.174, p<0.001), receiving information booklets about the secondary school (Year 5: 32%, Year 6: 78%; χ^2=9.090, p=0.003), and talking to siblings about secondary school (Year 5 47%, Year 6 68%; χ^2=48.875, p<0.001).

Table 4.47 Students’ responses for transition activities prior to transition

If yes, please choose the items that apply to you:	**Prior to transition**	
	Year 5 %(n)	**Year 6 %(n)**
My primary teacher has talked about going to secondary school	53.9(69)	96.0(145)
My friends and I have talked about going to secondary school	65.4(85)	93.5(144)
I have had an orientation day at my new school	20.7(25)	92.2(142)
My parents or caregivers have talked to me about going to secondary school	52.4(66)	91.3(137)
Information evening at my new secondary school	27.0(34)	87.1(128)
I have had information booklets about my new school in the mail [a]	31.7(40)	78.3(119)
My brothers and/or sisters have talked to me about going to secondary school [a]	47.0(62)	67.7(105)
Primary school visit from staff or students of my new secondary school [a]	41.0(57)	54.1(80)

Baseline: [a]p<0.05

Additionally, the number of transition activities undertaken by students was reviewed (Figure 4.7) and means analysed by the demographic factors of gender, primary school origin and SES, with results shown in Table 4.48.

Table 4.48 Students' responses for number of transition activities prior to transition by demographic categories

Number of transition activities	Year 5 mean(sd)	Year 6 mean(sd)	Wilcoxon signed-rank test Z(sig)
Gender			
Male (n=63)	3.6(2.19)	6.8(1.48)	-6.304(<0.001)
Female (n=86)	2.6(2.25)	6.8(1.58)	-7.445(<0.001)
Primary school origin			
Continuous (n=45)	3.1(2.57)	6.8(1.68)	-5.329(<0.001)
Feeder (n=64)	3.8(2.03)	6.9(1.43)	-6.347(<0.001)
Other (n=42)	2.2(1.86)	6.5(1.58)	-5.189(<0.001)
Socio-economic status			
Low family affluence (n=12)	3.1(2.81)	6.3(2.42)	-2.383(0.017)
Middle family affluence (n=102)	3.2(2.32)	6.8(1.48)	-7.976(<0.001)
High family affluence (n=37)	3.1(2.14)	7.0(1.41)	-5.034(<0.001)

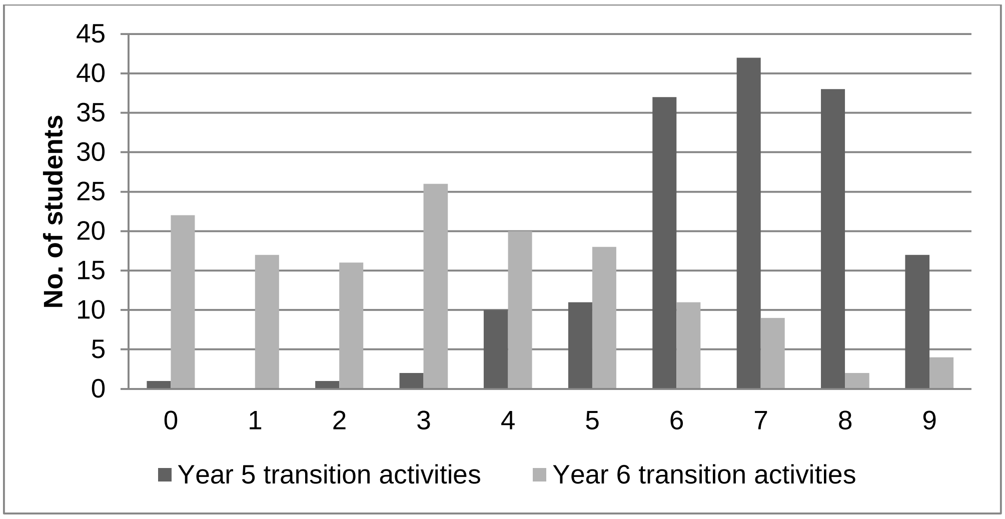


Figure 4.7 Students' reported number of transition activities in Year 5 and Year 6

In Year 5, the overall mean number of transition activities was three (mean=3.3. sd=2.35), while in Year 6 the mean number of activities was seven (mean=6.8, sd=1.53). In Year 5 males (mean=3.62, sd=2.19) participated in transition activities or received information on average more often than females (mean=2.6, sd=2.25), but in Year 6 both males and females participated in the same number of transition activities (males: mean=6.8, sd=1.48; females mean=6.8, sd=1.58). ‘Feeder’ students (mean=3.8, sd=2.03) participated in more transition activities than either ‘continuous’ (mean=3.1, sd=2.57) or ‘other’ (mean=2.2, sd=1.86) students in Year 5 and also in Year 6 (‘continuous’: mean=6.8, sd=1.68; ‘feeder’: mean=6.9, sd=1.43; ‘other’: mean=6.5, sd=1.58). Finally, while all categories of SES reported similar numbers of transition activities for Year 5 (low: mean=3.1, sd=2.81; middle: mean=3.2, sd=2.32; high: mean=3.1, sd=2.14) and for Year 6 (low: mean=6.3, sd=2.42; middle: mean=6.8, sd=1.48; high: mean=7.0, sd=1.41). Wilcoxon signed-rank testing revealed highly significant increases in the number of transition activities undertaken in Year 6 from Year 5.

4.3.3 Physical settings

Students were asked three questions about their perceptions of the physical setting of their secondary school. One question was regarding their safety at school, and two written answer questions regarding students’ likes and dislikes about being in Year 7 were included in both surveys.

4.3.3.1 Safety at school

To measure students’ perceptions of the physical settings of the school, one question was asked as part of the School Connectedness scale (McNeely, et al., 2002). The results for this question for baseline and post-transition surveys are below in Table 4.49. For this question, males accounted for 45% and females 55% of the data at baseline, and at post-transition, this was 43% and 57% respectively. At both time points, most of the student group ‘strongly agreed’ or ‘agreed’ they felt safe at school with males representing 36% at baseline and post-transition, and females representing 48% and 50% respectively. At baseline 6% of males and 7% of females responded ‘neither agree nor disagree’ to their perception of safety at school, however at six months post-transition this had decreased to 5% for males and 4% for females. The majority of students ‘strongly agreed’ or ‘agreed’ that they felt safe at school, regardless of primary school origin both at transition (‘continuous’ 26%; ‘feeder’ 34%; ‘other’ 24%) and post transition (‘continuous’ 26%; ‘feeder’ 33%; ‘other’ 26%). Additionally, those students who reported ‘neither agree nor disagree’ had decreased from baseline (‘continuous’ 4%; ‘feeder’ 8%; ‘other’ 5%) to post-transition (‘continuous’ 2%; ‘feeder’ 4%; ‘other’ 4%). Of the two-thirds of students (66%) who reported themselves as being of middle affluence, 83% of these responded to this item with ‘strongly agree’ or ‘agree’ at baseline and post-transition. Additionally, 80% of the high affluence group responded with ‘strongly agree’ and ‘agree’ at baseline and 89% at post-transition, and of the low family affluence group 92% responded ‘strongly agree’ or ‘agree’ at baseline and 94% at post-transition. Chi-square tests revealed no significant associations in either baseline or post-transition data, or between time points.

Chi-square tests were also performed for gender, primary school origin and SES in relation to safety at school however no significant relationships were evident for either baseline or post-transition data. Both data sets reported as significantly different from normal ($p \leq 0.001$).

Table 4.49 Students' responses for physical environment at baseline and six months post-transition

I feel safe at this school	Physical environment - baseline (n=173)					Physical environment - six months post-transition (n=174)				
	Strongly agree %(n)	Agree %(n)	Neither agree or disagree %(n)	Disagree %(n)	Strongly disagree %(n)	Strongly agree %(n)	Agree %(n)	Neither agree or disagree %(n)	Disagree %(n)	Strongly disagree %(n)
Gender										
Male	19.8(34)	16.3(28)	5.8(10)	2.3(4)	0.6(1)	22.0 (38)	13.9(24)	4.6(8)	1.2(2)	1.7(3)
Female	32.6(56)	15.1(26)	7.6(13)	0.0(0)	0.0(0)	25.4(44)	24.3(42)	430(7)	0.6(1)	2.3(4)
Primary school origin										
Continuous	18.6(32)	7.0(12)	3.5(6)	0.6(1)	0.0(0)	13.9(24)	11.6(20)	1.7(3)	0.6(1)	0.6(1)
Feeder	18.6(32)	15.1(26)	4.7(8)	1.7(3)	0.0(0)	19.3(33)	14.5(25)	3.5(6)	1.2(2)	2.9(5)
Other	15.1(26)	9.3(16)	5.2(9)	0(0)	0.6(1)	13.9(24)	12.0(21)	3.5(6)	0.0(0)	1.2(2)
Socio-economic status										
Low family affluence	2.9(5)	4.0(7)	0.6(1)	0.0(0)	0.0(0)	4.0(7)	3.4(6)	0.0(0)	0.0(0)	0.6(1)
Middle family affluence	34.1(59)	21.4(37)	9.2(16)	1.7(3)	0.0(0)	31.5(54)	23.6(41)	6.9(12)	1.1(2)	3.4(6)
High family affluence	13.9(24)	6.9(12)	4.0(7)	0.6(1)	0.6(1)	11.5(20)	11.5(20)	1.7(3)	0.6(1)	0.6(1)

4.3.4 Summary statement

In this chapter descriptive results were presented for the ‘supports’ domain. Results were described, factor analysis was undertaken for scale items, and significance testing was used to detect if any significant relationships existed within each data set, and also over time between baseline and six months post-transition. Variables were also examined by gender and primary school origin. For ‘internal supports’ significant results were reported for peer support, lack of loneliness, and family connectedness. ‘Institutional supports’ reported significant results for teacher connectedness, school connectedness, participation in pre-transition activities and participation in extracurricular activities. Finally, no significant results were reported for ‘physical settings’.

4.4 Self: characteristics of the individual

The nine elements investigated for self were psychosocial competence, sex role identification, age/life stage, state of health, race/ethnicity, socio-economic status, value orientation, previous experience, and academic progress with transition. Validated scales and short answer questions described previously were used as well as new questions to examine students’ perceptions of self during the transition from primary to secondary school.

4.4.1 Psychosocial competence

The 10-item Kessler Psychological Distress Scale (K-10) (Kessler, et al., 2002) was used to measure psychosocial competence at both time points, with results in Tables 4.50 and 4.51. At baseline and post-transition, the proportion of students who reported feeling tired out for no good reason ‘none of the time’ remained relatively stable (baseline 24%; post-transition 25%), as did students who reported ‘all of the time’ or ‘most of the time’ (baseline 17%; post transition 18%), and ‘some of the time’ or ‘a little of the time’ (baseline 59%; post-transition 57%). The proportion of students who reported feeling nervous ‘none of the time’ however increased at post-transition from baseline levels (baseline 17%; post-transition 26%), with students responding ‘all of the time’ or ‘most of the time’ decreasing from 22% to 18%, and students responding ‘some of the time’ or ‘a little of the time’ decreasing from 61% to 52% at six months post-transition. For feeling so nervous that nothing could calm you down, the proportion of students who reported feeling this way ‘all of the time’ and ‘most of the time’ remained stable over the time points (baseline 10%; post-transition 10%), as did proportions of students who reported ‘some of the time’ or ‘a little of the time’ (baseline 28%; post-transition

28%), however the proportion of students who reported ‘none of the time’ increased from 51% to 62% at post-transition. The proportion of students who reported feeling hopeless ‘none of the time’ remained stable (baseline 56%; post-transition 56%) while those who responded ‘all of the time’ or ‘most of the time’ increased slightly at post-transition from 9% to 11%, and those students who responded ‘some of the time’ or ‘a little of the time’ decreased slightly from 35% to 33% at post-transition. At baseline and post-transition, 12% of students reported feeling restless or fidgety ‘all of the time’ or ‘most of the time’, while the proportion of students who reported ‘some of the time’ or ‘all of the time’ decreased from 48% to 39%, and ‘none of the time’ increased from 40% to 51% at post-transition. The majority of students reported that they did not feel so restless they could not sit still at baseline (59%) and post-transition (62%), with the proportion of students who reported ‘all of the time’ increasing from 8% to 10% at post-transition, and students who reported ‘some’ or ‘a little of the time’ decreasing from 36% to 28% at post-transition. Similarly, most students did not feel depressed at either baseline (60%) or post-transition (61%), but for the remaining students, the proportion who answered ‘all’ or ‘most of the time’ increased from 10% to 13%, and ‘some’ or ‘a little of the time’ decreased from 30% to 26% six months post-transition. Most students also did not feel worthless (baseline 63%; post-transition 66%), but for the remaining students, 10% reported feeling this way ‘all’ or ‘most of the time’ at baseline, and 14% reported this at post-transition. Feeling worthless ‘some’ or ‘a little of the time’ decreased from baseline (26%) to post-transition (19%). While the majority of students reported at both time points that they did not feel so sad that nothing could cheer them up (baseline 65%; post-transition 59%), there was an increase in the proportion of students who felt this way ‘all of the time’ or ‘most of the time’ from 11% to 15%, and the proportion who responded ‘some of the time’ or ‘a little of the time’ remained stable (baseline 25%; post-transition 26%). Finally, student responses for feeling that everything was an effort were split over the response categories, with students reporting ‘all’ or ‘most of the time’ reporting 28% for baseline and 25% for post-transition, ‘some’ or ‘a little of the time’ reporting 30% increasing to 39% for post-transition, and ‘none of the time’ reporting 22% and 26% respectively. Chi-square tests were performed to determine the significant associations between each item and gender, primary school origin, and socio-economic status. No significant relationships were found either within or between the two time points.

Table 4.50 Student responses for K-10 scale at baseline

In the past four weeks about how often did you feel:			Baseline (n=186)		
	All of the time %(n)	Most of the time %(n)	Some of the time %(n)	A little of the time %(n)	None of the time %(n)
Tired out for no good reason?	4.3(8)	12.5(23)	31.0(57)	27.7(52)	24.5(45)
Nervous?	5.4(10)	16.8(31)	30.3(56)	30.3(56)	17.3(32)
So nervous that nothing could calm you down?	3.2(6)	7.0(13)	13.0(24)	25.4(47)	51.4(95)
Hopeless?	2.7(5)	5.9(11)	13.4(25)	22.0(41)	55.9(104)
Restless or fidgety?	3.8(7)	8.1(15)	23.7(44)	24.7(46)	39.8(174)
So restless you could not sit still?	1.6(3)	6.5(12)	15.6(29)	19.9(38)	58.5(105)
Depressed?	2.7(5)	7.5(14)	10.2(19)	19.4(36)	60.2(112)
That everything was an effort?	15.3(28)	23.0(42)	24.8(45)	14.8(27)	22.4(41)
So sad that nothing could cheer you up?	3.2(6)	8.1(15)	5.9(11)	17.7(33)	65.1(121)
Worthless?	4.3(8)	5.9(11)	10.3(19)	16.1(30)	63.2(117)

Table 4.51 Student responses for K-10 scale at six months post-transition in Year 7

In the past four weeks about how often did you feel:			Six month post-transition (n=176)		
	All of the time %(n)	Most of the time %(n)	Some of the time %(n)	A little of the time %(n)	None of the time %(n)
Tired out for no good reason?	8.5(15)	10.2(18)	27.3(48)	30.1(53)	23.9(42)
Nervous?	4.0(7)	14.2(25)	26.7(47)	29.0(51)	26.1(46)
So nervous that nothing could calm you down?	5.1(9)	4.5(8)	11.9(21)	16.5(29)	61.9(09)
Hopeless?	4.5(8)	6.8(12)	10.8(19)	22.2(39)	55.7(98)
Restless or fidgety?	5.1(9)	7.4(13)	16.5(29)	20.5(36)	50.6(89)
So restless you could not sit still?	4.6(8)	5.7(10)	9.7(17)	18.3(32)	61.7(108)
Depressed?	6.3(11)	6.3(11)	10.9(19)	15.4(27)	61.1(107
That everything was an effort?	12.5(22)	22.7(40)	19.3(34)	19.3(34)	26.1(46)
So sad that nothing could cheer you up?	6.9(12)	8.0(14)	8.6(15)	17.7(31)	58.9(103
Worthless?	7.4(13)	6.9(12)	7.4(13)	12.0(21)	66.3(11)

An Exploratory Factor Analysis utilising principal axis factor analysis was used to determine the underlying dimensions of the K-10 for baseline and post-transition data. Final estimates of communalities were iterated from squared multiple item correlations to convergence. The item pool was deemed suitable for factor analysis (baseline KMO=0.86; post-transition KMO=0.89). Using Kaiser's criterion (Eigenvalues ≥1.0) together with Cattell's scree test, three factors were extracted accounting for 68% of the common variance factor for baseline data, and two factors accounting for 75% of the common variances for the post-transition data. For the baseline results, Varimax rotated factor loadings ranged from 0.044 to 0.828 (Table 4.52). These three factors can be described as depressed mood, emotional turmoil, and physical agitation. Reliability analysis for these factors reported good to moderate reliability (Nunnaly, 1978; Santos, 1999) for depressed mood (baseline α=0.82; post-transition α=0.93), emotional turmoil (baseline α=0.72; post-transition α=0.78) and physical agitation (baseline α=0.60; post-transition α=0.59).

Table 4.52 Varimax rotated factor solutions for K10 psychological distress scale

In the past four weeks about how often did you feel:	K-10		
	Depressed mood	Emotional turmoil	Physical agitation
So sad that nothing could cheer you up?	.828	.197	.294
Worthless?	.757	.328	.144
Depressed?	.757	.297	.173
Hopeless?	.535	.410	.393
Restless or fidgety?	.242	.781	.162
So restless you could not sit still?	.215	.608	.172
Tired out for no good reason?	.255	.462	.238
Nervous?	.044	.166	.748
So nervous that nothing could calm you down?	.321	.214	.623
That everything was an effort?	.137	.088	.322

A mean score was calculated for depressed mood, emotional turmoil, and physical agitation for participants who had completed at least 80% of the items in the factor (Table 4.53). This resulted in a score in the range of one (low) to five (high). All mean scores were significantly different to normal (p<0.001).

Table 4.53 Factor mean scores for K10 psychological distress scale at baseline and six months post-transition in Year 7

	K10 - Baseline			K10 – 6 months post-transition		
	Depressed mood mean(sd)	Emotional turmoil mean(sd)	Physical agitation mean(sd)	Depressed mood mean(sd)	Emotional turmoil mean(sd)	Physical agitation mean(sd)
Gender [a]						
Male (n=76)	1.47(0.69)	2.10(0.87)	2.40(0.90)	1.66(1.10)	2.04(1.04)	2.16(0.88)
Female (n=96)	1.78(1.07)	1.78(0.98)	2.50(0.88)	2.49(0.88)	1.92(1.11)	2.40(0.91)
Primary school origin						
Continuous (n=51)	1.62(0.88)	2.06(0.87)	2.23(0.84)	1.69(1.08)	2.07(0.97)	2.21(0.93)
Feeder (n=70)	1.72(0.88)	2.14(0.96)	2.50(0.93)	1.91(1.10)	1.99(0.99)	2.36(0.89)
Other (n=52)	1.63(0.84)	2.08(0.87)	2.42(0.86)	1.75(1.16)	2.07(0.94)	2.27(0.91)
Socio-economic status						
Low family affluence (n=14)	1.84(0.90)	2.33(0.92)	2.74(0.85)	2.02(1.13)	2.31(1.16)	2.51(1.17)
Middle family affluence (n=114)	1.71(0.96)	2.13(0.91)	2.48(0.91)	1.85(1.15)	2.03(0.97)	2.27(0.92)
High family affluence (n=45)	1.43(0.64)	2.00(0.81)	2.27(0.82)	1.72(1.08)	2.11(0.99)	2.38(0.83)

Baseline: [a]$p<0.05$ depressed mood

Non-parametric Mann-Whitney tests were used with factor mean scores and gender, while Kruskal-Wallis tests were used with primary school origin and socio-economic status to determine significant differences. The Mann-Whitney test for gender revealed that at baseline, females had significantly higher depressed mood than males (χ^2=-2.298, p=0.022).

Wilcoxon signed-rank testing was also performed on factors to determine if there were any significant relationships between baseline and post-transition data (Figure 4.8), and revealed a significant decrease between baseline and post-transition levels of physical agitation (baseline 2.48, post-transition 2.30, z=-2.682, p=0.007). Wilcoxon signed-rank testing by demographic categories revealed a significant relationship between agitation and gender between surveys, with males reporting a significant decrease in physical agitation from baseline to post-transition (baseline 2.40, post-transition 2.16, z=-2.440, p=0.015). Similarly, a significant decrease in physical agitation was found for middle family affluence students (baseline 2.48, post-transition 2.27, z=-2.696, p=0.007), and ‘other’ students (baseline 2.42, post-transition 2.27, z=-2.244, p=0.025). No other significant relationships were found.

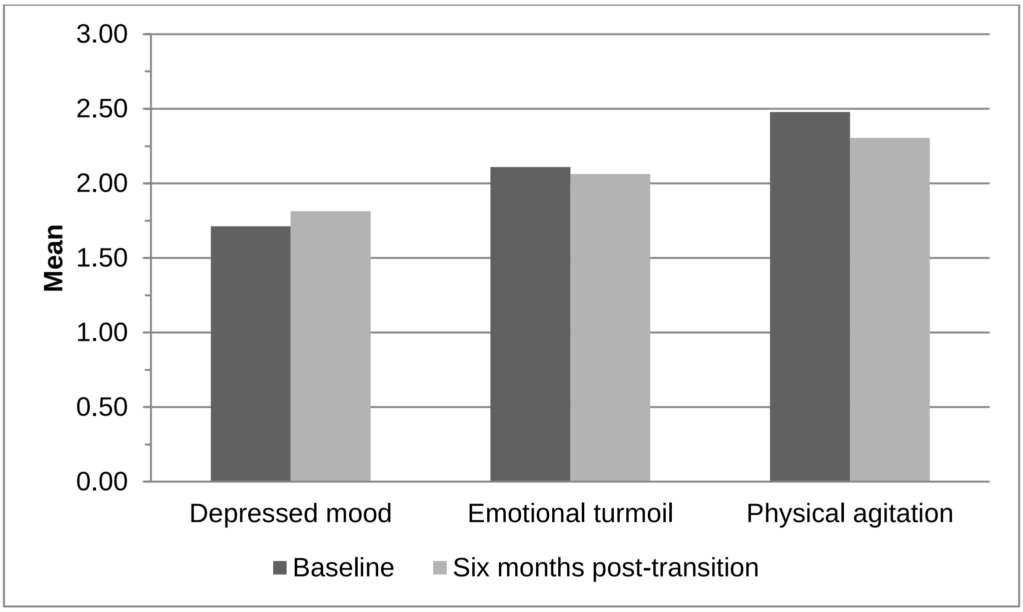


Figure 4.8 K-10 factors at baseline and six months post-transition in Year 7

4.4.2 Sex role identification

The sex role identification of participants was measured in the ‘Results’ section 4.1 entitled ‘Demographic characteristics of the sample’. Of the cohort of students with consent to participate in this research, 44% were male and 56% were female. Within the cohort, the proportion of males and females who were ‘continuous’ or ‘other’ students was 15% for each of males and females, however for ‘feeder’ students, 15% were male and 26% were female. For socio-economic status, low family affluence was reported for 3% for males and 5% of females, middle family affluence was reported for 29% of males and 38% of females, and high family affluence was reported for 12% of males and 14% of females in this study group. Chi-square testing did not reveal any significant relationships between gender and primary school origin or socio-economic status.

4.4.3 Age/life stage

The age and life stage of participants was measured in the ‘Results’ section 4.2.3 entitled ‘Timing of transition’. This item was used to determine if all participants were in the mandated age range for starting secondary school in Western Australia (11.5 years to 12.5 years as at 1st January 2014). One student (1%) was younger than the mandated age, while three students (2%) were older than the mandated age. The majority of students were within the mandated age range, with 46% between the ages of 11 years 6 months and 12 years 0 months (less one day), and 52% of students between the ages of 12 years 0 months and 12 years 6 m (less one day).

4.4.4 State of health

The state of health of participating students was collected from student record files after the final data collection (Table 4.54). The data were recorded as to the presence of the number of ongoing medical conditions (one to three) for each student. Ongoing medical conditions included any medical, physical, psychological, developmental, or other chronic condition that had been diagnosed by a medical professional. At post-transition data collection, within the student cohort (n=188) 18% of students had ongoing medical conditions. Males represented the highest proportion of students with ongoing medical problems, with 34% having one condition, 25% having two conditions and 3% having three medical conditions, while females reported 31%, 6% and 0% respectively. In relation to primary school origin, ‘continuous’ students reported 45% of medical conditions overall, with ‘feeder’ students accounting for 25% and ‘other’ students accounting for 30% of medical conditions in this category. The majority of students with ongoing medical conditions were from the middle family affluence category (68%) followed by high family affluence students (23%) and low family affluence students (10%).

One-sample chi-square tests were performed to identify any significant results for this item. The middle affluence category of students (68%) showed significant variation in the proportion of students with medical conditions over low (10%) or high (23%) affluence students (χ^2=10.286, p=0.006). Similarly, 'continuous' students (46%) showed significant variation in the proportion of medical problems over 'feeder' (25%) or 'other' (30%) students (χ^2=6.400, p=0.041). Finally, both males and females showed significant variation in medical problems (males: χ^2=7.900, p=0.019; females: χ^2=5.333, p=0.021).

Table 4.54 Students' ongoing medical conditions by demographic variables

Ongoing medical conditions	Post-transition (n=32) One medical condition %(n)	Two medical conditions %(n)	Three medical conditions %(n)
Gender [a]			
Male (n=20)	34.4(11)	25.0(8)	3.1(1)
Female (n=12)	31.3(10)	6.3(2)	0.0(0)
Primary school origin [b]			
Continuous (n=15)	27.3(9)	15.2(5)	3.0(1)
Feeder (n=8)	21.2(7)	3.0(1)	0.0(0)
Other (n=10)	18.2(6)	12.1(4)	0.0(0)
Socio-economic status [c]			
Low family affluence (n=3)	6.5(2)	3.2(1)	0.0(0)
Middle family affluence (n=21)	41.9(13)	22.6(7)	3.2(1)
High family affluence (n=45)	16.1(5)	6.5(2)	0.0(0)

[a]$p<0.05$ males, females; [b]$p<0.05$ continuous; [c]$p<0.05$ middle family affluence

4.4.5 Race/ethnicity

The race/ethnicity of the cohort was measured by one question that asked 'Were you born in Australia'. For those students that answered 'no', a space was left to write the name of the country in which they were born, and then categorised post data collection into New Zealand, Asia, Africa, United States, and United Kingdom (Figure 4.9).

This question was included in both surveys, as a change in school timetable resulted in shortened class times on the day of baseline data collection and many students did not complete this last part of the survey. Since place of birth should show no variation between surveys, the data collected at baseline and post-test were combined into one new and more complete variable. The results for this item are shown below in Table 4.59. Responses show that 75% of the Year 7 cohort were born in Australia. Of the remaining group of students who answered ‘no’ to this question, 47% were born in Africa, and 45% were born in Asia. United States (4%), United Kingdom (2%) and New Zealand 2%) account for the remaining places of birth reported by students.

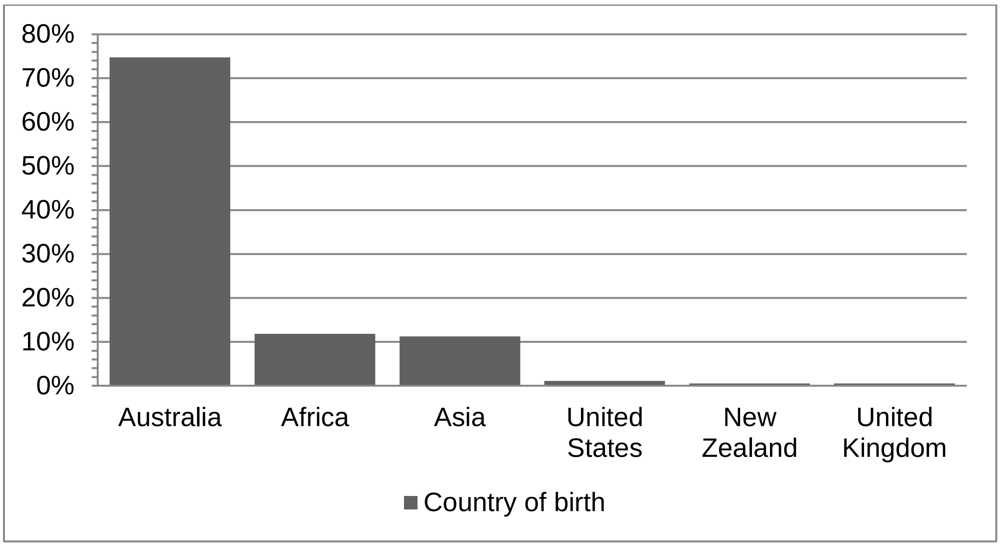


Figure 4.9 Ethnicity of Year 7 cohort by place of birth

Table 4.55 Year 7 students’ responses for ethnicity and place of birth

Were you born in Australia?	**(n=178)** **%(n)**
Yes	74.7(133)
No	25.3(45)

If no, where were you born?	**(n=45)** **%(n)**
Africa	46.7(21)
Asia	44.4(20)
United States	4.4(2)
New Zealand	2.2(1)
United Kingdom	2.2(1)

These data were also reviewed by the demographic variables of gender, primary school origin and socio-economic status (Table 4.55). In all demographic categories, the majority of students responded they were born in Australia (74%) and this was confirmed as significant by chi-square tests. The remainder of male students identified as being born in Africa (5%), Asia (4%), New Zealand (1%), United States (1%) and United Kingdom (1%), and females students identified as being born in Asia (8%), Africa (7%) and United States (1%). ‘Feeder’ and ‘other’ primary schools provided larger proportions of Asian-born (12%) and African-born (10%) students to the Year 7 cohort than were already in the ‘continuous’ (Asia 2%; Africa 1%) primary school. The majority of students, regardless of place of birth, were of middle family affluence (60%).

Table 4.56 Year 7 students' ethnicity by demographic categories

Student ethnicity	New Zealand %(n)	Asia %(n)	Africa %(n)	United States %(n)	United Kingdom %(n)	Australia %(n)	χ^2
				(n=166)			
Gender							
Male (n=74)	0.6(1)	4.2(7)	4.8(8)	0.6(1)	0.6(1)	33.9(56)	189.676[a]
Female (n=91)	0.0(0)	7.9(13)	6.7(11)	0.6(1)	0.0(0)	40.0(66)	113.264[a]
Primary school origin							
Continuous (n=50)	0.0(0)	1.8(3)	1.2(2)	0.6(1)	0.6(1)	25.9(43)	136.400[a]
Feeder (n=66)	0.0(0)	5.4(9)	7.2(12)	0.0(0)	0.0(0)	27.1(45)	36.273[a]
Other (n=50)	0.6(1)	4.8(8)	3.0(5)	0.6(1)	0.0(0)	21.1(35)	81.600[a]
Socio-economic status							
Low family affluence (n=14)	0.0(0)	0.6(1)	2.4(4)	0.0(0)	0.0(0)	5.4(9)	7.000[b]
Middle family affluence (n=110)	0.6(1)	8.4(14)	7.2(12)	1.2(2)	0.6(1)	48.2(80)	275.964[a]
High family affluence (n=42)	0.0(0)	3.0(5)	1.8(3)	0.0(0)	0.0(0)	20.5(34)	43.000[a]

[a]p<0.001; [b]p=0.030

4.4.6 Socio-economic status

Socio-economic status was measured for this domain by one question from the Family Affluence Scale (Boudreau & Poulin, 2009) which asks students' perception of how well off their family is. Due to an unforeseen change in class timetables on the day of baseline data collection, many students did not complete this part of the survey and given that SES would not be expected to vary between data collections, this question was asked again at post-transition. The results of both surveys were merged to provide a more accurate description of perceived family affluence, and the results are shown in Table 4.57. The proportion of students who responded that their family is 'average' in relation to this item was 40%, with 30% claiming their family was 'very well off', 20% claiming their family was 'quite well off', 5% were 'not so well off', and 6% were 'not well off at all'. A one-sample chi-square test showed that the proportion of students who claimed they were 'average' to 'quite well off' was significantly higher than those who claimed they were 'not so well off' or 'not well off at all' (χ^2=85.539, p<0.001).

Table 4.57 Student responses for perception of family wealth

How well off do you think your family is? [a]	**(n=178) %(n)**
Not well off at all	5.6(10)
Not so well off	4.5(8)
Average	40.4(72)
Quite well off	19.7(35)
Very well off	29.8(53)

[a]p<0.001

These data were also reviewed by the demographic categories of gender and primary school origin (Table 4.58). For gender, 23% of males and 26% of females claimed their families were 'quite well off' or 'well off', 19% of males and 21% of females claimed their families were 'average', and 2% of males and 8% of females claimed their families were 'not so well off' or 'not well off at all'. The largest proportion of students from 'other' and 'continuous' primary schools claimed their families were 'quite well off' to 'very well off' (18% and 15% respectively) with 10% and 13% claiming their families were 'average'. This pattern was not seen in 'feeder' students, who remained consistent at 17% across 'average' and 'quite well off' or 'well off' categories. For 'not well off at all' or 'not so well off', the proportion of students was low with the highest proportion of 7% for 'feeder' students, and 1% for both 'other' and ‘continuous’ students. Chi-square tests were undertaken to determine if any significant relationship could be found in relation to these demographic categories, however none were apparent. Within categories, however, significant variation was found for females (χ^2=32.170, p<0.001), males (χ^2=48.533, p<0.001), ‘continuous’ (χ^2=28.510, p<0.001), ‘feeder’ (χ^2=29.768, p<0.001) and ‘other’ students (χ^2=31.200, p<0.001).

Table 4.58 Student responses for perception of family wealth by demographic categories (n=176)

How well off do you think your family is?	**Not at all well off %(n)**	**Not so well off %(n)**	**Averag e %(n)**	**Quite well off %(n)**	**Very well off %(n)**
Gender					
Male (n=75)	1.2(2)	1.2(2)	18.9(32)	8.3(14)	14.8(25)
Female (n=94)	4.7(8)	3.6(6)	21.3(36)	11.8(20)	14.2(24)
Primary school origin					
Continuous (n=51)	0.6(1)	1.8(3)	12.9(22)	8.2(14)	6.5(11)
Feeder (n=69)	4.7(8)	2.4(4)	17.1(29)	5.3(9)	11.2(69)
Other (n=50)	0.6(1)	0.6(1)	10.1(17)	6.5(11)	11.8(20)

4.4.7 Values orientation

The values orientation of students was measured by two sub-scales from the Self-Description Questionnaire II from the work of Marsh (Marsh, 1990, 1992). The first ten items comprise the general qualities sub-scale, and the remaining ten items comprise the honesty/trustworthiness sub-scale. The results for this question are presented in Tables 4.59 and 4.60. At baseline and post-transition, the majority of students responded positively (‘more true than false’, ‘mostly true’, ‘true’) to liking the way they are (baseline 92%; post-transition 90%), having a lot to be proud of (baseline 92%; post-transition 91%), doing things as well as most people (baseline 90%; post-transition 89%), other people think I am a good person (baseline 98%; post-transition 93%), a lot of things about me are good (baseline 92%; post-transition 91%), doing something well (baseline 94%; post-transition 91%), and being able to be counted upon by others to do the right thing (baseline 93%; post-transition 92%). While still resulting in a positive majority, several positively worded items reported proportions larger than 10% for negative responses (‘more false than true’, ‘mostly false’, ‘false’). At baseline and post-transition, the negative responses about themselves included if the students thought they did lots of important things (baseline 11%; post-transition 12%), were as good as most people (baseline 18%; post-transition 14%), if honesty was important to them (baseline 10%; post-transition 12%), they always told the truth (baseline 20%; post-transition 22%), and if they were honest (baseline 10%; post-transition 12%). In the items that were negatively worded, the majority of students responded negatively that cheating in a test is OK if you don’t get caught (baseline 96%; post-transition 93%), however for the remaining items the proportions showed some change between baseline and post-transition. At baseline, 14% of students answered positively to the statement ‘I often tell lies’, and by post-transition this had increased to 17%, but for the item ‘I sometimes cheat’ there was a decrease of positive agreement from 12% to 9% at six months post-transition. The proportion of students who positively agreed with the statement ‘when I make a promise I keep it’ decreased slightly from baseline (93%) to post-transition (90%). Meanwhile, the proportion of students who agreed that they ‘couldn’t do anything right’ increased from 18% at baseline to 24% at post-transition, while those students who agreed that they ‘sometimes take things that belong to other people’ increased from 6% to 13% at post-transition. For the item ‘overall I am no good’ at baseline and post-transition, students’ negative responses (baseline 90%; post-transition 88%) remained relatively stable. Similarly, student responses remained stable for telling lies to stay out of trouble (baseline 78%; post-transition 77%). Chi-square testing was performed to identify significant relationships within each time point and across time points, however none were found.

Table 4.59 Students' responses for values orientation at baseline

Please read each statement and choose the answer that indicates how much the statement applies to you:	Baseline (n=181)					
	False	Mostly false	More false than true	More true than false	Mostly true	True
	%(n)	%(n)	%(n)	%(n)	%(n)	%(n)
I do lots of important things	1.1(2)	2.2(4)	8.2(15)	23.4(43)	43.5(80)	21.7(40)
In general, I like being the way I am	1.1(2)	2.2(4)	4.3(8)	13.6(25)	35.9(66)	42.9(79)
Overall I have a lot to be proud of	0.5(1)	2.2(4)	6.0(11)	17.5(32)	35.5(65)	38.3(70)
I can do things as well as most other people	1.1(2)	2.7(5)	6.5(12)	28.3(52)	33.2(61)	28.3(52)
Other people think I am a good person	0.5(1)	0.5(1)	1.1(2)	18.6(34)	41.0(75)	38.3(70)
A lot of things about me are good	0.5(1)	0.0(0)	6.6(12)	19.6(36)	38.3(70)	35.0(64)
I can't do anything right	33.2(61)	29.9(55)	19.0(35)	9.2(17)	5.4(10)	3.3(6)
I am as good as most other people	1.1(2)	4.9(9)	12.4(23)	24.9(46)	33.5(62)	23.2(43)
When I do something, I do it well	1.1(2)	1.1(2)	4.4(8)	30.1(55)	38.3(70)	25.1(46)
Overall I am no good	53.8(98)	25.3(46)	10.4(19)	7.1(13)	2.2(4)	1.1(2)
I sometimes take things that belong to other people	62.5(115)	22.8(42)	8.7(16)	2.7(5)	2.7(5)	0.5(1)
I sometimes tell lies to stay out of trouble	27(50)	28.6(53)	22.7(42)	13.5(25)	4.9(9)	3.2(6)
Honesty is very important to me	1.1(2)	0.5(1)	8.2(15)	21.2(39)	32.6(60)	36.4(67)
I always tell the truth	1.1(2)	5.4(10)	14.0(26)	28.5(53)	35.6(68)	14.5(27)
When I make a promise I keep it	1.6(3)	2.2(4)	3.3(6)	18.5(34)	31.0(57)	43.5(80)
I sometimes cheat	54.3(100)	19.0(35)	17.9(33)	4.9(9)	2.2(4)	1.6(3)
I often tell lies	43.7(80)	25.7(47)	16.9(31)	10.4(19)	2.7(5)	0.5(1)
I am honest	0.5(1)	1.6(3)	8.1(15)	21.6(40)	38.4(71)	29.7(55)
Cheating in a test is OK if I do not get caught	78.9(146)	9.7(18)	7.6(14)	1.6(3)	1.6(3)	0.5(1)
People can really count on me to do the right thing	1.6(3)	0.5(1)	4.9(9)	16.8(31)	38.6(71)	37.5(69)

Table 4.60 Students' responses for values orientation at six months post-transition

	Six months post-transition (n=179)					
Please read each statement and choose the answer that indicates how much the statement applies to you:	**False %(n)**	**Mostly false %(n)**	**More false than true %(n)**	**More true than false %(n)**	**Mostly true %(n)**	**True %(n)**
I do lots of important things	2.2(4)	2.8(5)	6.7(12)	28.5(51)	36.9(66)	22.9(41)
In general, I like being the way I am	2.8(5)	1.7(3)	6.7(12)	15.9(28)	29.6(53)	43.6(78)
Overall I have a lot to be proud of	3.4(6)	1.1(2)	4.5(8)	16.8(30)	38.5(69)	35.8(64)
I can do things as well as most other people	3.4(6)	2.2(4)	6.1(11)	20.1(36)	40.2(72)	27.9(50)
Other people think I am a good person	2.2(4)	1.7(3)	2.8(5)	20.1(36)	34.1(61)	39.1(70)
A lot of things about me are good	1.7(3)	1.7(3)	5.6(10)	16.3(29)	35.4(63)	39.3(70)
I can't do anything right	35.8(63)	27.8(49)	12.5(22)	10.2(18)	9.1(16)	4.5(8)
I am as good as most other people	3.4(6)	4.0(7)	6.9(12)	24.0(42)	34.3(60)	27.4(48)
When I do something, I do it well	2.3(4)	1.7(3)	5.2(9)	26.6(46)	41.6(72)	22.5(39)
Overall I am no good	56.2(100)	21.3(38)	10.7(19)	6.2(11)	3.4(6)	2.2(4)
I sometimes take things that belong to other people	59.2(103)	19.5(34)	8.6(15)	5.2(9)	2.9(5)	4.6(8)
I sometimes tell lies to stay out of trouble	32.4(57)	31.8(56)	13.1(23)	13.1(23)	6.3(11)	3.4(6)
Honesty is very important to me	2.8(5)	0.06(1)	9.0(16)	19.1(34)	31.5(56)	37.1(66)
I always tell the truth	3.9(7)	5.1(9)	12.9(23)	30.3(54)	33.1(59)	14.6(26)
When I make a promise I keep it	1.7(3)	3.4(6)	5.1(9)	13.5(24)	33.1(59)	43.3(77)
I sometimes cheat	56.8(100)	21.0(37)	9.7(17)	9.1(16)	1.1(2)	2.3(4)
I often tell lies	42.1(75)	28.7(51)	12.4(22)	9.6(17)	4.5(8)	2.8(5)
I am honest	2.3(4)	4.0(7)	6.3(11)	22.2(39)	36.9(65)	28.4(50)
Cheating in a test is OK if I do not get caught	73.9(130)	15.3(27)	4.0(7)	5.7(10)	0.0(0)	1.1(2)
People can really count on me to do the right thing	3.4(6)	1.1(2)	4.0(7)	16.5(29)	33.0(58)	42.0(74)

An Exploratory Factor Analysis utilising principal axis factor analysis was used to determine the underlying dimensions of the values orientation subscales for baseline and post-transition data. Final estimates of communalities were iterated from squared multiple item correlations to convergence. The item pool was deemed suitable for factor analysis (baseline KMO=0.88; post-transition KMO=0.87). Using Kaiser's criterion (Eigenvalues ≥1.0) together with Cattell's scree test, four factors were extracted accounting for 59% of the common variance factor for baseline data, and five factors accounting for 67% of the common variances for the post-transition data. For the baseline results, Varimax rotated factor loadings ranged from -0.128 to 0.787 (Table 4.61). These four factors can be described as positive self-evaluation, trustworthiness, reliability, and honesty. Reliability analysis for these factors reported good to moderate reliability (Nunnaly, 1978; Santos, 1999) for positive self-evaluation (baseline α=0.86; post-transition α=0.90), trustworthiness (baseline α=0.79; post-transition α=0.79), reliability (baseline α=0.72; post-transition α=0.62) and honesty (baseline α=0.75; post-transition α=0.81).

Table 4.61 Varimax rotated factor solutions for values orientation scale

Please read each statement and choose the answer that indicates how much the statement applies to you:	Positive self-evaluation	Trustworthiness	Reliability	Honesty
I can do things as well as most other people	.730	.122	.078	.120
Overall I have a lot to be proud of	.656	.189	.249	.042
I am as good as most other people	.656	.154	.222	.117
Other people think I am a good person	.616	.015	.238	.207
A lot of things about me are good	.616	.152	.291	.316
In general, I like being the way I am	.508	.127	.060	.072
I do lots of important things	.491	-.033	.467	.229
I often tell lies	.173	.755	.200	.224
Cheating in a test is OK if I do not get caught	.020	.731	.038	.063
I sometimes cheat	.049	.630	.118	.159
I sometimes take things that belong to other people	.189	.619	.062	.163
I sometimes tell lies to stay out of trouble	.127	.522	.245	.257
Overall I am no good	.440	.505	.145	-.035
I can’t do anything right	.228	.266	.233	-.128
People can really count on me to do the right thing	.324	.151	.680	-.161
When I do something, I do it well	.420	.173	.578	.056
When I make a promise I keep it	.077	.167	.491	.116
I am honest	.335	.309	.480	.455
I always tell the truth	.197	.312	.086	.787
Honesty is very important to me	.171	.172	.185	.526

A mean score was calculated for positive self-evaluation, trustworthiness, reliability, and honesty by averaging the items within each factor for which students completed 80% or more for the items within each factor (Tables 4.62 and 4.63). All mean scores were significantly different to normal ($p \leq 0.001$)

Table 4.62 Factor mean scores for values orientation at baseline, by demographic categories

	Values orientation - baseline			
	Positive self-evaluation mean(sd)	**Trustworthiness mean(sd)**	**Reliability mean(sd)**	**Honesty mean(sd)**
Gender				
Male (n=76)	4.85(0.81)	5.01(0.83)	4.88(0.79)	4.61(0.93)
Female (n=96)	4.93(0.72)	5.11(0.67)	4.97(0.91)	4.78(0.85)
Primary school origin [a]				
Continuous (n=50)	4.99(0.78)	5.01(0.83)	5.11(0.76)	4.83(0.77)
Feeder (n=70)	4.93(0.78)	5.09(0.71)	5.00(0.79)	4.71(0.94)
Other (n=52)	4.77(0.71)	5.12(0.67)	4.75(0.75)	4.56(0.85)
Socio-economic status				
Low family affluence (n=13)	4.75(0.62)	4.74(1.07)	4.85(0.85)	4.59(0.71)
Middle family affluence (n=114)	4.88(0.77)	5.09(0.72)	4.95(0.82)	4.64(0.93)
High family affluence (n=45)	4.98(0.74)	5.04(0.81)	5.00(0.75)	4.88(0.77)

[a] $p<0.05$ reliability

Non-parametric Mann-Whitney tests were used with factor mean scores and gender, while Kruskal-Wallis tests were used with primary school origin and socio-economic status to determine any significant differences. A significant relationship was found between primary school origin and reliability, with ‘continuous’ and ‘feeder’ students rating themselves as significantly more reliable at baseline than ‘other’ students ($\chi^2=6.350$, $p=0.042$). No other significant relationships were found.

Table 4.63 Factor mean scores for values orientation at six months post-transition, by demographic categories

	Values orientation - six months post-transition			
	Positive self-evaluation mean(sd)	Trustworthiness mean(sd)	Reliability mean(sd)	Honesty mean(sd)
Gender				
Male (n=76)	4.91(0.97)	4.99(0.97)	4.92(0.93)	4.64(1.09)
Female (n=98)	4.84(0.82)	5.01(0.78)	4.92(0.82)	4.61(0.99)
Primary school origin				
Continuous (n=50)	5.00(0.93)	5.030.93)	4.95(0.86)	4.67(1.13)
Feeder (n=71)	4.78(0.84)	4.99(0.82)	4.80(0.90)	4.62(1.06)
Other (n=51)	4.87(0.92)	5.04(0.85)	5.07(0.79)	4.60(0.90)
Socio-economic status				
Low family affluence (n=14)	4.50(1.06)	4.76(1.02)	5.10(0.61)	4.89(0.62)
Middle family affluence (n=114)	4.86(0.89)	5.02(0.87)	4.90(0.86)	4.63(1.03)
High family affluence (n=46)	4.92(0.93)	5.02(0.80)	4.90(0.96)	4.53(1.12)

Wilcoxon signed-rank testing was also performed on factors to determine if there were any significant relationships between baseline and post-transition data. For ‘other’ students, there was a significant increase in positive self-evaluation (baseline 4.77, post-transition 4.78, z=-1.997, p=0.046) and reliability (baseline 4.75, post-transition 5.07, z=-3.059, p=0.002) between baseline and post-transition. Additionally, the high family affluence category reported a significant decrease in honesty (baseline 4.88, post-transition 4.53, z=-1.994, p=0.046) between baseline and post-transition. No other significant relationships were found over time.

4.4.8 Previous experience with transition

In the baseline survey, students were asked if they had ever moved school prior to starting secondary school, and were requested to write down the number of times they had changed schools. The results for this item are below in Table 4.64. The proportion of students who stated that they had changed school before was 41%. Within this group, 40% had changed school once, 25% had changed school twice, 29% had changed school three times, and 7% had changed school four or five times.

Table 4.64 Year 7 students' previous experience with transition

Before moving to secondary school in Year 7, have you ever changed schools before?	**(n=184) %(n)**
Yes	40.8(75)
No	59.2(109)

If yes, how many times have you changed schools?	**(n=73) %(n)**
1 time	39.7(29)
2 times	24.7(18)
3 times	28.8(21)
4 times	4.1(3)
5 times	2.7(2)

This item was also reviewed by the demographic categories of gender, primary school origin and socio-economic status (Table 4.65). For all categories, the majority of students (62%) had never changed schools prior to moving to secondary school. The remaining students who reported having moved schools between one and five times were 17% for males and 21% for females. Excluding students who had never previously moved schools, 5% of 'continuous' students had previously moved schools once, 'other' students who had moved once or twice were 6% and 4% respectively, while 'feeder' students who had reported consistent results for moving schools once, twice or three times were 4%, 4% and 5% respectively. Low family affluence students reported moving schools once (2%), twice (1%) or three times (1%) previously, and high family affluence students reported moving schools once (5%), twice (2%), three times (1%), and four or five (1%) times previously. Middle affluence students reported moving schools fairly consistently across once (9%), twice (7%), and three times (9%), and a small proportion report previously changing schools four or five times (2%). Chi-square tests revealed significant results for gender with both males and females who had never moved schools being significantly higher than those who had moved schools at least once (males: $\chi^2=126.922$, $p<0.001$; females: $\chi^2=105.226$, $p<0.001$), for 'continuous' ($\chi^2=46.320$, $p<0.000$), ‘feeder’ (χ^2=84.551, p<0.000) and ‘other’ (χ^2=38.226, p<0.000) students, and for middle (χ^2=115.143, p<0.000) and high (χ^2=67.261, p<0.000) family affluence categories.

Table 4.65 Students’ previous transition experience by demographic variables

	(n=172)				
How many times have you changed schools?	**1 time %(n)**	**2 times %(n)**	**3 times %(n)**	**4 or 5 times %(n)**	**Never %(n)**
Gender ^{a}					
Male (n=77)	5.3(9)	4.1(7)	5.3(9)	1.8(3)	28.8(49)
Female (n=93)	9.4(16)	5.9(10)	5.3(9)	0.6(1)	33.5(57)
Primary school origin ^{a}					
Continuous (n=50)	5.2(9)	1.7(3)	2.9(5)	0.0(0)	19.2(33)
Feeder (n=69)	4.1(7)	4.1(7)	5.2(9)	1.2(2)	25.6(44)
Other (n=53)	5.8(10)	4.1(7)	2.9(5)	1.7(3)	16.3(28)
Socio-economic status ^{a}					
Low family affluence (n=13)	2.3(4)	0.6(1)	1.2(2)	0.0(0)	3.5(6)
Middle family affluence (n=112)	8.8(16)	7.6(13)	8.2(14)	1.8(3)	39.2(67)
High family affluence (n=46)	4.7(8)	1.8(3)	1.2(2)	1.2(2)	18.1(31)

Baseline: ^{a}p<0.001 males, females, continuous, feeder, other, low affluence, middle affluence

4.4.9 Summary statement

This chapter presented the descriptive results for the ‘self’ domain. Results were described, factor analysis was undertaken for scale items, and significance testing was used to detect if any significant relationships existed within each data set, and also over time between baseline and six months post-transition. Variables were also examined by gender and primary school origin. For ‘psychological competence’, significant results were produced. ‘Sex role’, ‘age’ and ’ethnicity’ were unable to be tested and are presented as demographic variables. Significant results were reported for ‘state of health’, ‘socioeconomic status’, and ‘values orientation’. Finally, students’ ‘previous experience with transition’ also revealed significant results.

4.4.10 Academic progress

The academic progress of students was measured by questions that asked how well they thought they had performed in their most recent school report. This item was included in baseline and post-transition surveys. Actual student marks for English and Mathematics were extracted from student files (where available) and standardised into an A-E grading schema at both time points to determine actual progress.

4.4.10.1 Student perception of academic achievement in cohort

To measure student achievement, students were asked how they perceived their previous school report in relation to others in the cohort, with four responses provided for them to select from. This data was collected at both time points to coincide with the last primary school report available, and the first secondary school report. The results of this item are presented in Tables 4.66 and 4.67. At baseline, 32% of students felt they did better than most other students on their reports in Year 6, while 47% felt they did about the same as other students and 21% felt they did not do as good or didn't know how they did in comparison to other students in their cohort. At post-transition, 35% of students felt they did better than most other students on their reports at Semester 2 in Year 7, while 41% felt they did about the same and 23% felt they did not do as well or didn't know how they did in comparison with their cohort. For those students who felt they did 'better than most others', similar proportions were reported for both males and females at baseline (males 16%; females 16%) and post-transition (males 17%; females 18%), however there was a decrease from baseline to post-transition for 'about the same as most others' for both groups (males: baseline 20%, post-transition 18%; females: baseline 27%, post-transition 24%). There was also an increase for females reporting 'not as good as most others' or 'I don't know' from 9% to 14% and a decrease for males for these responses from 11% to 9% at post-transition.

The proportion of 'continuous' students who reported they did 'better than most others' at baseline increased from 7% to 11% at post-transition, while those who reported doing 'about the same as most others' remained stable at post-transition with 14% and 13% respectively. For 'feeder' students, both of these categories decreased between baseline and post transition with 'better than most others' moving from 13% to 11% and 'about the same as most others' moving from 21% to 16% respectively, while 'other' students remained stable across surveys moving from 11% to 13% for both responses. The proportion of students who responded 'not as good as most others' or 'I don't know' by primary school origin also remained stable between time points with 8% and 11% at baseline and 9% and 12% respectively for the two responses at post-transition. Students of low and high family affluence reported stable results across response categories for ‘better than most others’ at baseline (low 4%; high 7%) and post-transition (low 2%; high 7%), ‘about the same as most others’ at baseline (low 2%; high 12%) and post-transition (low 3%; high 12%), and ‘not as good as others’ or ‘I don’t know’ unchanged for both surveys (low 2%; high 7%). The proportion of middle family affluence students for each response did change between surveys however, with ‘better than others’ increasing from 21% to 26% at post-transition, ‘about the same as most others’ decreasing from 33% to 27%, ‘not as good as most others’ decreasing from 5% to 4%, and ‘I don’t know’ increasing from 7% to 11% at post-transition.

Chi-square testing was used to identify any significant relationships in data from each time point and the demographic categories of gender, primary school origin and socio-economic status, however none were reported. Chi-square testing was also performed to locate any significant relationships between the baseline and post-transition data, but none were found. Normality testing showed that these results were significantly non-normal (p<0.001).

Table 4.66 Student responses for perception of academic achievement at transition

Compared to other students in your Year 6 group, which of the following best describes most of the results on your last school report in Year 6?	**Baseline (n=142)**			
	Better than most others %(n)	**About the same as most others %(n)**	**Not as good as most others %(n)**	**I don’t know %(n)**
Gender				
Male (n=68)	15.7(22)	20.0(28)	4.3(6)	7.1(10)
Female (n=74)	16.4(23)	27.1(38)	2.9(4)	6.4(9)
Primary school origin				
Continuous (n=39)	7.0(10)	14.1(20)	2.8(4)	3.5(5)
Feeder (n=59)	13.4(19)	21.1(30)	2.8(4)	4.2(6)
Other (n=44)	11.3(16)	11.3(16)	2.1(3)	3.6(9)
Socio-economic status				
Low family affluence (n=11)	3.5(5)	2.1(3)	1.4(2)	0.7(1)
Middle family affluence (n=94)	21.3(30)	33.3(47)	5.0(7)	7.1(10)
High family affluence (n=36)	6.4(9)	12.1(17)	0.7(1)	6.4(9)

Table 4.67 Student responses for perception of academic achievement at six months post-transition

Compared to other students in your Year 7 group, which of the following best describes most of the results on your last school report in Year 7?	Six months post-transition (n=168) Better than most others %(n)	About the same as most others %(n)	Not as good as most others %(n)	I don't know %(n)
Gender				
Male (n=74)	17.3(29)	17.9(30)	3.0(5)	6.0(10)
Female (n=94)	17.9(30)	23.8(40)	5.4(9)	8.9(15)
Primary school origin				
Continuous (n=50)	11.3(19)	13.1(22)	3.0(5)	2.4(4)
Feeder (n=69)	10.7(18)	16.1(27)	5.4(9)	6.9(15)
Other (n=49)	13.1(22)	12.5(21)	0.6(1)	3.0(5)
Socio-economic status				
Low family affluence (n=12)	1.8(3)	2.9(5)	1.8(3)	0.6(1)
Middle family affluence (n=114)	25.9(44)	26.5(45)	4.1(7)	10.8(18)
High family affluence (n=44)	7.1(12)	12.4(21)	2.9(5)	3.5(6)

4.4.10.2 Students' actual academic achievement

The actual achievement of students was measured by collecting English and Mathematics grades from the most recent primary school report (Year 5 or 6) from student records files, and the most recent secondary school report (Semester 2, 2014). As the majority of students in this cohort had originated from separate primary schools, report grading reflected the schema of that particular school, and included 'well below satisfactory' to 'highly satisfactory (five levels), level 1 to level 8, 'well below standard' to 'well above standard' (five levels), 'very low' t- 'excellent' (five levels) and 'progress towards minimum standard' to 'above target' (five levels). With input from the case study school's year 7 co-ordinator, results were standardised into the A-E grading schema used in the secondary school, and results are shown in Table 4.68 below. At baseline, the majority of students were 'at standard' or above (English 76%; Maths 79%) with remaining students below the expected standard (English 24%; Maths 21%). At six months post-transition, 84% of Maths students and 92% of English students had 'at standard' or above grades. In baseline Mathematics, the largest proportion of students were in the ‘C – at standard’ group, but by post-transition the largest proportion was found in the ‘B – above standard’ group (33%) and there was also an increase at post-transition of the proportion of students who were graded ‘A – well above standard’ (baseline 8%; post-transition 28%). Similarly, for baseline English, the largest proportion of students were in the ‘C – at standard’ group (56%), however at six months post-transition the largest proportion of students were graded ‘B – above standard’ (44%) while those in the ‘C – at standard group had decreased (41%) and the ‘A – well above standard’ group increased only minimally (baseline 5%; post-transition 13%). The proportion of students who were graded ‘D – Below standard’ or ‘E – well below standard’ decreased for both Maths and English from baseline (Maths 24%; English 21%) to post-transition (Maths 16%; English 9%). Results for the distribution of each subject at both time points were significantly non-normal (p<0.001). Chi-square testing was performed to determine if any significant relationships existed within each group of data, however none were identified.

Table 4.68 Student responses for actual academic achievement at baseline and six months post-transition in Year 7

			Baseline (n=179)		
Actual school results:	**A – Well above standard %(n)**	**B – Above standard %(n)**	**C – At standard %(n)**	**D – Below standard %(n)**	**E – Well below standard % (n)**
Mathematics	8.4(15)	19.0(34)	48.6(87)	21.2(38)	2.8(5)
English	5.0(9)	17.3(31)	56.4(104)	17.3(31)	3.9(7)
			Six months post-transition (n=167)		
Mathematics	27.5(25)	32.9(55)	23.4(39)	10.2(17)	6.0(10)
English	7.8(13)	43.7(73)	40.7(68)	6.6(11)	1.2(2)

Academic achievement was also reviewed by the demographic categories of gender, primary school origin and socio-economic status (Tables 4.69 to 4.72). The majority of students were ‘at standard’ or above (males 34%; females 44%) for English at baseline. By post-transition however the proportion of males ‘at standard’ or above for English had increased to 40% and females had decreased to 42%. The proportion of males and females who were ‘below standard’ or ‘well below standard’ was similar for both genders (males 10%; females 11%). At baseline, the largest proportion of students who were graded ‘D - below standard’ were from ‘feeder’ schools (11%), and by post-transition this proportion had decreased to 3%. The largest proportions of students were graded ‘C - at standard’ at baseline, with ‘continuous’ students at 19%, ‘feeder’ students at 21%, and ‘other’ students at 16%, however by post-transition these proportions had increased and were spread more evenly between ‘C – at standard’ and ‘B – above standard’, with ‘continuous’ students reporting 10% and 15%, ‘feeder’ students reporting 17% and 17%, and ‘other’ students reporting 13% and 12% respectively for these grades. Most low family affluence students reported as being ‘C – at standard’ (3%) or ‘D – below standard’ (3%) for English at baseline, and by six months post-transition this group of students were mostly graded as ‘C – at standard’ (3%) or ‘B – above standard’ (3%). At baseline, high affluence students were mostly graded ‘D – below standard’ (4%), ‘C – at standard’ (16%), or ‘B – above standard’ (5%), however by post-transition these students were mostly in the ‘C – at standard’ (10%) or ‘B – above standard’ (15%) grades for English. For middle family affluence students, the proportion who were graded ‘C – at standard’ (37%) or ‘D – below standard’ (11%) at baseline had decreased by post-transition to 28% and 4% respectively, and the proportion of students who were graded ‘A – well above standard’ (5%) or ‘B – above standard’ (11%) at baseline had increased by post-transition to 7% and 26% respectively. Overall, the proportion of students who reported ‘below standard’ decreased between time points (baseline 23%; post-transition (7%).

Table 4.69 Students' actual English results by demographic variables at baseline

Actual school results: English	Baseline (n=167) A – Well above standard	B – Above standard	C – At standard	D – Below standard	E – Well below standard
Gender					
Male (n=74)	1.8(3)	7.8(13)	24.6(41)	9.0(15)	1.2(2)
Female (n=93)	3.3(6)	9.6(16)	31.1(52)	9.0(15)	2.4(4)
Primary school origin					
Continuous (n=51)	2.4(4)	5.4(9)	18.5(31)	4.2(7)	0.0(0)
Feeder (n=87)	0.6(1)	6.0(10)	21.4(36)	10.7(18)	1.2(2)
Other (n=50)	2.4(2)	6.5(11)	16.1(27)	3.6(6)	1.2(2)
Socio-economic status					
Low family affluence (n=14)	0.6(1)	1.2(2)	3.0(5)	3.0(5)	0.6(1)
Middle family affluence (n=112)	4.8(8)	11.3(19)	36.9(62)	11.3(19)	2.4(4)
High family affluence (n=42)	0.0(0)	5.4(9)	15.5(26)	3.6(6)	0.6(1)

Table 4.70 Students' actual English results by demographic variables at six months post-transition

Actual school results: English	Six months post-transition (n=155) A – Well above standard	B – Above standard	C – At standard	D – Below standard	E – Well below standard
Gender					
Male (n=68)	2.6(4)	18.1(28)	19.4(30)	3.2(5)	0.6(1)
Female (n=87)	5.8(9)	25.8(40)	21.3(33)	3.25)	0.0(0)
Primary school origin					
Continuous (n=47)	2.5(4)	15.3(24)	10.2(16)	1.9(3)	0.0(0)
Feeder (n=63)	2.5(4)	17.2(27)	16.6(26)	3.2(5)	0.6(1)
Other (n=47)	3.2(5)	11.5(18)	13.4(21)	1.9(3)	0.0(0)
Socio-economic status					
Low family affluence (n=14)	1.3(2)	2.5(4)	3.2(5)	1.3(2)	0.6(1)
Middle family affluence (n=103)	7.0(11)	26.1(41)	28.0(44)	3.8(6)	0.6(1)
High family affluence (n=40)	0.0(0)	14.8(23)	9.6(15)	1.3(2)	0.0(0)

The majority of students were 'at standard' or above (males 35%; females 41%) for Maths at baseline. By post-transition however the proportion of students 'at standard' or above for Maths had increased to 37% for males and 49% for females. The proportion of males and females who were 'below standard' or 'well below standard' was similar for both genders (males 7%; females 8%). At baseline, the largest proportion of students who were graded 'D - below standard' were from 'feeder' schools (11%), and by post-transition this proportion had decreased to 5%. The largest proportions of students were graded 'C - at standard' at baseline, with 'continuous' students at 17%, 'feeder' students at 19%, and 'other' students at 13%, however by post-transition, these proportions had decreased and increases were seen in the proportion of students who were graded 'A – well above standard' and 'B – above standard', with 'continuous' students reporting 12% and 10%, 'feeder' students reporting 8% and 13%, and 'other' students reporting 9% and 12% respectively for these grades. The proportion of ‘feeder’ students (baseline 19%; post-transition 12%) who reported a ‘C – at standard’ Maths grade continued to be higher at post-transition than either ‘continuous’ (baseline 17%; post-transition 5%) or ‘other’ students (baseline 13%; post-transition 6%). Most low family affluence students reported either a ‘C – at standard’ (3%) or ‘D - below standard’ (2%) grade at transition, however by six months post-transition the largest proportion of students were found in ‘B – above standard’ (4%) or ‘C – at standard’ (3%) grades. For middle family affluence students, 16% were ‘below standard’ or less at transition and this proportion decreased to 13% at post-transition. The distribution of middle affluence students across the ‘at standard’ or above grades changed post-transition, with ‘C – at standard’ proportions decreasing from 32% to 11% at post-transition, ‘B – above standard’ proportions increased from 12% to 20% post-transition, and ‘A – well above standard’ proportions increasing from 7% to 22%. High family affluence students mostly reported as ‘C – at standard’ (7%), ‘B - above standard’ (5%) or ‘D -below standard’ (5%) at baseline. Six months post-transition, however, high family affluence students mostly reported as ‘C – at standard’ (8%), ‘B – above standard’ (10%), or ‘A – well above standard’ (6%). Overall, the proportion of students who were ‘below standard’ or less decreased from baseline (24%) to post-transition (17%).

Table 4.71 Students’ actual mathematics results by demographic variables at baseline

			Baseline (n=167)		
Actual school results: Mathematics	**A – Well above standard**	**B – Above standard**	**C – At standard**	**D – Below standard**	**E – Well below standard**
Gender					
Male (n=74)	6.0(10)	7.8(13)	21.0(35)	8.4(14)	1.2(2)
Female (n=93)	3.0(5)	11.4(19)	26.9(45)	13.2(22)	1.2(2)
Primary school origin					
Continuous (n=51)	3.6(6)	3.6(6)	16.7(28)	6.5(11)	0.0(0)
Feeder (n=87)	1.8(3)	6.5(11)	19.0(32)	11.3(19)	1.2(2)
Other (n=50)	3.6(6)	9.5(16)	12.5(21)	3.6(6)	0.6(1)
Socio-economic status					
Low family affluence (n=14)	0.6(1)	1.8(3)	3.0(5)	2.4(4)	0.6(1)
Middle family affluence (n=112)	6.5(11)	11.9(20)	32.1(54)	13.7(23)	2.4(4)
High family affluence (n=42)	1.8(3)	5.4(9)	13.1(22)	4.8(8)	0.0(0)

Table 4.72 Students' actual mathematics results by demographic variables at baseline

Actual school results: Mathematics	Post transition (n=155) A – Well above standard	B – Above standard	C – At standard	D – Below standard	E – Well below standard
Gender					
Male (n=68)	12.9(20)	15.5(24)	8.4(13)	5.2(8)	1.9(3)
Female (n=87)	16.8(25)	18.1(28)	13.5(21)	5.2(8)	3.2(5)
Primary school origin					
Continuous (n=47)	12.1(19)	9.8(15)	4.5(7)	2.5(4)	1.3(2)
Feeder (n=63)	7.6(12)	12.7(20)	11.5(18)	4.5(7)	3.8(6)
Other (n=47)	8.9(14)	11.5(18)	5.7(9)	3.8(6)	0.0(0)
Socio-economic status					
Low family affluence (n=14)	1.3(2)	3.8(6)	2.5(4)	0.0(0)	1.3(2)
Middle family affluence (n=103)	21.7(34)	19.7(31)	11.1(18)	8.9(14)	3.8(6)
High family affluence (n=40)	5.7(9)	10.2(16)	7.6(12)	1.3(2)	0.6(1)

Chi-square tests did not reveal any significant associations for these data, or between data at transition and post-transition for either Maths or English results. Wilcoxon signed-rank tests did however reveal significant results. For males and females, post-transition English and Maths grades were significantly higher than baseline grades (males: English z=-3.681, p<0.001, Maths z=-3.748, p<0.001; females: English z=-5.545, p<0.001, Maths z=-5.031, p<0.001), and also were for 'continuous' (English z=-6.545, p<0.001, Maths z=-4.568, p<0.001), 'feeder' (English z=-4.568, p<0.00, Maths z=-3.133, p=0.002) and 'other' students (English z=-2.600, p=0.009, Maths z=-3.042, p=0.002). Low family affluence students showed a significant increase in English grades by post-transition (z=-2.111, p<0.035), while middle and high family affluence groups had significant increases in grades for both English (middle: z=-5.071, p<0.001; high: z=-3.661, p<0.001), and Maths (middle: z=-4.929, p<0.001; high: z=-3.554, p<0.001) at six months post-transition.

4.4.11 Summary statement

Results for ‘academic progress’ have been described in this section, and significance testing used to detect if any significant relationships existed within each data set, and also over time between baseline and six months post-transition. The demographic variables of gender and primary school origin were applied to student’s academic progress, and the results recorded in this section. For ‘students’ perception of academic achievement’ no significant results were found, and this was also the case for student’s actual Mathematics and English grades.

4.5 Transition experience

The transition experience of students was measured by one question that asked how the move to secondary schools was for the student, based on the work of Akos (Akos, 2002). Students were able to choose from four answers ranging from easy to difficult, and were then asked to explain their answer to add depth to their response. This question was asked at both time points (Tables 4.73 and 4.74). At baseline, 38% of students rated their transition to secondary school as ‘difficult’ or ‘somewhat difficult’, but by six months post-transition this had decreased to 28%. The surveys also revealed that 14% of the cohort were males who rated their transition as ‘difficult’ or ‘somewhat difficult’ at baseline and this had decreased to 7% post-transition. For students who were female, 24% rated their transition at baseline as ‘difficult’ or ‘somewhat difficult’ and at post-transition, this had decreased slightly to 22%. In relation to primary school origin, 6% ‘continuous’, 17% ‘feeder’ and 14% ‘other’ students reported a ‘difficult’ or ‘somewhat difficult’ experience at baseline, while 23% ‘continuous’, 24% ‘feeder’ and 16% ‘other’ students reported an ‘easy’ or ‘somewhat easy’ transition at baseline. By six months post-transition, 7% ‘continuous’, 12% ‘feeder’ and 10% ‘other’ students reported a negative transition, and 22% ‘continuous’, 30% ‘feeder’ and 21% ‘other’ students reported a positive transition. These data show that the increase in positive perception of transition at post-transition was mainly represented by students of ‘feeder’ and ‘other’ primary school origins. In relation to family affluence, the largest group of students were found in the middle family affluence group (baseline 66%; post-transition 67%). In this group, most students (baseline 42%; post-transition 51%) reported a ‘somewhat easy’ or ‘easy’ transition, while the high family affluence group were spread over ‘somewhat difficult’ (9%), ‘somewhat easy’ (9%) and ‘easy’ (7%) at baseline. By six months post-transition, the majority of the high family affluence group again reported ‘somewhat difficult’ (5%), ‘somewhat easy’ (8%), and ‘easy’ (10%). Finally the majority of the low family affluence group reported a spread between ‘difficult’ (baseline 2%; post transition 2%), ‘somewhat difficult’ (baseline 9%; post-transition 5%) and ‘somewhat easy’ (baseline 2%; post-transition 2%) at both time points.

Chi-square testing was undertaken with gender, primary school origin and SES to determine if any significant relationships existed in the data at each time point. No significant relationships were found at baseline, however post-transition data revealed a significantly higher proportion of females (22%) rated their transition as ‘somewhat difficult’ or ‘difficult’ than males (8%) at six months post transition (χ^2=13.284, p=0.039). Additionally, a significantly higher proportion of ‘feeder’ students (30%) rated their transition as ‘somewhat easy’ or ‘easy’ than either ‘continuous’ (22%) or ‘other’ students (20%) (χ^2=12.516, p=0.006). Chi-square testing over time between overall baseline and post-transition data revealed no significant results. Wilcoxon signed-rank testing revealed that there was a significant increase in positive ratings of transition at six months post transition from baseline for males (baseline 2.96%, post-transition 3.29%, z=-2.999, p=0.003), ‘other’ students (baseline 2.83%, post-transition 3.10%, z=-3.126, p=0.025), and for middle affluence students (baseline 38.2%, post-transition 25.7%, z=-3.333, p=0.002).

Table 4.73 Students’ perception of the move from primary to secondary school at baseline

How was the move from primary to secondary school for you?			Baseline (n=174)		
	Difficult %(n)	Somewhat difficult %(n)	Somewhat easy %(n)	Easy %(n)	Total %(n)
Gender					
Male	2.9(8)	10.9(19)	15.5(27)	14.9(26)	44.3(77)
Female	7.5(13)	16.7(29)	17.2(30)	14.4(25)	55.7(97)
Primary school origin					
Continuous	1.7(3)	4.6(8)	10.9(19)	12.0(21)	29.1(51)
Feeder	5.1(9)	12.0(21)	12.6(22)	10.9(19)	40.6(71)
Other	3.4(6)	10.9(19)	9.1(16)	6.9(12)	30.3(53)
Socio-economic status					
Low family affluence	1.7(3)	2.9(5)	2.3(4)	1.1(2)	8.0(14)
Middle family affluence	7.4(13)	16.0(28)	22.3(39)	20.0(35)	65.7(115)
High family affluence	1.7(3)	8.6(15)	8.6(15)	7.4(13)	26.3(46)

Table 4.74 Students' perception of the move from primary to secondary school at six months post-transition

How was the move from primary to secondary school for you?	Six months post-transition (n=171) Difficult %(n)	Somewhat difficult %(n)	Somewhat easy %(n)	Easy %(n)	Total %(n)
Gender [a]					
Male	1.8(3)	4.7(8)	16.4(28)	21.1(36)	43.9(75)
Female	5.8(10)	15.8(27)	17.5(30)	17.0(29)	56.1(96)
Primary school origin [b]					
Continuous	1.2(2)	5.9(10)	5.3(9)	16.5(28)	28.8(49)
Feeder	4.1(7)	7.6(13)	17.6(30)	12.4(21)	41.8(71)
Other	2.4(4)	7.1(12)	10.6(18)	9.4(16)	29.4(50)
Socio-economic status					
Low family affluence	1.8(3)	2.9(5)	1.8(3)	0.6(1)	7.0(12)
Middle family affluence	4.1(7)	12.3(21)	23.4(40)	27.5(47)	67.3(115)
High family affluence	2.3(4)	5.3(9)	8.2(14)	9.9(17)	25.7(44)

Post-transition: [a]p<0.05 females, [b]p<0.05 easy or somewhat easy

At the end of data collection, the full range of written responses for ease or difficulties of transition were categorised (Tables 4.75 and 4.76). Many students provided multiple reasons (baseline n=114; post-transition n=73), and those who did not answer at all were excluded from analysis, with results recoded to reflect the ease or difficulty of transition.

The issue of friendship was paramount in students' responses, with students who reported an 'easy' or 'somewhat easy' transition responding that it was due to the ease of making new friends (baseline 44%; post-transition 51%) and/or that they came with friends from their primary school or already had friends at the secondary school (baseline 41%; post-transition 71%). Similarly, those students who reported a difficult transition reported that it was due to the difficulty of making new friends (baseline 29%; post-transition 32%), having no friends in their classes (baseline 4%; post-transition 2%) and that they missed their old friends who did not move with them (baseline 27%; post-transition 22%). At baseline, 11% of students said having siblings at the school helped ease their transition, however by post-transition this had fallen to 3%. Some students cited that welcoming teachers and school staff helped with their move to secondary school (baseline 9%; post-transition 12%) but those with transition difficulties reported that they missed their old primary school (baseline 15%; post-transition 10%). For those students who found transition easy, feeling prepared and ready (baseline 8%; post-transition 22%), a positive attitude (baseline 6%; post-transition 12%), and the opportunity for a fresh start (baseline 4%; post-transition 4%) were reported. Conversely, for those who found transition difficult, feeling unprepared or fearful about the move (baseline 15%; post-transition 10%), being in a bigger school or getting lost (baseline 14%; post-transition 8%) and needing to be more organised or independent (baseline 4%; post-transition 8%) were issues raised by students. At baseline, a few students who found transition easy responded to the effect that 'it's just school' (baseline 6%; post transition 4%), that the school had a good reputation (baseline 2%, post-transition 1%) and that they liked the new subjects (baseline 1%; post-transition 3%). Finally, students who had a difficult transition cited at baseline that secondary school was very different to primary school (14%) and they were struggling with the new rules and expectations of secondary school (3%), however no students reported these reasons at six months post transition (0.0% for both categories).

Table 4.75 Students' reported reasons for ease of transition at baseline and six months post-transition

Reasons for ease of transition	**Baseline (n=114) %(n)**	**Six months post-transition (n=73) %(n)**
Easy to make friends	43.9(50)	50.7(37)
Came with/already had friends	40.4(46)	71.2(52)
Siblings already at school	10.5(12)	2.7(2)
Welcoming teachers and staff	9.6(11)	12.3(9)
Felt prepared and ready	7.9(9)	21.9(16)
Positive attitude	6.1(7)	12.3(9)
It's just school	3.5(4)	4.1(3)
Fresh start	3.5(4)	4.1(3)
School reputation	1.8(2)	1.4(1)
New subjects	0.9(1)	2.7(2)

Table 4.76 Students' reported reasons for difficulty of transition at baseline and six months post-transition

Reasons for difficulty of transition	Baseline (n=73) %(n)	Six months post-transition (n=50) %(n)
Difficult to make new friends	28.8(21)	32.0(16)
Miss old friends	27.4(20	22.0(11)
Miss primary school	15.1(11)	10.0(5)
Not prepared/fearful	15.1(11)	10.0(5)
Very different to primary school	13.7(10)	0.0(0)
Big school/getting lost	13.7(10)	8.0(4)
Harder and more work/homework	5.5(4)	12.0(6)
No friends in classes	4.1(3)	2.0(1)
Need to be organised/independent	4.1(3)	8.0(4)
New rules and expectations	2.7(2)	0.0(0)

CHAPTER FIVE

MULTIVARIATE ANALYSIS

The research questions posed for this thesis aim to investigate the application of Schlossberg's model (1984) to primary to secondary school transition in a cohort of Year 7 students at a Western Australian K-12 school. Each research question corresponds to a domain of the model, as shown in Figure 5.1.

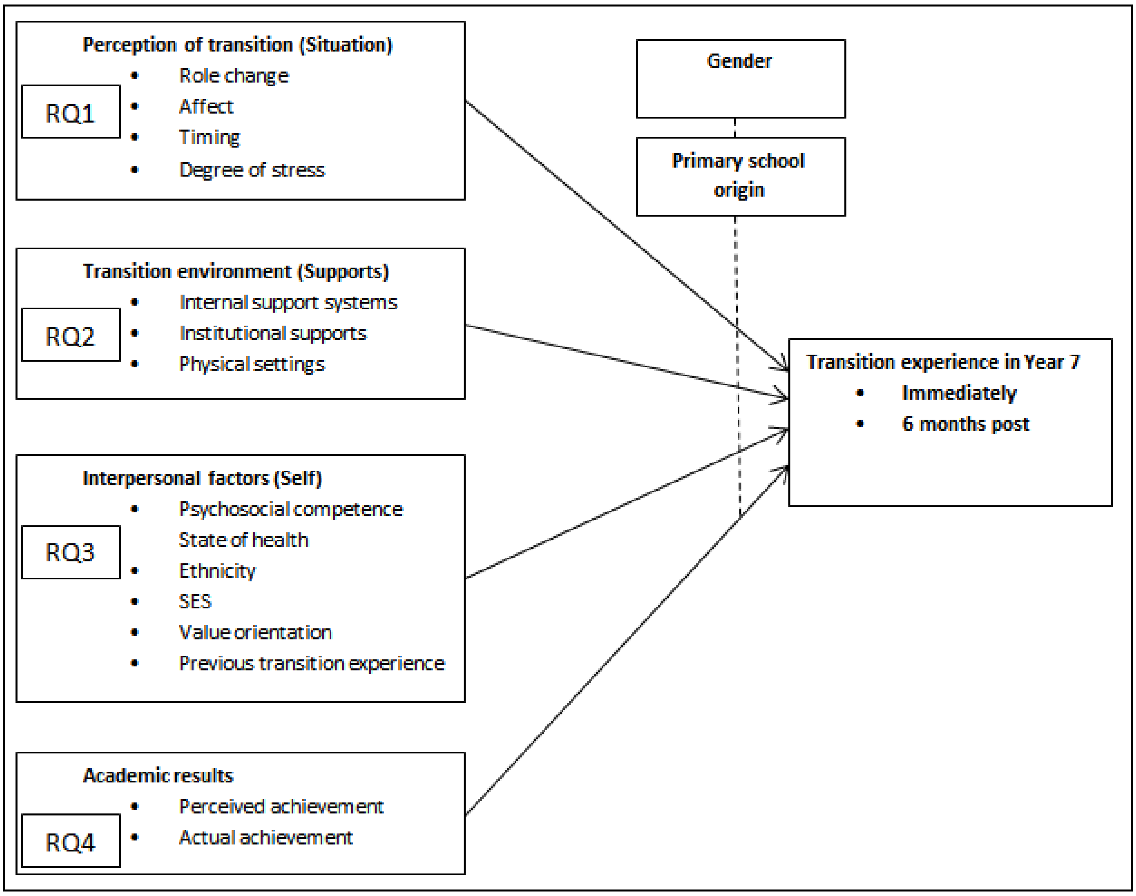


Figure 5.1 Model of transition for multivariate analysis

5.1 Research question one

Research question one aimed to investigate if students' perception of transition at the end of Year 6 had an impact on their transition experience at the commencement of Year 7 ('baseline') and six months post-transition ('post-transition'). The resulting model was also examined for differences in demographic categories of gender and primary school origin. This question produced the following hypotheses:

Hypothesis 1a: There is no relationship between perception of transition at the end of Year 6 and transition experience at commencement of Year 7, after controlling for gender and primary school origin.

Hypothesis 1b: There is no relationship between perception of transition at the end of Year 6 and transition experience in Year 7 at six months post-transition, after controlling for gender and primary school origin.

The independent variables in this research question were based on the 'perception of transition' domain as described in Schlossberg's model (Figure 3.1), and measured at baseline. Two questions were used to measure 'role change' and these questions asked what students were looking forward to, and were worried about, in relation to the move to secondary school. 'Effect of transition' was measured by one qualitative item that asked 'What things do you like about your new secondary school', from which a score of 'likes' was obtained. The 'timing of transition' was measured by one question that asked students for their month and year of birth, which were then categorised into quarter-years for the purpose of analysis, however due to a lack of dispersal this variable was excluded from analysis. Finally, the 'degree of stress' was measured by one dichotomous question that asked if students had experienced any major problems in the last six months, such as a person dying or a family breakup. All of these items are further described in the 'Methods and procedures' chapter, Section 3.10. Gender and primary school of origin were each measured by one question, as described in the 'Results' chapter, Section 4.1. The categorical dependent variables 'transition experience' and 'actual transition experience' were measured at baseline and six months post-transition, and comprised one question that asked, 'How was the move from primary to secondary school for you?'(Akos, 2002; Akos & Galassi, 2004). For this question, students selected one response from 'difficult', 'somewhat difficult', 'somewhat easy' and 'easy'.

Multinomial logistic regression analysis was used to test if there was a relationship between perception of transition at the end of Year 6 and transition experience at commencement of Year 7 and at six months post-transition, while controlling for gender and primary school origin (Tables 5.1 and 5.2). The models for transition experience at commencement ($\chi^2(21)=42.445$, p=0.004) and at six months post-transition ($\chi^2(21)=34.580$, p=0.031) were statistically significant.

After controlling for gender and primary school origin, perception of transition at the end of Year 6 was a significant predictor for both transition experience at the commencement of Year 7, and for transition experience in Year 7 at six months post-transition. At baseline, the ‘role change’ element of negative expectations of secondary school had a significant influence on how ‘easy’ a student perceived their transition experience to be at the commencement of Year 7. Students with higher scores of negative expectations were significantly less likely to report an ‘easy’ transition, with ‘difficult’ (OR 1.30, p=0.001), ‘somewhat difficult’ (OR 1.25, p<0.001), and ‘somewhat easy’ (OR 1.11, p=0.048) reporting significant results. Females were significantly more likely than males to report a ‘somewhat difficult’ transition (OR 3.79, p=.025) at six months post-transition, and students with higher scores of things they liked about being at secondary school in the ‘effect of transition’ element at baseline were significantly more likely to report a ‘somewhat easy’ transition at six months post-transition. For these hypotheses, gender and primary school origin exerted a significant influence over students’ transition experiences at six months post-transition.

For research question one, significance was reported for several independent variables of the ‘perception of transition’ domain of Schlossberg’s model in relation to ‘students’ transition experience’. At baseline, negative pre-transition expectations in Year 6 were a significant predictor of a poorer transition experience. At post-transition, being female was a predictor of a poorer transition experience, while student liking of aspects about being in secondary school predicted an easier transition experience. Primary school origin reported non-significant results for this research question. Additionally, both baseline and post-transition multinomial regression models were significant. Given these results, the null hypotheses 1a and 1b can be partially rejected, as there is sufficient evidence of a significant relationship between perception of transition in Year 6 and transition experience at baseline and post-transition in Year 7 after controlling for gender.

Table 5.1 Multinomial logistic regression results for perception of transition in Year 6 as a predictor of transition experience at commencement of Year 7

		OR	95% CI	p
Difficult				
Role change	Positive expectations	.85	.64, 1.14	.282
	Negative expectations	1.30	1.11, 1.52	.001*
Effect	Student likes	.99	.40, 2.44	.982
Degree of stress	Major problems	1.31	.32, 5.33	.709
	Gender - female	1.05	.25, 4.47	.945
	Primary school - ‘continuous	.33	.05, 3.10	.375
	Primary school – ‘feeder’	1.06	.21, 5.40	.945
Somewhat difficult				
Role change	Positive expectations	.92	.73, 1.16	.480
	Negative expectations	1.25	1.12, 1.40	<.000*
Effect	Student likes	1.29	.66, 2.53	.456
Degree of stress	Major problems	1.11	.37, 3.29	.855
	Gender - female	1.29	.25, 2.14	.571
	Primary school - ‘continuous	.26	.06, 1.06	.064
	Primary school – ‘feeder’	.51	.15, 1.77	.288
Somewhat easy				
Role change	Positive expectations	.91	.75, 1.10	.316
	Negative expectations	1.11	1.00, 1.22	.048*
Effect	Student likes	1.55	.85, 2.85	.155
Degree of stress	Major problems	.55	.20, 1.53	.252
	Gender - female	.76	.29, 1.99	.579
	Primary school - ‘continuous	.73	.21, 2.51	.618
	Primary school – ‘feeder’	1.07	.33, 3.50	.911

*p<0.05; **p<0.001; Reference categories are easy transition; major problems – no; gender – males; primary school origin - other

Table 5.2 Multinomial logistic regression results for perception of transition in Year 6 as a predictor of transition experience in Year 7 at six months post-transition

		OR	95% CI	p
Difficult				
Role change	Positive expectations	.81	.59. 1.11	.189
	Negative expectations	1.14	.96, 1.36	.138
Effect	Student likes	2.34	.90, 6.05	.080
Degree of stress	Major problems	1.83	.34, 9.82	.479
	Gender - female	1.14	.21, 6.19	.885
	Primary school - ‘continuous	.37	.03, 4.44	.430
	Primary school – ‘feeder’	1.64	.26, 10.29	.596
Somewhat difficult				
Role change	Positive expectations	.91	.74, 1.11	.334
	Negative expectations	1.08	.97, 1.19	.171
Effect	Student likes	1.04	.51, 2.09	.911
Degree of stress	Major problems	2.45	.81. 7.43	.114
	Gender - female	3.78	1.18, 12.12	.025*
	Primary school - ‘continuous	.51	.13, 1.97	.329
	Primary school – ‘feeder’	.68	.20, 2.72	.529
Somewhat easy				
Role change	Positive expectations	.96	.80, 1.17	.738
	Negative expectations	1.08	.96, 1.17	.106
Effect	Student likes	2.04	1.15, 3.61	.015*
Degree of stress	Major problems	1.80	.69, 4.71	.229
	Gender - female	.79	.29, 1.84	.507
	Primary school - ‘continuous	.46	.14, .150	.197
	Primary school – ‘feeder’	1.38	.48, 3.98	.548

*p<0.05; **p<0.001; Reference categories are easy transition; major problems –no; gender – males; primary school origin - other

5.2 Research question two

The purpose of research question two was to investigate if students' transition environment at the end of Year 6 had an impact on their transition experience at the commencement of Year 7 and six months post-transition. The resulting model was also examined for differences in demographic categories of gender and primary school origin. This question produced the following hypotheses:

Hypothesis 2a: There is no relationship between transition environment at the end of Year 6 and transition experience at commencement of Year 7 after controlling for gender and primary school origin.

Hypothesis 2b: There is no relationship between transition environment at the end of Year 6 and transition experience in Year 7 at six months post-transition after controlling for gender and primary school origin.

The independent variables in this research question were based on the 'transition environment' domain as described in Schlossberg's model (Figure 2.1) and measured at baseline. Three questions were used to measure 'internal support systems' namely, family connectedness, loneliness, and peer support, while one question measured school safety as part of the 'physical settings' domain. 'Institutional supports' were measured by items measuring school connectedness, extra-curricular activities, teacher support while one question asked if students had participated in any pre-transition activities while in primary school. The extracurricular activities variable was excluded from analysis due the small number of responses (n=40) to this item in the baseline survey. All of these items are described in the 'Methods' chapter, section 3.10. Gender and primary school of origin were each measured by one question, as described in the 'Results' chapter, section 4.1. The categorical dependent variables 'transition experience' and 'actual transition experience' were measured at baseline and six months post-transition, and comprised one question that asked, 'How was the move from primary to secondary school for you?'(Akos, 2002; Akos & Galassi, 2004). For this question, students selected one response from 'difficult', 'somewhat difficult', 'somewhat easy' and 'easy'.

Multinomial logistic regression analysis was used to test if there was a relationship between transition environment at the end of Year 6 and transition experience at commencement of Year 7 and at six months post-transition, while controlling for gender and primary school origin (Tables 5.3 and 5.4). The models for transition experience at commencement ($\chi^2(45)=72.10$, $p=0.006$) and at six months post-transition ($\chi^2(45)=82.99$, $p<0.001$) were statistically significant.

For ‘internal support systems’, students’ levels of loneliness emerged as a significant predictor of transition experience. Students who felt lonely on commencement of secondary school were more likely to report a ‘difficult’ (OR 7.74; p=0.005) or ‘somewhat easy’ (OR 3.76, p=0.026) than ‘easy’ transition experience at baseline. These results do however indicate that loneliness at baseline reduces students’ ability to experience an ‘easy’ transition on commencing at their new secondary school, however by six months post-transition the effect of loneliness on transition experience was no longer significant. The emotional factor of peer support in the ‘internal support systems; domain also produced significant results, with students who evidenced high levels of emotional support from peers significantly less likely to report a ‘somewhat difficult’ transition experience at commencement of secondary school (OR 0.85, p=0.08), as were ‘continuous’ students (OR 0.22, p=0.042). Analysis of post-transition results did yield some significant results, with students who felt safe at school significantly more likely to report a ‘somewhat easy’ transition experience (OR 7.42, p=0.001). Interestingly, students who reported they were unsure about their safety or unsafe also reported significant results, being significantly more likely to experience a ‘somewhat easy’ transition (OR 7.23, p=.027). Due to the very small proportion of students who reported feeling unsafe at school in the descriptive analysis, the variable was collapsed with the ‘unsure’ responses to enable meaningful analysis, however the largest proportion of this group were students who reported being unsure about their safety at school at the commencement of Year 7. Consequently, it is not unreasonable to suggest that these significant results relate particularly to students who answered ‘unsure’ for this question. A significant relationship also emerged between the family care factor of family connectedness for the ‘internal support system’ domain of the post-transition results. Students with high levels of family care were significantly less likely to report a ‘somewhat easy’ than an ‘easy’ transition (OR .43, p=0.005), indicating that levels of family care at commencement of secondary school were important in students’ reporting an ‘easy’ transition experience. Post-transition results also revealed a gender effect, wherein females were significantly more likely than males to report a ‘somewhat difficult’ transition (OR 6.08, p=0.005). Additionally, ‘continuous’ students were significantly less likely to report a ‘somewhat easy’ transition experience at six months post-transition than students from either ‘feeder’ or ‘other’ primary school origins (OR 0.32, p=0.020).

For research question two, significant results were was reported for several independent variables of the ‘transition environment’ domain of Schlossberg’s model in relation to ‘students’ transition experience. At baseline, loneliness was a significant predictor of a poorer transition experience, however this was not present a post-transition. The emotional support of peers at commencement of Year 7 and being a ‘continuous’ student at the school also predicted an easier transition at baseline. By six months post-transition, feeling safe at school was a predictor of a more positive transition experience, although being unsure about the safety of school also predicted a positive transition. Having a caring family predicted ease of transition experience at six months post-transition. However, being female and being a ‘continuous’ student at the case study school predicted a poorer transition experience by six months post-transition. Both baseline and post-transition multinomial regression models were significant. Given these results, the null hypotheses 2a and 2b can be rejected, as there is sufficient evidence of a significant relationship between transition environment in Year 6 and transition experience at baseline and post-transition in Year 7, after controlling for gender and primary school origin.

Table 5.3 Multinomial logistic regression results for transition environment at the end of Year 6 as a predictor of transition experience at commencement of Year 7

		OR	95% CI	p
Difficult				
Internal support systems	Family connectedness - interaction	.73	.18, 2.80	.663
	Family connectedness - monitoring	1.38	.30, 6.32	.667
	Family connectedness - care	.90	.41, 1.96	.794
	Loneliness	7.74	1.84, 32.59	.005*
	Peer support - emotional	1.01	.09, 11.18	.994
	Peer support - participation	.47	.06, 3.78	.478
	Peer support - social	7.28	.91, 58.33	.061
Institutional supports	School connectedness	.93	.20, 4.27	.925
	Teacher connectedness	.89	.34, 2.55	.885
	Pre-transition activities	.90	.06, 13.85	.938
Physical setting	Safe at school – disagree/unsure	1.59	.17, 15.54	.684
	Safe at school – agree	.64	.10, 4.26	.644
	Gender - female	1.941	.44, 8.57	.381
	Primary school - ‘continuous’	.63	.10, 4.15	.628
	Primary school – ‘feeder’	1.41	.28, 6.98	.675

		OR	95% CI	p
Somewhat difficult				
Internal support systems	Family connectedness - interaction	.58	.20, 1.72	.329
	Family connectedness - monitoring	.74	.25, 2.20	.582
	Family connectedness - care	.87	.47, 1.60	.661
	Loneliness	2.89	.86, 9.75	.087
	Peer support - emotional	.85	.01, .52	.008*
	Peer support - participation	3.27	.60, 17.29	.173
	Peer support - social	1.83	.37, 9.14	.461
Institutional supports	School connectedness	.93	.27, 3.19	.908
	Teacher connectedness	.99	.45, 2.19	.992
	Pre-transition activities	2.34	.36, 15.24	.375
Physical setting	Safe at school – disagree/unsure	.46	.06, 3.73	.468
	Safe at school – agree	2.851	.71, 11.40	.138
	Gender - female	2.176	.70, 6.73	.177
	Primary school - ‘continuous’	.223	.05, .95	.042*
	Primary school – ‘feeder’	.447	.13, 1.59	.212

		OR	95% CI	p
Somewhat easy				
Internal support	Family connectedness	.96	.35, 2.63	.938
systems	Family connectedness - monitoring	.87	.31, 2.47	.793
	Family connectedness - care	1.01	.58, 1.78	.967
	Loneliness	3.76	1.17, 12.08	.026*
	Peer support	.61	.13, 2.80	.524
	Peer support - participation	1.30	.29, 5.71	.731
	Peer support - social	2.91	.67, 12.65	.155
Institutional	School connectedness	1.46	.46, 4.63	.525
supports	Teacher connectedness	.82	.43, 1.54	.530
	Pre-transition activities	.57	.09, 3.80	.565
Physical setting	Safe at school – disagree/unsure	1.79	.33, 9.84	.505
	Safe at school – agree	1.70	.47, 6.08	.420
	Gender - female	1.04	.41, 2.70	.929
	Primary school - ‘continuous’	.55	.17, 1.64	.334
	Primary school – ‘feeder’	.74	.23, 2.40	.619

*p<0.05; **p<0.001; Reference categories are easy transition; gender – males; primary school origin – other; pre-transition activities – yes; safe at school – strongly agree

Table 5.4 Multinomial logistic regression results for transition environment at the end of Year 6 as a predictor of transition experience in Year 7 at six months post-transition

		OR	95% CI	p
Difficult				
Internal support systems	Family connectedness - interaction	2.91	.47, 18.02	.250
	Family connectedness - monitoring	.433	.06, 2.32	.328
	Family connectedness - care	.742	.24, 2.34	.610
	Loneliness	2.29	.50, 10.52	.286
	Peer support - emotional	4.97	.29, 85.25	.269
	Peer support - participation	.09	.01, 1.10	.059
	Peer support - social	3.29	.28, 38.89	.344
Institutional supports	School connectedness	2.04	.25, 16.55	.503
	Teacher connectedness	.82	.27, 2.46	.720
	Pre-transition activities	-16.55	-	-
Physical setting	Safe at school – disagree/unsure	7.34	.50, 105.98	.143
	Safe at school – agree	.95	.06, 14.42	.972
	Gender - female	4.183	.60, 29.07	.146
	Primary school - ‘continuous	.57	.04, 2.17	.630
	Primary school – ‘feeder’	1.78	.24, 6.71	.544

		OR	95% CI	p
Somewhat difficult				
Internal support systems	Family connectedness - interaction	.98	.35, 2.84	.984
	Family connectedness - monitoring	1.76	.57, 5.50	.329
	Family connectedness - care	.56	.27, 1.18	.129
	Loneliness	1.84	.71, 4.76	.212
	Peer support - emotional	.32	.05, 2.04	.226
	Peer support - participation	4.45	.76, 27.27	.098
	Peer support - social	.39	.07, 2.07	.270
Institutional supports	School connectedness	.96	.28, 3.31	.946
	Teacher connectedness	.95	.43, 2.08	.893
	Pre-transition activities	.13	.01, 1.90	.136
Physical setting	Safe at school – disagree/unsure	4.84	.68, 34.18	.114
	Safe at school – agree	2.77	.65, 11.62	.168
	Gender - female	6.08	1.72, 21.55	.005*
	Primary school - ‘continuous’	.34	.80, 1.40	.135
	Primary school – ‘feeder’	.40	.11, 1.46	.165

		OR	95% CI	p
Somewhat easy				
Internal support systems	Family connectedness	1.65	.65, 4.18	.294
	Family connectedness - monitoring	1.92	.71, 5.21	.202
	Family connectedness - care	.423	.23, .77	.005*
	Loneliness	1.37	.56, 3.34	.485
	Peer support	.33	.07, 1.45	.141
	Peer support - participation	1.49	.35, 6.42	.592
	Peer support - social	1.60	.42, 6.05	.488
Institutional supports	School connectedness	1.84	.60, 5.70	.290
	Teacher connectedness	1.29	.65, 2.55	.461
	Pre-transition activities	.73	.14, 3.77	.708
Physical setting	Safe at school – disagree/unsure	7.23	1.52, 41.76	.027*
	Safe at school – agree	7.42	2.16, 25.53	.001*
	Gender - female	1.39	.55, 3.54	.491
	Primary school - ‘continuous	.32	.09, 1.14	.020*
	Primary school – ‘feeder’	1.07	.36, 3.20	.895

*p<0.05; **p<0.001; Reference categories are easy transition; gender – males; primary school origin – other; pre-transition activities – yes; safe at school – strongly agree

5.3 Research question three

Research question three investigated if students' interpersonal factors at the end of Year 6 had an impact on their transition experience at the commencement of Year 7 and six months post-transition. The resulting model was also examined for differences in demographic categories of gender and primary school origin. This question produced the following hypotheses:

Hypothesis 3a: There is no relationship between interpersonal factors at the end of Year 6 and transition experience at commencement of Year 7 after controlling for gender and primary school origin.

Hypothesis 3b: There is no relationship between interpersonal factors at the end of Year 6 and transition experience in Year 7 at six months post-transition after controlling for gender and primary school origin.

The independent variables in this research question were based on the 'interpersonal factors' domain as described in Schlossberg's model (Figure 2.1) and measured at baseline. For 'psychosocial competence', students responded to the K-10 scale of psychological distress. This variable was collapsed into two categories to allow meaningful analysis. The 'state of health' of students was collected from student record files, while 'ethnicity' was measured by one question that asked if students were born in Australia. The Family Affluence scale was used to measure students' 'socioeconomic status', and 'values orientation' was measured by three scales from the same instrument to determine students' self-reported positivity, trustworthiness, reliability and honesty. The factors of positivity and reliability were collapsed to allow data analysis. Finally, one question was asked to determine if students' had any 'previous transition experience'. All of these items are described in the 'Methods' chapter, section 3.10. Gender and primary school of origin were each measured by one question, as described in the 'Results' chapter, section 4.1. The categorical dependent variables 'transition experience' and 'actual transition experience' were measured at baseline and six months post-transition, and comprised one question that asked, 'How was the move from primary to secondary school for you?'(Akos, 2002; Akos & Galassi, 2004). For this question, students selected one response from 'difficult', 'somewhat difficult', 'somewhat easy' and 'easy'.

Multinomial logistic regression analysis was used to test if there was a relationship between interpersonal factors at the end of Year 6 and transition experience at commencement of Year 7 and at six months post-transition, while controlling for gender and primary school origin (Tables 5.5 and 5.6). The models for transition experience at commencement ($\chi2(36)=65.99$, $p=0.002$) and at six months post-transition ($\chi2(36)=77.53$, $p<0.001$) were statistically significant.

Table 5.5 Multinomial logistic regression results for interpersonal factors at the end of Year 6 as a predictor of transition experience at the commencement of Year 7

		OR	95% CI	p
Difficult				
Psychosocial competence	K-10 - depression	.74	.27, 2.00	.547
	K-10 – agitation/turmoil	3.36	1.67, 6.74	.001*
State of health	Ongoing medical issues	1.03	.30, 3.54	.996
Ethnicity	Born in Australia?	2.04	.41, 10.10	.384
Socioeconomic status	Family affluence	.52	.13, 2.14	.367
Values orientation	Self-description - trust	1.87	.46, 7.67	.386
	Self-description - reliable	.78	.43, 1.42	.418
	Self-description - honest	.56	.19. 1.66	.292
Previous transition	Moved schools before?	.40	.08, 2.00	.267
	Gender - female	3.66	.80, 16.81	.095
	Primary school - 'continuous	.86	.11, 6.68	.883
	Primary school – 'feeder'	.81	.15, 4.41	.811

		OR	95% CI	p
Somewhat difficult				
Psychosocial competence	K-10 - depression	.651	.29, 1.49	.651
	K-10 – agitation/turmoil	2.62	1.57, 4.35	<0.001*
State of health	Ongoing medical issues	.43	.14, 1.31	.138
Ethnicity	Born in Australia?	.475	.14, 1.65	.240
Socioeconomic status	Family affluence	.838	.32, 2.23	.724
Values orientation	Self-description - trust	.78	.32, 1.93	.597
	Self-description - reliable	.64	.43, .96	.032*
	Self-description - honest	1.17	.53, 2.57	.702
Previous transition	Moved schools before?	.41	.13, 1.27	.121
	Gender - female	2.51	.85, 7.39	.095
	Primary school - ‘continuous	.21	.05, .93	.040*
	Primary school – ‘feeder’	.45	.13, 1.58	.214

		OR	95% CI	p
Somewhat easy				
Psychosocial competence	K-10 - depression	.63	.30, 1.36	.238
	K-10 – agitation/turmoil	1.81	1.19, 2.76	.006*
State of health	Ongoing medical issues	1.14	.57, 2.28	.721
Ethnicity	Born in Australia?	.51	.17, 1.48	.212
Socioeconomic status	Family affluence	1.02	.43, 2.42	.961
Values orientation	Self-description - trust	1.72	.77, 3.85	.189
	Self-description - reliable	.76	.54, 1.07	.116
	Self-description - honest	.97	.50, 1.85	.915
Previous transition	Moved schools before?	.78	.30, 2.00	.599
	Gender - female	1.50	.60, 3.78	.388
	Primary school - ‘continuous	.65	.20, 2.15	.477
	Primary school – ‘feeder’	.75	.24, 2.36	.626

*p<0.05; **p<0.001; Reference categories are easy transition; gender – males; primary school origin – other; ongoing medical issues – no; born in Australia – yes; moved schools before – no.

Table 5.6 Multinomial logistic regression results for interpersonal factors at the end of Year 6 as a predictor of transition experience in Year 7 at six months post-transition

		OR	95% CI	p
Difficult				
Psychosocial competence	K-10 - depression	.17	.02, 1.47	.107
	K-10 – agitation/turmoil	4.0	1.22, 13.05	$.022^{*}$
State of health	Ongoing medical issues	1.36	.24, 7.80	.727
Ethnicity	Born in Australia?	2.14	.21, 22.22	.525
Socioeconomic status	Family affluence	.80	.13, 5.01	.808
Values orientation	Self-description - trust	.14	.02, 1.39	.093
	Self-description - reliable	.50	.27, .95	$.035^{*}$
	Self-description - honest	.91	.21, 4.04	.904
Previous transition	Moved schools before?	-	-	-
	Gender - female	7.23	.91, 57.57	.062
	Primary school - ‘continuous	.17	.01, 3.36	.169
	Primary school – ‘feeder’	.25	.02, 3.26	.287

		OR	95% CI	p
Somewhat difficult				
Psychosocial competence	K-10 - depression	1.22	.58, 2.55	.603
	K-10 – agitation/turmoil	1.62	1.03, 2.53	.035*
State of health	Ongoing medical issues	.94	.37, 2.40	.897
Ethnicity	Born in Australia?	.67	.20, 2.24	.518
Socioeconomic status	Family affluence	.71	.26, 1.93	.504
Values orientation	Self-description - trust	1.26	.44, 3.60	.669
	Self-description - reliable	.87	.58, 1.31	.497
	Self-description - honest	.66	.28, 1.55	.339
Previous transition	Moved schools before?	1.13	.38, 3.39	.826
	Gender - female	6.53	2.01, 21.17	.002*
	Primary school - ‘continuous	.45	.11, 1.74	.246
	Primary school – ‘feeder’	.58	.17, 1.98	.582

		OR	95% CI	p
Somewhat easy				
Psychosocial competence	K-10 - depression	.50	.22, 1.14	.099
	K-10 – agitation/turmoil	1.43	1.00, 2.11	.074
State of health	Ongoing medical issues	1.14	.55, 2.35	.721
Ethnicity	Born in Australia?	.52	.19, 1.46	.215
Socioeconomic status	Family affluence	.859	.38, 1.92	.711
Values orientation	Self-description - trust	1.36	.59, 3.25	.455
	Self-description - reliable	.80	.58, 1.10	.182
	Self-description - honest	.64	.34, 1.21	.165
Previous transition	Moved schools before?	.94	.37, 2.39	.892
	Gender - female	2.22	.90, 5.47	.083
	Primary school - ‘continuous	.40	.12, 1.30	.124
	Primary school – ‘feeder’	1.32	.47, 3.70	.604

*$p<0.05$; $^{**}p<0.001$; Reference categories are easy transition; gender – males; primary school origin – other; ongoing medical issues – no; born in Australia – yes; moved schools before – no.

Significant relationships between the agitation/turmoil element of ‘psychosocial competence’ were found for this research question. Students who reported agitation or turmoil at the commencement of Year 7 were significantly more likely to experience a ‘difficult’ (OR 3.36, p=0.001), ‘somewhat difficult’ (OR 2.62 p<0.001), or ‘somewhat easy’ (OR 1.81, p=0.006) transition rather than an ‘easy’ transition at the beginning of Year 7. This factor of ‘psychosocial competence’ continued to exert influence over time, with ‘difficult’ (OR 4.0, p=0.22) and ‘somewhat difficult’ (OR 1.62, p=0.035) transition experiences reporting significance at six months post-transition. The ‘values orientation’ element of someone who can be relied upon reported significant results, with students who described themselves as reliable significantly less likely to report a ‘somewhat difficult’ transition at commencement of Year 7 (OR 0.64, p=0.032), or a ‘difficult’ transition experience at six months post transition (OR 0.50, p=0.035). Finally, for gender and primary school origin, ‘continuous’ students were significantly less likely to report a ‘somewhat difficult’ transition experience at the beginning of Year 7 (OR 0.21, p=0.040), and females were significantly more likely than males to report a ‘somewhat difficult’ transition at six months post-transition in Year 7 (OR 6.53, P=0.002).

For research question three, several independent variables of the ‘interpersonal factors’ domain of Schlossberg’s model reported significant results in relation to ‘students’ transition experience’. Students who felt agitated or in turmoil at the commencement of Year 7 reported significantly poorer transition experiences at baseline, with evidence of this effect continuing through to six months post-transition. Considering yourself to be a reliable person predicted an easier transition experience at both baseline and post-transition, and while being a ‘continuous’ student predicted an easier transition at baseline, being female predicted a poorer transition at six months post-transition. Multinomial regression models for both baseline and post-transition produced significant results. These results indicate that the null hypotheses 3a and 3b should be rejected, as there is sufficient evidence of a significant relationship between interpersonal factors in Year 6 and transition experience at baseline and post-transition in Year 7, after controlling for gender and primary school origin.

5.4 Research question four

Research question three investigated if students' academic results in Year 6 influences their transition experience at the commencement of Year 7 and six months post-transition. The resulting model was also examined for differences in demographic categories of gender and primary school origin. This question produced the following hypotheses:

Hypothesis 4a: There is no relationship between academic results in Year 6 and transition experience at commencement of Year 7 after controlling for gender and primary school origin.

Hypothesis 4b: There is no relationship between academic results in Year 6 and transition experience in Year 7 at six months post-transition after controlling for gender and primary school origin.

The two independent variables for this research question were 'perceived achievement' and 'actual achievement' and measured at baseline. These two variables, while not part of Schlossberg's model, are widely used in the literature as ways of measuring the outcome of primary to secondary school transition. For 'perceived achievement', students were asked one question about how well they thought they had performed academically with other students in their class, and for 'actual achievement', students' grades for English and Maths were extracted from their school records. All of these items are described in the 'Methods' chapter, section 3.10. Gender and primary school of origin were each measured by one question, as described in the 'Results' chapter, section 4.1. The categorical dependent variables 'transition experience' and 'actual transition experience' were measured at baseline and six months post-transition, and comprised one question that asked, 'How was the move from primary to secondary school for you?'(Akos, 2002; Akos & Galassi, 2004). For this question, students selected one response from 'difficult', 'somewhat difficult', 'somewhat easy' and 'easy'.

Multinomial logistic regression analysis was used to test if there was a relationship between academic results at the end of Year 6 and transition experience at commencement of Year 7 and at six months post-transition, while controlling for gender and primary school origin (Tables 5.7 and 5.8). The model for transition experience at commencement was not significant ($\chi^2(18)=21.92$, $p=0.236$) while the model for model for transition experience at six months post-transition ($\chi^2(18)=41.66$, $p=0.001$) was statistically significant.

Table 5.7 Multinomial logistic regression results for academic results at the end of Year 6 as a predictor of transition at commencement of Year 7

		OR	95% CI	p
Difficult				
Perceived achievement	Own comparison to other students	.48	.24, .98	.042*
Actual achievement	English	1.93	.25, 14.89	.527
	Mathematics	1.97	.27, 19.97	.499
	Gender - female	1.81	.43, 7.52	.416
	Primary school - ‘continuous	.30	.04, 2.54	.269
	Primary school – ‘feeder’	1.05	.18, 5.99	.965
Somewhat difficult				
Perceived achievement	Own comparison to other students	.74	.43, 1.26	.265
Actual achievement	English	1.71	.35, 8.25	.505
	Mathematics	1.09	.23, 5.23	.918
	Gender - female	2.05	.76, 5.52	.156
	Primary school - ‘continuous	.19	.05, .75	.018*
	Primary school – ‘feeder’	.50	.15, 1.63	.250
Somewhat easy				
Perceived achievement	Own comparison to other students	1.13	.68, 1.87	.644
Actual achievement	English	.94	.21, 4.20	.937
	Mathematics	1.46	.35, 6.00	.604
	Gender - female	1.40	.59, 3.32	.441
	Primary school - ‘continuous	.51	.17, 1.58	.244
	Primary school – ‘feeder’	.56	.18, 1.74	.318

*p<0.05; **p<0.001; Reference categories are easy transition; gender – males; primary school origin - other

Table 5.8 Multinomial logistic regression results for academic results at the end of Year 6 as a predictor of transition experience in Year 7 at six months post-transition

		OR	**95% CI**	**p**
Difficult				
Perceived achievement	Own comparison to other students	.40	.16, .98	.046*
Actual achievement	English	3.70	.31, 44.94	.556
	Mathematics	2.04	.19, 21.79	.304
	Gender - female	4.59	.63, 33.61	.133
	Primary school - ‘continuous	.21	.01, 3.35	.269
	Primary school – ‘feeder’	.90	.11, 7.68	.921
Somewhat difficult				
Perceived achievement	Own comparison to other students	.53	.30, .94	.029*
Actual achievement	English	3.04	.50, 18.56	.229
	Mathematics	.35	.60, 2.07	.248
	Gender - female	6.83	2.12, 22.04	.001*
	Primary school - ‘continuous	.34	.09, 1.30	.116
	Primary school – ‘feeder’	.53	.15, 1.86	.320
Somewhat easy				
Perceived achievement	Own comparison to other students	1.17	.72, 1.91	.528
Actual achievement	English	1.79	.27, 3.83	.985
	Mathematics	1.01	.45, 7.20	.412
	Gender - female	1.40	.60, 3.25	.437
	Primary school - ‘continuous	.24	.08, .74	.013*
	Primary school – ‘feeder’	.84	.30, 2.32	.727

*p<0.05; **p<0.001; Reference categories are easy transition; gender – males; primary school origin - other

At baseline, students' who felt they doing as well as, or better than, their counterparts were significantly less likely to report a 'difficult' transition (OR 0.48, p=0.042) and this effect continued through to six months-transition (OR 0.40, p=0.046). Actual English and Mathematics grades did not report significance in relation to transition experience at either baseline or post-transition. Primary school origin reported a significant relationship with transition experience at baseline, with 'continuous' students significantly less likely to report a 'somewhat difficult' transition (OR 0.19, p=0.18). Interestingly, by six months post-transition 'continuous' students' were now significantly less likely to report a 'somewhat easy' transition experience than 'easy' transition experience (OR 0.24, p=0.13). At post- transition, a relationship between gender and transition experience emerged, with females significantly more likely than males to report a 'somewhat difficult' transition experience.

For research question four, significant results were reported for several independent variables of the 'academic progress' domain in relation to 'students' transition experience. At baseline and post-transition, students' perceptions of their academic ability predicted transition experience, with the perception of academic success a predictor of a less difficult transition. Actual academic grades did not predict transition experience at either time point. An easier transition experience was predicted at baseline and post-transition by being a 'continuous' student at the case study school. Finally, being female emerged as a predictor for a poorer transition at post-transition. While, the multinomial regression model for baseline results was not significant, the multinomial regression model at post-transition produced significant results. The results for this research question indicate that there is insufficient evidence to reject the null hypotheses 4a; however, the null hypothesis 4b should be rejected, as there is sufficient evidence of a significant relationship between academic results in Year 6 and transition experience at baseline and post-transition in Year 7, after controlling for gender and primary school origin.

CHAPTER SIX

DISCUSSION, IMPLICATIONS OF THE RESEARCH, AND CONCLUSION

6.1 Introduction

The purpose of this chapter is to discuss the findings of this study in relation to the overall study objectives by linking the results of this research to the empirical and theoretical evidence of the literature. The study limitations along with recommendations for practice and future investigations in relation to primary to secondary school transition will also be discussed in the following paragraphs.

6.2 Aim of the study

The aim of the 'Rising to the Challenge' study was to determine the predictors of a positive transition based on the model postulated by Nancy Schlossberg (Schlossberg, 1981) that has recently been applied to primary to secondary school transition. The roles of gender, primary school origin and socio-economic status also examined. Two data collections were administered to 188 students of the Year 7, 2014 cohort at the case study school by online survey, and supporting data was collected directly from student record files and school documents. The first data collection was undertaken in the third week of Term 1 after the move to secondary school, and the second data collection was administered in the second week of Term 3 approximately six months post-transition.

6.3 Discussion of study findings

This discussion of the research project findings will begin by describing the context of transition within the case study school environment, as this informs an understanding the results of the study. Results will then be discussed in light of the key domains of Schlossberg's transition model (Schlossberg, 1981), and followed by discussion of the results of the multivariate analysis in relation to previous research. The final part of this chapter will focus on discussion of the implications of this research for primary to school transition, and priorities for future research in this area.

6.3.1 Research question one

Contrary to the hypotheses for research question one, differences were found between students' 'perception of transition' and their actual perceived transition experience at six months post-transition. In addition, there were gender differences. Therefore, the findings of research questions one partially reject the null hypotheses.

The following diagram (Figure 6.1) indicates the 'perception of transition' domain and the variables for this research question.

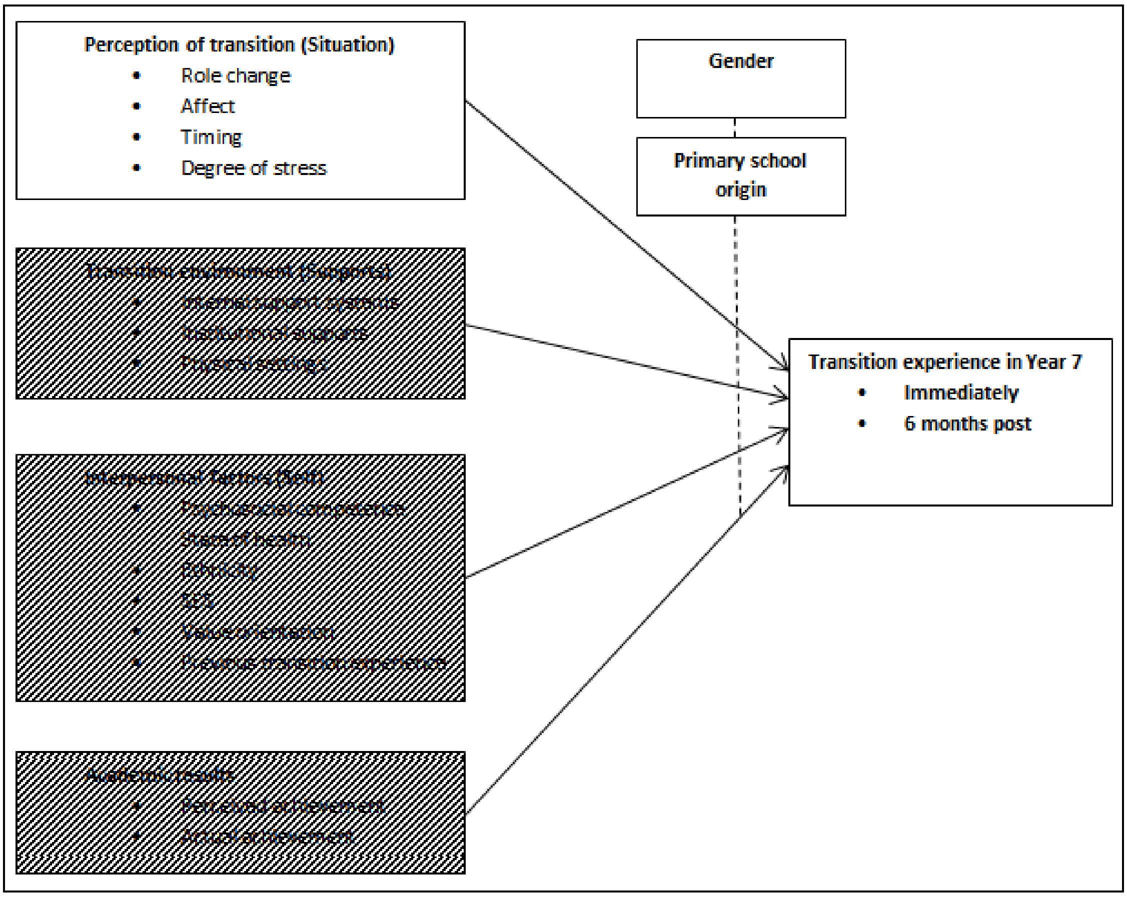


Figure 6.1 Independent and dependent variables for research question one

The element 'role change' reflected students' *negative expectations* about the move from primary to secondary school. Students in this Masters' research who had negative expectations at baseline were significantly more likely to report a 'difficult', 'somewhat difficult', or 'somewhat easy' transition experience in the first few weeks of secondary school, indicating that negative expectations of secondary school impact on the ease with which adolescents navigate the move into secondary school. Positive expectations about the move to secondary school and transition experience at the commencement of Year 7 have widely been associated with a positive transition, however this relationship was not significant in the current study, although the sample characteristics and size could account for this. Recent work by Serbin, et al, (2013) reported that not only do many factors tend to occur in ‘clusters’ for poorly transitioning students (e.g., family disadvantage, gender, previous low academic performance, lack of supports, minority group membership) perceived negative expectations about school transition can impact on actual transition experience, as confirmed by the results in this current research project. Interestingly, the largest proportion of students who reported a poor transition were ‘middle affluence’ students (57%), Serbin, et al’s (2013) study found that children from ‘low affluence’ backgrounds often did better in transition when parental connectedness was high, as was the case in this cohort, than children from ‘low’ or ‘high affluence’ backgrounds. Duchesne, et al, (2009) also states that negative expectations can take on disproportionate importance to the realities of transition, resulting in a ‘negative cognitive schema’, and therefore are more likely to impact on social well-being and mental health of students for whom these clusters occur. However, the statistical significance of negative expectations on transition experience had dissipated by six months post-transition and this supports other evidence that has found that negative expectations often do not eventuate into actual negative experiences, as found in two Western Australian studies (Pereira & Pooley, 2007; Waters, et al., 2014). These data support Schlossberg’s inclusion of role change in her model, as the reduction of negative expectations of secondary school could be expected to increase the perception of transition as a positive life event, and may also help ameliorate other negative risk factors of a poor transition.

The independent variable *student likes* measured the ‘perceived effect’ of transition on the cohort by measuring what students’ liked about being in secondary school. At six months post-transition, students who had things they liked about being in secondary school were also less likely to report a ‘somewhat easy’ over an ’easy’ transition experience. School liking has been found to predict school achievement (Riglin, et al., 2013), and as academic results are a widely reported outcome measure of transition, is was interesting to see that the majority of students in the current cohort also reported academic progress at six months post-transition. These results lend weight to the evidence in the literature that students’ who report a liking of school have a more positive transition experience (Bullis, Davis, Bull, & Johnson, 1997; Carlson, Sroufe, & England, 2004; Kingery & Erdley, 2007; Power & Cotterell, 1981; Riglin, et al., 2013; Turner, 2007; Waters, et al., 2014). In particular, the majority of students liked their teachers (nice, friendly, caring), other students (nice, kind, friendly, caring) and being in year 7 generally (choice of subjects, academic challenge, making new friends, extra-curricular activities), reflecting the well-evidenced interpersonal focus, autonomy, and decision-making needs of the adolescent stage of development. Additionally, this cohort also participated in several comprehensive pre-transition activities, which have been found to influence transition experience by relieving worries and helping students to develop the motivation, knowledge and confidence to negotiate the new situation (Andrews & Bishop, 2008; Delamont, 1991; McGee, et al., 2003). Consequently, the vast majority of students in this study reported having positive expectations about moving to secondary school. These results add further support to the notion that a positive approach to transition through a liking of school can support students' overall transition experience, as postulated in Schlossberg's model (1981). Given this evidence, an opportunity for future intervention research presents itself here in relation to promoting and developing student liking of school at an early stage of the pre-transition or transition process.

6.3.2 Research question two

Contrary to the hypotheses for research question two, differences were found between the 'transition environment' of primary to secondary school transition and their actual perceived transition experience at six months post-transition. In addition, there were gender and primary school origin differences and therefore the findings of research questions two reject the null hypotheses.

The following diagram (Figure 6.2) indicates the 'perception of transition' domain and the variables for this research question.

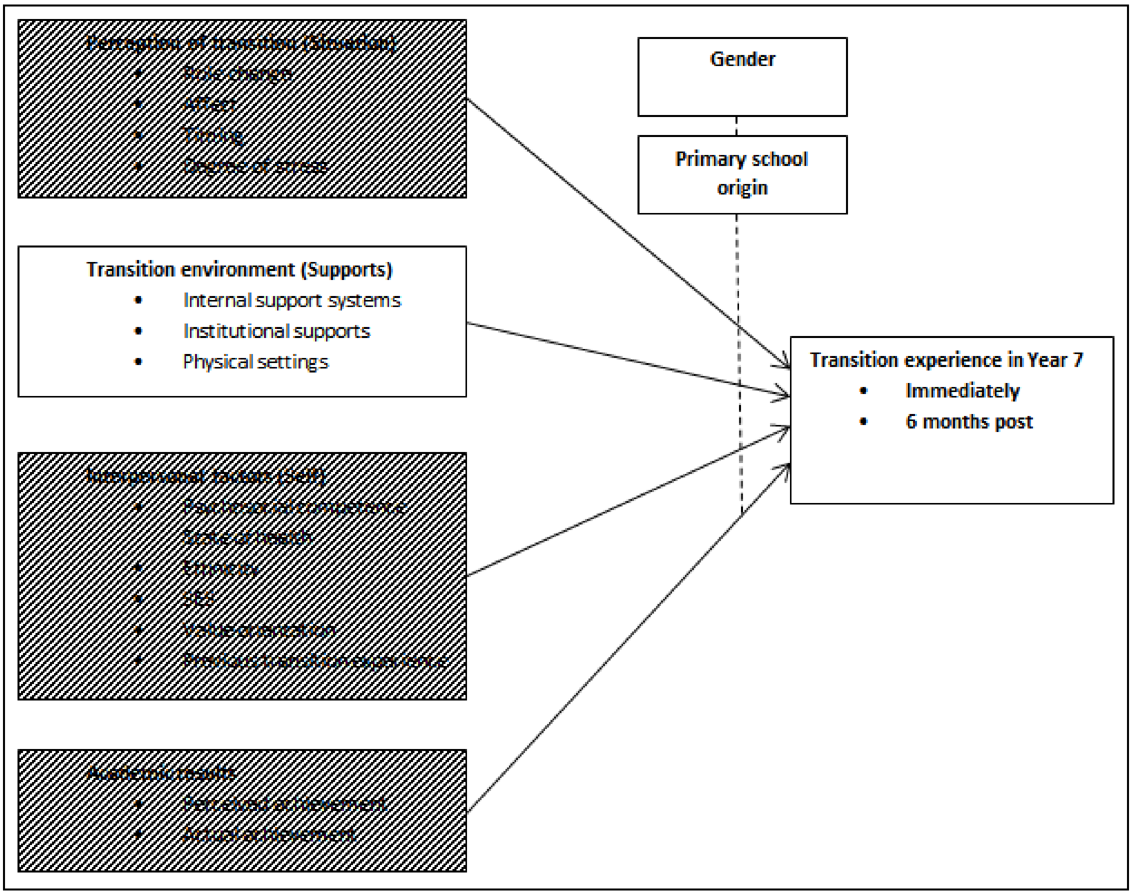


Figure 6.2 Independent and dependent variables for research question two

The domain element ‘internal support systems’ reflected students’ level of *loneliness* experienced over the move from primary to secondary school at pre-transition, with students who had higher levels of loneliness significantly likely to experience a poor perception of transition. Many authors have discussed how increased loneliness in adolescents contributes to anti-social behaviours, peer relationship problems, increased stress and motivational decline - all of which have been reported in the literature as outcomes and/or predictors of a poor transition (Akos, 2002; Anderson, et al., 2000; Blackwell, et al., 2007; Bohnert, et al., 2013; Fenzel, 2000; Frey, et al., 2009; Herlihy, 2007; Hughes, et al., 2013; Kingery & Erdley, 2007; Qualter, et al., 2007; Rice, 1997; Waters, et al., 2012; Zanobini & Usai, 2002; Zeedyk, et al., 2003). Interestingly, at baseline and post-transition descriptive results, females were only slightly more lonely than males and reported similar levels for peer support as males, however this could be the result of social desirability bias. Given the literature on social issues in lives of adolescents these results were not unexpected, with social and peer issues being extremely important at this stage of human development (Bohnert, et al., 2013; Coffey, 2009; Duchesne, et al., 2009; Hanewald, 2013; Lawson, et al., 2008; Smith, et al., 2008; Speering & Rennie, 1996; Zeedyk, et al., 2003) and particularly in relation to adjustment to secondary school (Coffey, 2009; Fyson, 2008; Hanewald, 2013; Jindal-Snape & Foggie, 2008; Topping, 2011). Indeed, in the critical review by Hanewald, et al, (2013) the point is made that a lack of a sense of belonging, social connections, and social support in school transition can lead to social alienation, poor achievement and school dropout in the long term. Given that Schlossberg's model (1981) includes supportive and stable social supports as a predictor for a positive transition, these results provide evidence to support the notion that efforts to provide these supports will assist in a positive primary to secondary school experience.

Students' perception of safety at school, found in the 'institutional supports' element, yielded significant and interesting results in relation to transition experience at six months post-transition. For the current research, students who felt safe at school, as well as those who were unsure about how safe they were at school, predicted a perceived positive transition experience. As these results were found in the post-transition data, it could indicate that students were 'unsure' simply because their safety had never been called in question before or they may not have understood what 'safety' meant in the context of the question, but nevertheless still considered they had had a positive transition experience. In Coffey's (2009) study of six schools, 86% of students reported feeling safe at school, and this is cited in the report as partly facilitating a rapid adjustment to secondary school of less than one term. Additionally, safety was subsequently linked to high levels of both teacher and school connectedness (Coffey, 2009), and this link is further elucidated in the work of Waters, et al, (2009) that describes the social and ecological supports for adolescent school connectedness, many of which also mirror Schlossberg's model in relation to feeling supported by an institution or group (Schlossberg, 1981), and further demonstrating the importance of connectedness and perception of safety in facilitating a positive school transition. The current study reported that 86% of students felt safe at school at six months post-transition, up from 78% at baseline, with students reporting similarly high levels of teacher and school connectedness post-transition, therefore adding support to Coffey (2009) and Waters, et al, (2009) results.

The family care factor of *family connectedness* in the element of 'internal support systems' was a significant predictor of positive transition experience at six months post-transition. Families that are sensitive to the specific needs of, and provide high levels of support to, their child during adolescence have been shown to be an important resource during the move to secondary school (Coffey, 2013; de Bruyn, 2005; Hanewald, 2013; Jindal-Snape & Foggie, 2008; McGee, et al., 2003; Rice, 1997; Van Ryzin, et al., 2012) by supporting the emerging young adult and their particular needs around autonomy, self-determination and behavioural regulation (Barber & Olsen, 2004; Brinthaupt, et al., 2007; Chen & Gregory, 2009; Fenzel, 2000; Galton, et al., 1999; Hughes, et al., 2013; Parker & Neuharth-Pritchett, 2009; Potter, et al., 2001; Topping, 2011). Schlossberg's model (1981) is congruent with this later research and also states the necessity of warm, stable and supportive relationships with intimate others for a positive transition experience. For this cohort, connectedness to family was high at baseline and remained stable over time. In particular, the role of parents has emerged, not surprisingly, as vital in students' experience of a positive transition to secondary school (Galton, et al., 1999; Osborn, et al., 2006). Supporting these results, Duchesne, et al, (2009) reported that parental attachment mediated negative transition expectations, while Serbin, et al., (2013) found that adolescents did better in transition when parental connectedness was high. Additionally, parental care and support have been associated with children's ability to cope with new situations and new relationships (National Institute of Child Health and Human Development Early Child Care Research Network, 2004). The evidence reported in this Master's research supports the literature and the model being tested, and reinforces the importance of parents in supporting their adolescent to successfully navigate new situations and challenges such as school transition.

The emotional factor of *peer support* as a constituent of 'internal support systems' proved to be a predictor of perceived transition experience, with students who reported a higher level of peer support at baseline also less likely to report a 'somewhat difficult' transition. Peer support in the form of moving schools with a cohesive group of friends has been reported in the literature as a protective factor against a poor transition (Isakson & Jarvis, 1999). The social focus of adolescents has wide support as a key indicator for transition success with the literature. Additionally, involvement in extra-curricular activities have also been reported to be important through increasing peer and school connectedness, and thereby contributing to a positive transition (Carter, et al., 2007; Resnick, et al., 1997; Waters, et al., 2009; West, et al., 2008). The work of several authors has found that the success or failure of school transition was dependant on the support systems in place for students as they moved to secondary school, particularly parental, teacher and peer supports, indicating that social relationships with peers are critical in facilitating a positive transition (Anderson, et al., 2000; Kurita, 1999; Stumpers, et al., 2005; Weller, 2007). Indeed Schlossberg's model (1981) includes interpersonal supports including friendships as a positive predictor of transition, at both pre-transition and also post-transition to support a successful adjustment to the new environment .Several studies have found that pre-transition peer relationships are a protective factor for a positive transition to secondary school and act as a support while new relationships are formed (Bohnert, et al., 2013; Eman, 2013; Hanewald, 2013; Kingery & Erdley, 2007; Kurita, 1999; Stumpers, et al., 2005). This study reported similar findings with evidence that showed students who responded that they had experienced a positive transition had come from their old school with friends, already had friends at their new school prior to moving, or had siblings at the case study school. Additionally, overall high levels of connectedness to peers were evident in the results of this cohort of Year 7 students at baseline. It should be noted, however, that there would likely be some element of social desirability bias inherent in students' responses.

Interestingly, none of the variables measured for this question reported significance for participants who reported a 'difficult' or 'somewhat difficult' transition experience at six months post-transition, suggesting that factors other than transition environment may be hampering their successful transition to secondary school in the longer term.

6.3.3 Research question three

Contrary to the hypotheses for research question three, differences were found between the 'interpersonal factors' of primary to secondary school transition and their actual transition experience at six months post-transition In addition there were also differences by gender and primary school origin and therefore the findings of research questions three reject the null hypotheses.

The following diagram (Figure 6.3) indicates the 'perception of transition' domain and the variables for this research question.

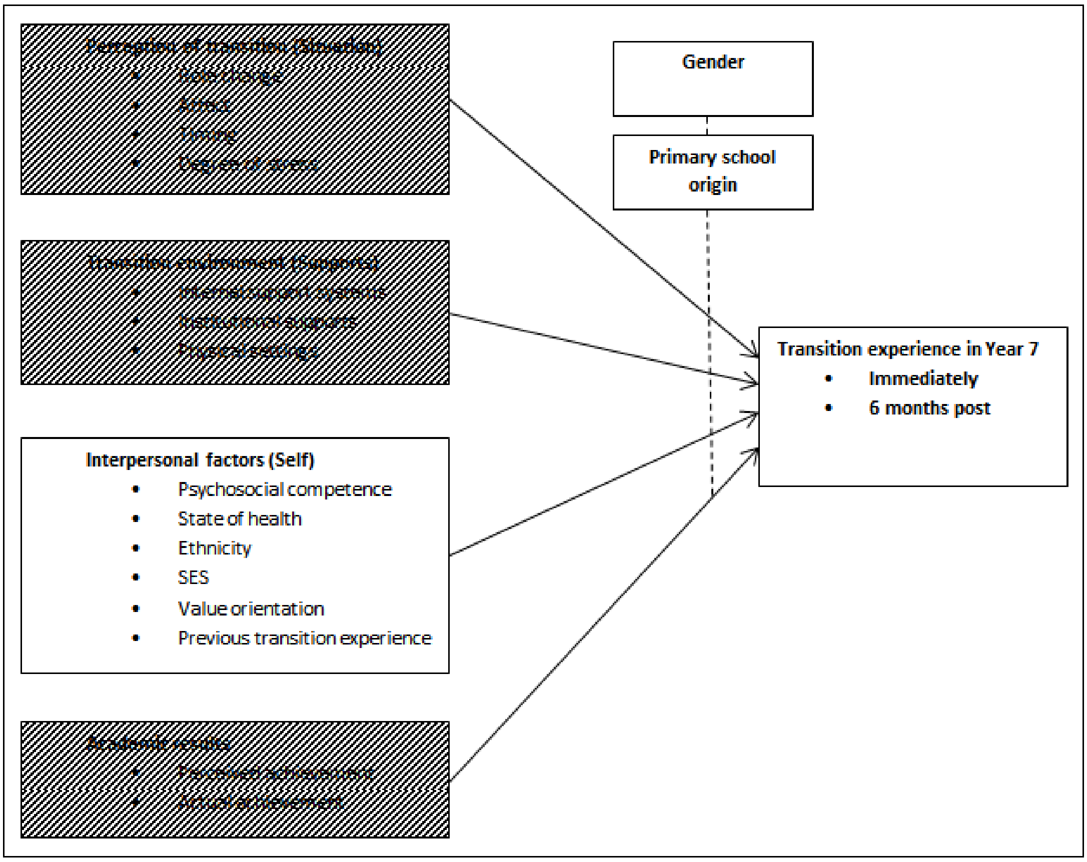


Figure 6.3 Independent and dependent variables for research question three

The agitation/turmoil (anxiety) variable of *psychosocial competence*, located in the element of ‘interpersonal factors’, was a significant predictor of a poorer perceived transition experience at baseline and six months post-transition. Non-significant results, however, were reported for participants who experienced a ‘difficult’ transition at baseline for all other variables in this question, indicating that for this group of participants, positive interpersonal factors already possessed in Year 6 did not make their transition experience any easier. Additionally, at post-transition, no variables in this model reported significance for participants who reported a ‘somewhat easy’ transition experience, indicating that the influence of interpersonal factors on transition experience had subsided.

Researchers have well documented the poorer mental health outcomes of adolescents who fail to negotiate the primary to secondary transition (Henry, et al., 2012; Rice, et al., 2011; West, et al., 2008). Most students adjust quickly to the new challenges of secondary school, but for those who do not, problems with anxiety can be ongoing (Freudenberg & Ruglis, 2007; Henry, et al., 2012; Holdsworth, 2010; Riglin, et al., 2013; West, et al., 2008) and has been linked to depression, low self-esteem, low resilience, increased stress, motivational decline, school disengagement and high conflict with others (Akos, 2002; Anderson, et al., 2000; Blackwell, et al., 2007; Bohnert, et al., 2013; Fenzel, 1989, 2000; Frey, et al., 2009; Hughes, et al., 2013; Kingery & Erdley, 2007; NSWDET, 2006; Qualter, et al., 2007; Rice, et al., 2011; Rice, 1997; Waters, et al., 2012; Zanobini & Usai, 2002; Zeedyk, et al., 2003). In the current Masters research, students who reported a negative transition also reported poorer mental health at baseline and subsequently poorer mental health at six months post-transition adding to the evidence that a less than optimal transition can impact on ongoing school success and personal development as described by many authors in this field of research (Benner & Graham, 2009; Hanewald, 2013; Humphrey & Ainscow, 2006; Kennelly & Monrad, n.d.; Qualter, et al., 2007; Speering & Rennie, 1996; Van Ryzin, et al., 2012; Wampler, et al., 2002). The results of this current study adds weight to a recent Western Australian study by Waters, et al (2012) of 1500 Year 8 students where 31% of the cohort reported a poor transition experience, of whom one-third also reported higher levels of anxiety and depression one year after moving to secondary school. The current study measured these variables at six months post-transition and reported poor transition in 29% of the cohort. Given this is similar to 31% as reported by Waters, et al (2012) in their larger cohort, it would appear that poor psychological competence is evidenced as early as the six months post transition, and therefore could be a prudent entry point for intervention.

Students' self-perception of reliability, found in the *values orientation* element of 'interpersonal factors', was a significant predictor of perceived transition experience at baseline and post transition. In Schlossberg's work, she states that a person's values are intrinsic in their ability to assimilate transitions into their life (Schlossberg, 1981, 1984, 2008). In the UK qualitative research by Arthur, et al., (2010), teachers reported that in secondary school there was an emphasis on building students' ability to make good choices and take responsibility for those choices, and in faith-based schools, the development of a set of values was a particular focus (Arthur, et al., 2010). Given that the 'continuous' and 'feeder' students of this cohort have already spent a large amount of their schooling career in a faith-based environment, it is not surprising that a value such as reliability reported significant results. For the 'other' students in this cohort, they are also likely to have been exposed to similar values in their primary schools, faith-based or not. Early in their secondary schooling, students realise that they need to meet the extra demands of homework, organisation, and time management and need to take responsibility for their learning (Coffey, 2013; Jindal-Snape & Foggie, 2008; Measor & Woods, 1984). As such, the self-perception of reliability may scaffold adolescents in meeting the challenge of these demands (Roeser & Eccles, 1998), thus helping them to adjust to their new role and easing their worries about school (Pascarella & Terenzini, 2005; Zeedyk, et al., 2003), and ultimately facilitating a more positive transition experience. Teacher support and capability in teaching may also assist with developing reliability in students through the relationship quality developed in the classroom, as this has been found by several authors as being crucial to student motivation and success (Hanewald, 2013; Hughes, et al., 2013; Speering & Rennie, 1996; Stumpers, et al., 2005). For this cohort, quantitative measures of teacher connectedness was high at baseline and post-transition, with the top four qualitative themes reporting that many students 'liked' that teachers at the case study school were nice, kind, and friendly, said that they were helpful, they were caring and supportive, and that teachers wanted the students to learn and made classes interesting. Students who consider themselves as a reliable (responsible and able to meet demands) person demonstrated their values, motivations and goals congruent with that of the case study school, and therefore could be reasonably expected to report an easier transition experience.

6.3.4 Research question four

Contrary to the hypotheses for research question three, differences were found between the ‘academic results’ of primary to secondary school transition and their actual transition experience at six months post-transition. In addition, there were also significant differences by gender and primary school origin, and therefore the findings of research questions four reject the null hypotheses.

The following diagram (Figure 6.4) indicates the ‘perception of transition’ domain and the variables for this research question.

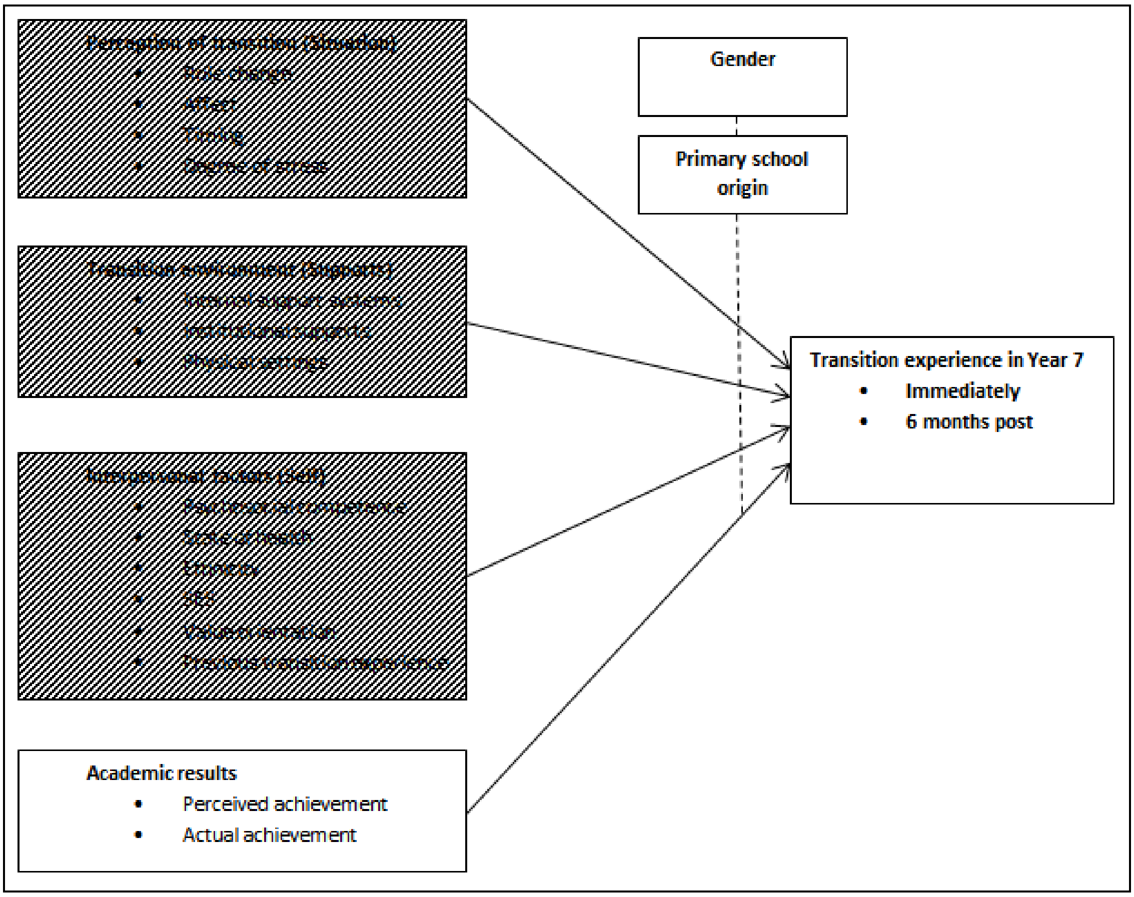


Figure 6.4 Independent and dependent variables for research question four

Students’ *perceived achievement* in relation to how well they were doing academically in relation to other students of their cohort was a significant predictor of perceived transition experience at baseline and post transition. Within the literature, academic outcomes are commonly used as an outcome in determining if a student’s transition to secondary school was successful or not, reflecting the more performance based and competitive environment typically found in secondary schools (McGee, et al., 2003; Paulick, et al., 2013). The rationale for this outcome is based on the academic dip and recovery often observed in the grades of transitioning students, and covered widely in the transition literature (Barber & Olsen, 2004; Benner & Graham, 2009; Galton, et al., 1999; Hanewald, 2013; Parker & Neuharth-Pritchett, 2009; Pollard, 1987; Riglin, et al., 2013; Speering & Rennie, 1996). Interestingly, the current results do not support this link, with students' perception of their achievement in relation to their cohort significantly influencing percieved transition experience, while the influence of actual academic grades of English and Maths on transition experience were not significant at baseline or post-transition, suggesting that their influence had waned on transition experience by six months post-transition. Students who rated themselves as comparing academically favourably with others students were significantly less were likely to report a difficult transition at both time points. While this result relates to perceived achievement, and not actual achievement, there is some consistency with published research that indicates academic achievement is linked to school adjustment (Anderson, et al., 2000; Benner, 2011; Galton, et al., 2000), school connectedness (Resnick, et al., 1997; Roeser, Eccles, & Sameroff, 2000), and , when positive, to experiencing a more successful transition (Carter, et al., 2007; Resnick, et al., 1997; Waters, et al., 2009; West, et al., 2008). Additionally, in the case of this cohort, baseline high levels of school connectedness was reported with over 74% of participants responding 'agree' or 'strongly agree' in relation to feeling connected to their new school. Concurrent evidence around academic discontinuity should also be noted in interpreting these results. In Coffey's (2009) report on a sample of Western Australian schools, educational discontinuity was identified by teachers as an issue requiring attention, as students had lower levels of numeracy and literacy skills that they had expected on commencing Year 7 in secondary school. In the wider Australian educational context, the move to a national curriculum over recent years may also have gone some way to ameliorating educational discontinuities for students progressing from primary school. The negative influence of educational discontinuity on school transition has been discussed at length in the international literature as far back as 1981 (Power & Cotterell, 1981), and has emerged as an ongoing issue in the move from primary to secondary school, focussing on the percieved and actual academic preparedness of students to make a successful leap into secondary school (Anderson, et al., 2000; Galton, et al., 1999; Galton, et al., 2000b; Hakkarainen, et al., 2012; Paulick, et al., 2013; Riglin, et al., 2013; Roderick, 1993; Serbin, et al., 2013; Speering & Rennie, 1996)

6.3.5 Gender effects

Gender was as a significant factor in transition experience for research questions one, two, three and four of this thesis. In all cases, female students reported a more problematic transition experience than male students of the Year 7 cohort across both baseline and post-transition results.

6.3.5.1 Transition experience

In this cohort, female students were significantly more likely to report a ‘somewhat difficult’ transition experience, regardless of expectations prior to the move. Gender differences in school transition have been investigated in the literature with mixed results as to whether boys or girls do better through the transition process (Anderson, et al., 2000; Arens, et al., 2013; McGee, et al., 2003; Rice, et al., 2011; Serbin, et al., 2013). In seminal work by Fenzel (Fenzel, 1989) the author postulated that in ‘feminised’ (i.e., primary school) environments boys report higher levels of role strain, and it is therefore possible that in ‘masculinised’ (secondary school) environments girls would report more role strains. This was subsequently confirmed, with girls coping less well with school transition with role change strains emanating from predominately teachers, parents and peer relations (Fenzel, 1989). Girls may also be more susceptible to worries about transition (Anderson, et al., 2000) and this could be the case for this cohort as descriptive results found that girls reported significantly more negative expectations about moving to secondary school at baseline than boys.

Female students have been shown to have difficulties with social relationships and friendships at transition (Anderson, et al., 2000; Benner & Graham, 2009; Bohnert, et al., 2013; Cauley & Jovanovich, 2006; Galton, et al., 1999; Hanewald, 2013; Hughes, et al., 2013; Mason, 1997; Mizelle, 2005; Topping, 2011; Wrigley & Lofsnaes, 2005), and this appears to have a greater impact on the self-esteem of girls than boys especially if major life events such as a divorce or death in the family are present (Blyth, Simmons, & Bush, 1978; Crockett, Petersen, Graber, Schulenberg, & Ebata, 1989). Girls may also be more disenchanted with secondary teaching strategies or miss the student-teacher relationships of their primary schooling years. (Speering & Rennie, 1996), In this vein, several authors have identified the importance of the social capital of friendships in successful transition to secondary school (Anderson, et al., 2000; Bramston & Patrick, 2007; Evangelou, et al., 2008; Holdsworth, 2010; Kingery & Erdley, 2007; McGee, et al., 2003; Weller, 2007), and recent research has shown that females are more likely to internalise their problems with moving to secondary school (Bohnert, et al., 2013; Hughes, et al., 2013). Consequently, the findings of this study indicate that aspects of secondary school may be oriented towards the skills, capabilities and developmental progress of males – a possible artefact from previous generations when female education was not seen as important – and an area for further investigation.

6.3.5.2 Transition environment

Gender effects were also apparent for this research question with females reporting a poorer transition experience at six months post-transition. Social issues have been found to be more important than academic issues for adolescents, and particularly so for females at this stage of their development (Anderson, et al., 2000; Benner & Graham, 2009; Bohnert, et al., 2013; Bramston & Patrick, 2007; Cauley & Jovanovich, 2006; Evangelou, et al., 2008; Galton, et al., 1999; Hanewald, 2013; Holdsworth, 2010; Hughes, et al., 2013; Kingery & Erdley, 2007; Mason, 1997; McGee, et al., 2003; Mizelle, 2005; Topping, 2011; Weller, 2007; Wrigley & Lofsnaes, 2005). Indeed, Martinez, et al., (2011) report that females perceive that the support from close friends often declines during transition, and that the challenge of establishing new friendship groups is great. Stumpers, et al (2009) in their Western Australian qualitative study found that social connections might be cultivated at the cost of conforming to social needs and expectations, which if taken in the context of supporting aspects of students' internal support systems, indicates poor transition has an inherently social aspect for females. In this current research, females reported high levels of connectedness to teachers, school and family, and maintained or progressed academically over transition – all well-known contributors to a positive school transition and providing support for the transition environment domain of Schlossberg's model (1981). However, the highly significant results for a poor perceived transition experience for females in this research needs in-depth investigation. Although not within the scope of this particular research, gender-biased parent and teacher support and expectations have been shown to negatively impact transition experience (McGee, et al., 2003). Further research to examine these relationships could well provide opportunities for intervention to improve the transition outcomes for females of future cohorts.

While these data reported than females perceived an overall poorer transition than males, the small size and non-randomised nature of this sample, and therefore an inability to generalise this research to the general population, has not clarified the contested issue of gender effects on primary to secondary school transition. Consequently, further research with a larger and more diverse sample is recommended.

6.3.5.3 Interpersonal factors

In research question three, females reported a poorer transition experience at six months post-transition. Primary to secondary school transition is widely described as a stressful experience for most students (Barton & Rapkin, 1987; Blackwell, et al., 2007; Fenzel, 1989, 2000; Hanewald, 2013; Jindal-Snape & Foggie, 2008; Lawson, et al., 2008; Power & Cotterell, 1981; Topping, 2011). Schlossberg also agrees that the relationship between gender and transition is highly complex and that the source of stress differs between the sexes, with females being more concerned with intimacy and reciprocity in relationships (Schlossberg, 1981, 1984). In the descriptive results of the current study, females recorded higher levels of depressed mood, emotional turmoil and physical agitation at baseline than males, as well as being significantly more likely to be worried about getting along with other students, fitting in, making friends, having more students around, and being made fun of. Additionally, analysis of this study's qualitative responses as to why a students' transition was 'easy', 'somewhat easy', 'somewhat difficult, or 'difficult' was predominated by issues around friendship and social relationships including making new friends, being in classes with friends, and missing old friends who did not move to the case study school with them. Similarly, the most commonly cited reasons for liking the students at their new school were because other students were friendly, nice and kind, fun to be with, and caring whereas the common reasons for disliking the students at their new school included being mean, gossipy or rude and exclusion from a group. Given the well-known focus on social relationships during adolescence, (Anderson, et al., 2000; Benner & Graham, 2009; Bohnert, et al., 2013; Cauley & Jovanovich, 2006; Galton, et al., 1999; Hanewald, 2013; Hughes, et al., 2013; Mason, 1997; Mizelle, 2005; Topping, 2011; Wrigley & Lofsnaes, 2005), it is not unreasonable to expect that psychosocial competence could suffer during transition to secondary school.

6.3.5.4 Academic results

For academic results, females reported a poorer transition experience at post-transition. McGee, et al, (2003) found in their review of the literature that high performing females experienced a more negative transition than males since it was not socially beneficial for them to be portrayed as 'smart'. In fact, Stumpers, et al (2009), in their Western Australian qualitative study, found that social connections are cultivated at the cost of conforming to peers expectations, which if taken in the context of perceived achievement in females, indicates poor transition has an inherently social aspect. As previously stated, social capital and peer relationships are more important to many girls over academic prowess at this stage (Anderson, et al., 2000; Benner & Graham, 2009; Bohnert, et al., 2013; Bramston & Patrick, 2007; Cauley & Jovanovich, 2006; Evangelou, et al., 2008; Galton, et al., 1999; Hanewald, 2013; Holdsworth, 2010; Hughes, et al., 2013; Kingery & Erdley, 2007; Mason, 1997; McGee, et al., 2003; Mizelle, 2005; Topping, 2011; Weller, 2007; Wrigley & Lofsnaes, 2005) and consequently the evidence points to social issues being a mediating link between perceived academic achievement and transition experience for females. When taken in the context of the cohort for this study, the results for this research question point to the fact that the perception of positive academic success for females may in fact be detrimental to their school adjustment, resulting in an overall poorer transition experience. Further research to examine these relationships could well provide opportunities for intervention to improve the transition outcomes for females of future cohorts.

6.3.6 Primary school origin

Primary school origin reported as a significant factor in transition experience for research questions two, three and four of this thesis. In all cases, ‘continuous’ student reported an easier transition experience than either ‘feeder’ or ‘other’ students of the Year 7 cohort across both baseline and post-transition results.

6.3.6.1 Transition environment

Primary school origin effects emerged for research question two at baseline with ‘continuous’ students reported a more positive transition than either ‘feeder’ or ‘other’ students. Research by Alspaugh (Alspaugh, 1998) found that fewer transitions were better for student outcomes, and this was also evident in the current research, as ‘continuous’ students generally remained at the same school for the entire of their compulsory schooling, providing vital institutional support and educational continuity as well as maintaining peer and friendship networks. Although not abundant in the literature, some work has identified that where students remain in the same school there is preservation of students’ self-concept, and therefore social and academic areas are reinforced (Hanewald, 2013; Towns, 2010) and there are less disruptions and gaps in students’ knowledge (Galton, et al., 1999). Additionally, connectedness between students, teachers and schools has been identified as key concept in student well-being (Carter, et al., 2007; Jose, Ryan, & Pryor, 2012; McNeely, et al., 2002; Resnick, et al., 1997; Roffey, 2008; Shochet, et al., 2006; Waters, et al., 2009; West, et al., 2008), and is often particularly well developed in middle schools and comprehensive K-12 schools (Waters, et al., 2009), and the ‘continuous’ students in this Master’s research evidenced high levels for all factors of teacher connectedness, school connectedness and peer support at baseline and post-transition. These results provide support for the literature and, and as postulated in Schlossberg’s model includes these supports as important reserves for managing the stressors of transition by providing information, protection, affiliation, resilience, and reinforcement of self-esteem (Schlossberg, 1981, 1984). The results for research question two indicate that ‘continuous’ students had their ‘internal support systems’ already well in place before moving into secondary school.

6.3.6.2 Interpersonal factors

Primary school of origin was a significant predictor of a positive transition experience with ‘continuous’ students reporting a more positive transition than either ‘feeder’ or ‘other’ students at baseline. Amongst the ‘continuous’ group, descriptive results reported 79% of students responded their transition was ‘easy’ or ‘somewhat easy’, and the levels of mental health of this subgroup, as measured by the K-10, were similar or better than those of the general cohort. These results support the findings of an Australian mixed methods study by Longaretti (2006), who found mental health in the form of positive thinking, self-concept, and peer relationships were significantly related to ease of transition. Similarly, results of a US study reported positive self-esteem as a predictor in coping with transition to secondary school (Roeser, et al., 1999). These results support the work of Schlossberg (1981) as psychosocial competence support the coping and resilience of an individual to cope with change. The results of this Master’s research provide some support for ’continuous’ school structures as important reserves for managing the stressors of transition by providing information, protection, affiliation, resilience, and reinforcement of psychosocial well-being (Schlossberg, 1981, 1984).

6.3.6.3 Academic results

Primary school origin effects were also found for ‘continuous’ students, who reported a more positive transition than either ‘feeder’ or ‘other’ students at six months post-transition. Early Australian work by Kirkpatrick, and described in the McGee, et al., (2003) review, noted that students reported that their studies in the first year of secondary school were no harder or easier than in primary school. Additionally, educational discontinuity, often cited in the literature as a contributing factor for a poorer transition experience, could see the reverse being true for ‘continuous’ students. In the literature, which generally takes a deficit approach to transition, several authors have written about the lack of communication and knowledge sharing between primary and secondary schools (Balfanz, 2009; Griebel & Berwanger, 2006; McGee, et al., 2003; Nolan, 2012), with McGee, et al (2003) citing inherent school cultures that reject the sharing of student information. In conjunction with this, many authors have noted that there is often a skills and knowledge gap evident when students transition to secondary school (Coffey, 2009; Galton, et al., 1999; Galton, et al., 2000; Power & Cotterell, 1981; Speering & Rennie, 1996). Subsequently, educational discontinuity has the potential to affect the mental of transitioning students (Holdsworth, 2010) by causing stress through actual and/or perceived deficits in social, academic and intellectual domains (Natvig, Albrektsen, & Qvarnstrom, 2003; Pearlin, Menaghan, Lieberman, & Mullan, 1981; Zimbardo, 1999). Given that students are already in the school and staff can easily share 'inside' information in preparation for transition to secondary school, it is feasible that the needs of 'continuous' students are better catered for in this regard than 'feeder' and 'other' primary school students, resulting in a more positive transition experience for this sub-group.

6.3.7 Summary statement

The study results supports much of the recent research into school transition, and provides evidence that Schlossberg's 'A model of human adaptation to transition' could be a useful framework for analysing and intervening in transition experiences, with the aim of facilitating a positive move in to secondary school for each student.

In relation to Schlossberg's model (1981), a liking of school, peer support, feeling safe at school, a values orientation of being reliable, high teacher, school and family connectedness, and successful academic achievement all emerged as predictors of a positive primary to secondary transition. In addition, negative expectations about the move to secondary school, feeling lonely, and being female were significant negative predictor of a poor transition in this particular cohort. Primary school origin emerged as an important factor for a successful transition, with 'continuous' students more likely have a positive transition into secondary school. Gender differences, too, were apparent in this particular cohort with females more likely to experience a poorer transition than males overall.

The main findings of this thesis are that several of the elements postulated in Schlossberg's model domains, namely 'situation', 'supports', and 'self', together with 'academic progress' were significant predictors of transition experience. These variables indicate a variety of influences are important on the way students' move from primary to secondary school, and therefore an ecological approach to investigating school transition is appropriate.

6.4 Limitations of the study

The discussion of the findings of this study should be considered in the light of limitations relating to sample selection, instrument development and data analysis. These limitations may have implications for the generalisability of the study results previously presented in Section 5.

6.4.1 Sample selection

Time and resources available for this Master's research and the large number of independent variables, and consequently increased analysis requirements, present in Schlossberg's model (Figure 2.1) meant that it was not feasible to extend this study beyond one school. Additionally, students were not randomly selected for this research. Once the school was recruited, all students in the Year 7 2014 cohort were included in the sample, and passive consent was sought from parents/caregivers for their child to participate. The use of only one case study school therefore has limited the generalisability of this research to the broader transitioning student population.

6.4.2 Instrumentation

There is currently no widely accepted instrument for measuring school transition, nor any one unifying theory or model that adequately describes the process of transition from primary to secondary school. Consequently, only latent variables could be measured, and these relied on the self-report of adolescents around 12-13 years of age. The baseline survey also relied on retrospective reports, and for both surveys it is possible that social desirability potentially biased results, in that students may have responded in ways that supported their self-esteem and self-perceptions (Holtgraves, 2004; van de Mortel, 2008). The majority of questions in the survey are widely known and validated, however some of the questions were fashioned specifically for this project, and others were based on previous work undertaken by the CHPRC. Where possible, questions included in the surveys had been used with Australian children on previous occasions. Student queries during survey administration were dealt with according to the survey protocol however, it is possible that issues with context, wording and comprehension of the questions together with the young age and varying English literacy standards of the participants may have biased some student responses. In particular, the non-response of students to written answer questions should also be considered as a limitation for all research with young people as 'silence' may be the result of the fixed unfamiliar language of the survey, increasing requests to participate in research, the perception that nothing is going to change anyway, or that the topic is not important to them (Fielding, 2004).

Finally, although the components of the surveys were chosen for their previous reliability and validity, and these were confirmed in pilot testing, surveys items that were specifically constructed for this research and those from prior CHPRC work are limited in their evidence of internal reliability or validity. Available time and resources prevented more comprehensive measures of validity and reliability of the overall survey being undertaken prior to the first data collection.

6.4.3 Data analysis

This study aimed to determine the relationships between a wide number of independent individual, organisational and contextual variables on primary to secondary school transition. Where there were too few responses in a category (due to small sample size) variables had to be collapsed into more manageable scores to allow meaningful analysis, thereby reducing the statistical power of calculations. Recoding of qualitative answers into thematic categories was also subject to some degree of interpretation by the researcher, and it is possible that there is some inaccurate representation in these results. Additionally, the small sample size meant that significance may not have been achieved in testing when in fact a relationship may truly exist. Finally, the inconsistencies evident in measuring school transition make the results of this study difficult to compare with other studies that have investigated this process.

6.5 Summary

The results of this study have identified many significant variables in the transition process for this particular cohort of students (Table 6.1). The novel part of this study was the inclusion of primary school origin that sought to determine any differences in transition experience of students who ‘continued’ from the primary campus at the school into the secondary campus, those students who came from recognised ‘feeder’ schools, and students from ‘other’ primary schools not connected in any way to the case study school.

Table 6.1 Significant variables for the RTTC study cohort, based on Schlossberg’s model

Situation	**Supports**	**Self**	**Academic**
Negative expectations	Peer support - emotional	Values orientation - reliable	Perceived achievement
Student likes	Loneliness	K10 – agitation/turmoil	
	School safety		
Gender	Gender	Gender	Gender
	Primary school origin	Primary school origin	Primary school origin

Multivariate analyses and subsequent discussion of significant results in relation to the published literature demonstrated the overlap between the domains of many of the independent variables in the cohort’s transition experience, and served to reinforce the inherently ecological nature of the transition from primary to secondary school, as cited by many authors in the literature (Barton & Rapkin, 1987; Benner, 2011; Benner & Graham, 2009; Brinthaupt, et al., 2007; Burns, 2010; Duchesne, et al., 2009; Ellerbrock & Kiefer, 2013; Eman, 2013; Griebel & Berwanger, 2006; Kinney, 2011; Parker, 2009; Pollard, 1987; Rice, et al., 2011; Serbin, et al., 2013; Stumpers, et al., 2005; Topping, 2011; Towns, 2010). Although the results of this case study of one school cannot be generalised to the population per se, the concordance of many of the results of this research with the current literature shows they could usefully inform further research through the identification of these key factors influencing primary to secondary school transition in Western Australia.

Gender proved to be an important influence across all three domains of Schlossberg’s model, with females experiencing a poorer transition than males while primary school origin influenced the ‘self’ and ‘supports’ domains of the model and ‘academic progress’, with ‘continuous’ students having the easiest transition experience. Overall, it was found that the majority of students in this cohort experienced a positive transition into secondary school, with transition essentially complete by six months into the school year.

6.6 Implications of the research

The findings of this study have identified the significant variables associated with primary to secondary school transition in a Western Australian school. The research has also provided evidence of the variables in Schlossberg's 'A model of human adaptation to transition' that have proven to be predictors of the ease or difficulty with which adolescents navigate and adjust to secondary schooling. It was found that variables from all three domains of Schlossberg's model, plus academic progress were important for transition experience, while controlling for primary school and gender. This research provides support for the use of Schlossberg's model in understanding school transition in 11-13 year old students and, although not all variables reported as significant, it cannot be said that the remaining variables could not reach significance in a differently constructed or larger cohort. It should be noted that these results are highly contextualised to the case study school. This research did reflect, however, the literature to some extent and could serve to give ecological scope and form for continuing research into the primary to secondary school transition phenomenon.

Further investigation of the issues around the relationships between the domains of 'situation', 'supports', 'self' and academic progress is warranted. The complexity of the links between each domain is not demonstrable in these results, and was outside the scope of this project. Exploration using qualitative methods such as interviews and focus groups in addition to complementary quantitative research is necessary to achieve the depth of analysis each constituent variable requires, and to tease out the links between each domain. Ultimately, such research could lead to a valid, reliable and acceptable instrument to measure primary to secondary school transition, and be a useful tool for schools to use in their own planning for future cohorts of Year 7 students.

Throughout this research, gender and primary school origin played important parts in students' transition experiences. Females experienced poorer transition overall regardless of the domain under investigation, and this current research reflects a portion of the literature in this area. Additionally, investigation of this cohort in relation to primary school origin of the students entering Year 7, produced expected results in that 'continuous' students had the least problems adjusting to secondary school. This research study, while reporting significant results, is unable to make any global inferences about gender influence and primary school origin in relation to moving from primary to secondary school in the general population of transitioning students. It is however, useful for informing further research and providing guidance for the case study school for future cohorts. Given there is a paucity of literature that deals with transition in the same school, and mixed results continue to be reported for the influence of gender on transition, these two factors are a very interesting avenue for future research, given the anecdotal increase in popularity of combined primary-secondary and co-ed campuses in some education sectors. Additionally, while this particular research was undertaken in a private school, transition experience is no less important in public schools where the number of primary schools that feed into the secondary school is generally much larger and primary schools are currently much less networked with their respective secondary schools.

For this particular case study school, and the private school system it is part of, there are implications in this research for policy relating to primary to secondary school transition. Firstly, in the context of this particular case study school, care is taken to gather information from the primary schools and use it to plan for transition, however there was no easily accessible explicit policy document on the school's website or available from school administration. The only printed matter regarding transition was in a Year 7 curriculum document available for download from their website. Secondly, given that females fared less well in transition, school climate could be reviewed for normative gender bias in daily school activities and staff attitudes and beliefs. An intervention around gender bias in education may also be beneficial for both teachers and parents. The results of this research may be useful in the formulation of suitable policies for the case study school, and for the wider school community, and could be put in place relatively quickly and with minimal cost.

This research study was a limited longitudinal exploration of school transition, with data collections approximately six months apart, and based on studies undertaken in the US, UK and Europe. While providing more than just a 'snapshot' of transition, it leads to a need for further Australian longitudinal research that may provide an insight into the long-term outcome of a positive or negative school transition. Effectively, for those students in this cohort who did not transition well, there will be no subsequent information about whether they did eventually adjust to secondary school. In addition, many published studies have not taken an ecological approach to school transition, and while these diversity of these results indicate that further research utilise this approach, the diversity of variables to be measured may make large-scale investigation expensive and impractical.

6.7 Conclusion

This study has provided a glimpse into the transition experience of the Year 7 cohort in a K-12 comprehensive school. This study, while small, was broad in its exploration of variables influencing the individual's primary to secondary school transition experience. An ecological approach was taken to this research in order to capture the many and varied influences on students' perceptions of the move from primary to secondary school. One kindergarten-to-Year 12 school in Perth, Western Australia was selected to participate in the research, with a cohort of 204 Year 7 students enrolled for the 2015 academic year. These students comprised males and females, and were either continuing at the school from the primary campus, moving to the school from recognised 'feeder' schools, or were from other secular, religious or independent primary schools. The research was guided by the work of Nancy Schlossberg, who postulates a wide ecological approach to transition that encompasses aspects of the individual's perception of the transition, environmental supports, and interpersonal factors previously used mainly for understanding career change, and only applied to primary to secondary school transition in recent years.

The findings of this research suggest that the majority of students navigated their transition to secondary school with little difficulty. Significant positive predictors for the move to secondary school were a liking of school, existing pre-transition peer and social relationships, high family, school and teacher connectedness, participating in pre-transition activities, and feeling safe at school and are congruent with much of Schlossberg's model. Strategies aimed at reducing negative expectations of secondary school and to help girls feel academically valued may prove worthwhile in reducing the perception of a negative transition to secondary school. Additionally, students who were continuing in the same school had the least problems adjusting to secondary school, with males having an easier perceived transition than females, regardless of primary school origin. These results, however, are not generalizable, and in the case of gender, cannot be deemed to add to the mixed evidence in the literature for gender influence on school transition. A major limitation of this research was that the sample was small and from the one K-12 school.

For those who do not adjust easily to secondary school, social well-being and mental health can be compromised in both the short- and long-term, and since the impact of poor school transition on future adult success are still relatively unknown, facilitating a positive transition into secondary school should remain an educational priority for Western Australian schools.

REFERENCE LIST

Adermann, J., & Campbell, M. A. (2010). Anxiety and Aboriginal and Torres Strait Islander young people. In N. Purdie, P. Dudgeon & R. Walker (Eds.), Working Together: Aboriginal and Torres Strait Islander Mental Health and Wellbeing Principles and Practice (pp. 105-115). Australia: Australian Council for Educational Research Press. doi: http://apo.org.au/node/39689

Akos, P. (2002). Student perceptions of the transition from elementary to middle school. *Professional School Counseling, 5*(5), 339-345.

Akos, P., & Galassi, J. P. (2004). Middle and high school transitions as viewed by students, parents and teachers. *Professional School Counselling, 7*(4), 213-221.

Allhusen, V., Belsky, J., Booth-LaForce, C., Bradley, R., Brownell, C., Burchinal, M., . . . Friedman, S. (2004). Fathers' and mothers' parenting behavior and beliefs as predictors of children's social adjustment in the transition to school. *Journal of Family Psychology, 18*(4), 628-638. doi: http://dx.doi.org/10.1037/0893-3200.18.4.628

Alspaugh, J. (1998). Achievement loss associated with the transition to middle school and high school. *Journal of Educational Research, 92*, 20-25. doi: http://dx.doi.org/10.1080/00220679809597572

Anderman, L., & Leake, V. (2007). The interface of school and family in meeting the belonging needs of young adolescents. In S. Mertens, V. Anfara Jnr & M. Caskey (Eds.), *The young adolescent and the middle school* (pp. 163-182). Charlotte, USA: Information Age Publishing.

Anderson, L. W., Jacobs, J., Schramm, S., & Splittgerber, F. (2000). School transitions: Beginning of the end or a new beginning? *International Journal of Educational Research, 33*(4), 325-339. doi: 10.1016/s0883-0355(00)00020-3

Andrews, C., & Bishop, P. (2008). Middle grades transition programs around the globe. *Middle School Journal*(September 2008), 8-14.

Arens, A. K., Yeung, A. S., Craven, R. G., Watermann, R., & Hasselhorn, M. (2013). Does the timing of transition matter? Comparison of German students' self-perceptions before and after transition to secondary school. *International Journal of Educational Research, 57*(0), 1-11. doi: http://dx.doi.org/10.1016/j.ijer.2012.11.001

Arthur, J., Davison, J., See, B. H., & Knowles, C. (2010). Consistency in values: The transition from primary to secondary school - Character in transition. Canterbury, UK: Canterbury Christ Church University.

Australian Curriculum Assessment and Reporting Authority. (2014). My School Retrieved 28/05/2014, from http://www.myschool.edu.au/

Baills, L., & Rossi, T. (2001). The transition from isolated, rural contexts to boarding school - Can school physical education and sport play a part? *Journal of Physical Education New Zealand, 34*(1), 40-52.

Balfanz, R. (2009). Putting middle grades students on the graduation path: A policy and practice brief Retrieved 13/10/2014, from http://www.nmsa.org/portals/0/pdf/research/Research_from_the_Field/Policy_Brief_Balfanz.pdf

Barber, B., & Olsen, J. (2004). Assessing the transitions to middle and high school. *Journal of Adolescent Research, 19*(1), 3-30. doi: 10.1177/0743558403258113

Barber, M. (1999, 12/03/1999). Bridges to assist a difficult crossing, *Times Educational Supplement*. Retrieved from https://www.tes.co.uk/article.aspx?storycode=313443

Barnes-Holmes, Y., Scanlon, G., Desmond, D., Shevlin, M., & Vahey, N. (2013). A study of transition from primary to post-primary school for pupils with special educational needs. *National Council for Special Education Research Report No 12*. Meath, Ireland: National Council for Special Education.

Barton, J., & Rapkin, B. (1987). The transition to junior high school: A longitudinal study of self-esteem, psychological symptomatology, school life, and social support. *Child Development, 58*(5), 1235-1243. doi: http://dx.doi.org/10.2307/1130617

Bates, J. (2013). Administrator perceptions of transition programs in international secondary schools. *Journal of Research in International Education, 12*(1), 85-102. doi: 10.1177/1475240913478078

Beane, J. (1990). *A middle school curriculum: From rhetoric to reality* (2nd ed.). Columbus, USA: National Middle School Association.

Benner, A. (2011). The transition to high school: Current knowledge, future directions. *Educational Psychology Review, 23*(3), 299-328. doi: 10.1007/s10648-011-9152-0

Benner, A., & Graham, S. (2009). The transition to high school as a developmental process among multiethnic urban youth. *Child Development, 80*(2), 356-376. doi: http://dx.doi.org/10.1111/j.1467-8624.2009.01265.x

Blackwell, L. S., Trzesniewski, K. H., & Dweck, C. S. (2007). Implicit theories of intelligence predict achievement across an adolescent transition: A longitudinal study and an intervention. *Child Development, 78*(1), 246-263. doi: 10.1111/j.1467-8624.2007.00995.x

Bloyce, J., & Frederickson, N. (2012). Intervening to improve the transfer to secondary school. *Educational Psychology in Practice, 28*(1), 1-18. doi: 10.1080/02667363.2011.639345

Blyth, D. A., Simmons, R. G., & Bush, D. (1978). The transition into early adolescence: A longitudinal comparison of youth in two educational contexts. *Sociology of Education, 51*(3), 149-162. doi: 10.2307/2112661

Bohnert, A. M., Aikins, J. W., & Arola, N. T. (2013). Regrouping: Organized activity involvement and social adjustment across the transition to high school. *New Directions for Child and Adolescent Development*(140), 57-75. doi: 10.1002/cad.20037

Boudreau, B., & Poulin, C. (2009). An examination of the validity of the Family Affluence Scale II (FAS II) in a general adolescent population of Canada. *Social Indicators Research, 94*(1), 29-42. doi: http://dx.doi.org/10.1007/s11205-008-9334-4

Boyce, W., Torsheim, T., Currie, C., & Zambon, A. (2006). The family affluence scale as a measure of national wealth: Validation of an adolescent self-report measure. *Social Indicators Research, 78*, 473-487. doi: http://dx.doi.org/10.1007/s11205-005-1607-6

Bramston, P., & Patrick, J. (2007). Rural adolescents experiencing an urban transition. *Australian Journal of Rural Health, 15*, 247-251. doi: http://dx.doi.org/10.1111/j.1440-1584.2007.00897.x

Brim, O., & Kagan, J. (1980). Constancy and change: A view of the issues. In O. Brim & J. Kagan (Eds.), *Constancy and change in human development* (pp. 1-25). Cambridge, USA: Harvard University Press.

Brinthaupt, T., Lipka, R., & Wallace, M. (2007). Aligning student self and identity concerns with middle school practices. In S. Mertens, V. Anfara Jnr & M. Caskey (Eds.), *The young adolescent and the middle school* (pp. 201-218). Charlotte, USA: Information Age Publishing.

Bronfenbrenner, U. (1979). *The ecology of human development*. Cambridge: Harvard University Press.

Bullis, M., Davis, C., Bull, B., & Johnson, B. (1997). Expectations versus realities: Examination of the transition plans and experiences of adolescents who are deaf and adolescents who are hearing. *Rehabilitation Counseliing Bulletin, 40*, 251-264.

Burns, E. (2010). Capturing the diversity of transition from a multidisciplinary perspective. *Australian Journal of Career Development*, *19*(3), 43-51. doi: http://dx.doi.org/10.1177/103841621001900307

Carlson, E., Sroufe, L., & England, B. (2004). The construction of experience: A longitudinal study of representation and behaviour. *Child Development, 75*, 66-83. doi: http://dx.doi.org/10.1111/j.1467-8624.2004.00654.x

Carolan, B. V. (2013). School Transitions and Students' Achievement in the Fifth Grade. *The Journal of Educational Research, 106*(5), 372-383. doi: 10.1080/00220671.2012.736432

Carter, M., McGee, R., Taylor, B., & Williams, S. (2007). Health outcomes in adolescence: Associations with family, friends and school engagement. *Journal of Adolescence, 30*(1), 51-62. doi: 10.1016/j.adolescence.2005.04.002

Cassidy, J., & Asher, S. (1992). Loneliness and peer relations in young children. *Child Development, 63*(2), 350-365. doi: http://dx.doi.org/10.2307/1131484

Cauley, K., & Jovanovich, D. (2006). Developing an effective transition program for students entering middle school or high school. *The Clearing House, 80*(1), 15-25. doi: http://dx.doi.org/10.3200/TCHS.80.1.15-25

Chen, W.-B., & Gregory, A. (2009). Parental involvement as a protective factor during the transition to high school. *The Journal of Educational Research, 103*(1), 53-62. doi: 10.1080/00220670903231250

Coffey, A. (2009). Managing the move. *ResearchOnline@ND*. Retrieved from http://researchonline.nd.edu.au/edu_article/48/

Coffey, A. (2013). Relationships: The key to successful transition from primary to secondary school? *Improving Schools, 16*(3), 261-271. doi: 10.1177/1365480213505181

Craven, R. G., Marsh, H., & Burnett, P. (2003). Cracking the self-concept enhancement conundrum: a call and blueprint for the next generation of self-concept enhancement research. In H. Marsh, R. G. Craven & D. McInerney (Eds.), *International Advances in Self Research* (pp. 91-126). Sydney, Australia: Information Age Press.

Crockett, L. J., Petersen, A. C., Graber, J. A., Schulenberg, J. E., & Ebata, A. (1989). School Transitions and Adjustment During Early Adolescence. *The Journal of Early Adolescence*, *9*(3), 181-210. doi: 10.1177/0272431689093002

Currie, C., Molcho, M., Boyce, W., Holstein, B., Torsheim, T., & Richter, M. (2008). Researching health inequalities in adolescents: The development of the Health Behaviour in School-Aged Children (HBSC) Family Affluence Scale. *Social Science & Medicine, 66*(6), 1429-1436. doi: http://dx.doi.org/10.1016/j.socscimed.2007.11.024

de Bruyn, E. H. (2005). Role strain, engagement and academic achievement in early adolescence. *Educational Studies, 31*(1), 15-27. doi: 10.1080/0305569042000310930

Deci, E., & Ryan, R. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. London, UK: Springer Link.

Delamont, S. (1991). The hit list and other horror stories: Sex roles and school transfer. *The Sociological Review, 39*(1), 238-259. doi: http://dx.doi.org/10.1111/j.1467-954X.1991.tb02980.x

Department of Education and Early Childhood Development. (2010). The Effecitveness of Student Wellbeing Programs and Services Retrieved 18/09/2013, from http://download.audit.vic.gov.au/files/290110_Student_Wellbeing_Full_Report.pdf

Department of Education and Early Childhood Development. (2013). 2. About Transition Retrieved 18/09/2013, from http://www.education.vic.gov.au/Documents/childhood/professionals/learning/trkpart1about.pdf

Department of Education and Training. (2007). The future placement of year 7 students in Western Australian public school: A study Retrieved 08/12/2011, from http://pandora.nla.gov.au/tep/88866

Dockett, S., & Perry, B. (2003). The transition to school: What's important. *Educational Leadership, 60*(7), 30-33.

Driessen, G., Sleegers, P., & Smit, F. (2008). The transition from primary to secondary education: Meritocracy and ethnicity. *European Sociological Review, 24*(4), 527-542. doi: 10.1093/esr/jcn018

Duchesne, S., Ratelle, C. F., Poitras, S.-C., & Drouin, E. (2009). Early adolescent attachment to parents, emotional problems, and teacher-academic worries about the middle school transition. *The Journal of Early Adolescence, 29*(5), 743-766. doi: 10.1177/0272431608325502

Eccles, J., Midgley, C., Wigfield, A., Miller Buchanan, C., Reuman, D., Flanagan, C., & Mac Iver, D. (1993). Development during adolescence: The impact of stage-environment fit on young adolescents' experiences in schools and in families. *American Psychologist, 48*(2), 90-101. doi: http://dx.doi.org/10.1037/0003-066X.48.2.90

Eccles, J., & Roeser, R. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence, 21*(1), 225-241. doi: 10.1111/j.1532-7795.2010.00725.x

Ellerbrock, C., & Kiefer, S. (2013). The interplay between adolescent needs and secondary school structures: fostering developmentally responsive middle and high school environments across the transition. [Report]. *High School Journal, 96*(3), 170-194. doi: http://dx.doi.org/10.1353/hsj.2013.0007

Eman, Y. (2013). Managing the transition process of students from junior high-school to high-school. *Revista de Management Comparat International, 14*(1), 71-85.

Erikson, E. (1950). *Childhood and society*. New York, USA: Norton.

Evangelou, M., Taggart, B., Sylva, K., Melhuish, E., Sammons, P., & Siraj-Blatchford, I. (2008). What makes a successful transition from primary to secondary school? Retrieved 09/02/2014, from http://www.ioe.ac.uk/successful_transition_from_primary_to_secondary_report.pdf

Felner, R., Seitsinger, A., Brand, S., Burns, A., & Bolton, N. (2007). Creating small learning communities: Lessons from the project on high-performing learning communities about "what works" in creating productive, developmentally enhancing, learning contexts. *Educational Psychologist, 42*(4), 209-221. doi: http://dx.doi.org/10.1080/00461520701621061

Fenzel, L. M. (1989). Role Strains and the Transition to Middle School: Longitudinal Trends and Sex Differences. *The Journal of Early Adolescence, 9*(3), 211-226. doi: 10.1177/0272431689093003

Fenzel, L. M. (2000). Prospective study of changes in global self-worth and strain during the transition to middle school. *The Journal of Early Adolescence, 20*(1), 93-116. doi: 10.1177/0272431600020001005

Fielding, M. (2004). Transformative approaches to student voice: theoretical underpinings, recalcitrant realities. *British Educational Research Journal, 30*(2), 295-311. doi: http://dx.doi.org/10.1080/0141192042000195236

Fisher, S., Fraer, N., & Murray, K. (1984). The transition from home to boarding school: A diary-style analysis of the problems and worries of boarding school pupils. *Journal of Environmental Psychology, 4*, 211-221. doi: http://dx.doi.org/10.1016/S0272-4944(84)80042-0

Freudenberg, N., & Ruglis, J. (2007). Reframing school dropout as a public health issue. *Preventing chronic disease, 4(4)*(10/03/2014). Retrieved from http://www.cdc.gov/pcd/issues/2007/oct/pdf/07_0063.pdf

Frey, A., Ruchkin, V., Martin, A., & Schwab-Stone, M. (2009). Adolescents in transition: School and family characteristics in the development of violent behaviors entering high school. *Child Psychiatry & Human Development, 40*(1), 1-13. doi: 10.1007/s10578-008-0105-x

Friis, R., & Sellers, T. (1996). *Epidemiology for public health practice*. Maryland, USA: Aspen Publishers Inc.

Fyson, S. J. (2008). Using discourse analysis and psychological sense of community to understand school transitions. *Journal of Community Psychology, 36*(4), 452-467. doi: 10.1002/jcop.20247

Galton, M., Gray, J., & Ruddock, J. (1999). The impact of school transitions and transfers on pupil progress and attainment Retrieved 04/08/2013, from http://www.cumbria.gov.uk/elibrary/Content/Internet/537/40696142117.pdf

Galton, M., Morrison, I., & Pell, T. (2000). Transfer and transition in English schools: reviewing the evidence. *International Journal of Educational Research, 33*(4), 341-363. doi: 10.1016/s0883-0355(00)00021-5

Ganeson, K., & Ehrich, L. C. (2009). Transition into high school: A phenomenological study. [Article]. *Educational Philosophy & Theory, 41*(1), 60-78. doi: 10.1111/j.1469-5812.2008.00476.x

Goodman, J., Schlossberg, N., & Anderson, M. (2006). *Counseling adults in transition: Linking practice and theory* (3rd. ed.). New York, USA: Springer Link Publishing Company.

Government of Western Australia. (2011). Western Australian children to step up in pre-primary and year 7 Retrieved 29/07/2013, from http://det.wa.edu.au/schoolsandyou/detcms/schoolsandyou/schools-and-you/pre-primary-and-year-7/pre-primary-and-year-7.en?oid=MultiPartArticle-id-12735707#toc1

Graham, C., & Hill, M. (2003). *Negotiating the transition to secondary school*: Scottish Council for Research in Education.

Griebel, W., & Berwanger, D. (2006). Transition from primary school to secondary school in Germany. *International Journal of Transitions in Childhood, 2,* 32-38.

Hakkarainen, A., Holopainen, L., & Savolainen, H. (2012). Mathematical and reading difficulties as predictors of school achievement and transition to secondary education. *Scandinavian Journal of Educational Research, 57*(5), 488-506. doi: 10.1080/00313831.2012.696207

Hanewald, R. (2013). Transition between primary and secondary school: Why it is important and how it can be supported. *Australiam Journal of Teacher Education, 38*(1), 62-74. doi: http://dx.doi.org/10.14221/ajte.2013v38n1.7

Hayes, M., & Vivian, C. (2008). What kind of place is secondary school? *The Educational Forum, 72*(1), 23-31. doi: http://dx.doi.org/10.1080/00131720701603586

Henry, K., Knight, K., & Thornberry, T. (2012). School disengagement as a predictor of dropout, delinquency, and problem substance use during adolescence and early adulthood. *Journal of Youth and Adolescence, 41*(2), 156-166. doi: 10.1007/s10964-011-9665-3

Herlihy, C. (2007). Toward ensuring a smooth transition into high school Retrieved 07/11/2011, from http://eric.ed.gov/PDFS/ED501075.pdf

Hodges, J., Sheffield, J., & Ralph, A. (2013). Home away from home? Boarding in Australian schools. *Australian Journal of Education, 57*(1), 32-47. doi: http://dx.doi.org/10.1177/0004944112472789

Holdsworth, R. (2010). Transition and engagement research document 6 Retrieved 13/02/2014, from http://www.ceomelb.catholic.edu.au/WorkArea/DownloadAsset.aspx?id=17202

Holmes, T., & Rahe, R. (1967). The social readjustment rating scale. *Journal of Psychosomatic Research, 2*, 213-218. doi: http://dx.doi.org/10.1016/0022-3999(67)90010-4

Holtgraves, T. (2004). Social desriability and self-reports: testing models of socially desirable responding. *Personality and Social Psychology Bulletin, 30*(2), 161-172. doi: http://dx.doi.org/10.1177/0146167203259930

Howard, S., & Johnson, B. (n.d). Transition from primary to secondary school: Possibilities and paradoxes Retrieved 10/11/2011, from http://www.aare.edu.au/04pap/how04184.pdf

Hughes, L. A., Banks, P., & Terras, M. M. (2013). Secondary school transition for children with special educational needs: a literature review. *Support for Learning, 28*(1), 24-34. doi: 10.1111/1467-9604.12012

Humphrey, N., & Ainscow, M. (2006). Transition club: Facilitating learning, participation and psychological adjustment during the transition to secondary school. *European Journal of Psychology of Education, 21*(3), 319-331. doi: 10.1007/bf03173419

Isakson, K., & Jarvis, P. (1999). The adjustment of adolescents during the transition into high school: A short-term longitudinal study. *Journal of Youth and Adolescence, 28*(1), 1-26. doi: http://dx.doi.org/10.1023/A:1021616407189

Jackson, A., & Davis, G. (2000). Turning points 2000: Educating adolescents in the 21st century Retrieved 08/03/2014, from http://mltei.org/cqn/Adolescent%20Development/Resources/General/TURNING%20POINTS%202000.pdf

Jindal-Snape, D., & Foggie, J. (2008). A holistic approach to primary—secondary transitions. *Improving Schools, 11*(1), 5-18. doi: 10.1177/1365480207086750

Jose, P. E., Ryan, N., & Pryor, J. (2012). Does Social Connectedness Promote a Greater Sense of Well-Being in Adolescence Over Time? *Journal of Research on Adolescence, 22*(2), 235-251. doi: 10.1111/j.1532-7795.2012.00783.x

Kennelly, L., & Monrad, M. (n.d.). Easing the transition to high school: Research and best practices designed to support high school learning Retrieved 07/11/2011, from http://eric.ed.gov/PDFS/ED501073.pdf

Kessler, R., Andrews, G., Colpe, L., Hiripi, E., Mroczek, D., Normand, S., . . . Zaslavsky, A. (2002). Short screening scales to monitor population prevalences and trends in non-specific psychological distress. *Psychological Medicie, 32*, 959-976. doi: http://dx.doi.org/10.1017/S0033291702006074

Kingery, J., & Erdley, C. (2007). Peer experiences as predictors of adjustment across the middle school transition. *Education and Treatment of Children, 30*(2), 73-88. doi: http://dx.doi.org/10.1353/etc.2007.0007

Kinney, P. (2011). School transition and school improvement. *Principal Leadership* (October 2011), 61-62.

Kotewa, D. (1995). Transition and adaptations: Theory and thoughts to ponder. *Journal of Student Affairs, 4*, 45-52.

Kurita, J. A. (1999). *The role of social support in mediating the stress of school transitions.* NQ46866 Ph.D., University of Alberta (Canada), Ann Arbor. Retrieved from http://kx7gx4pm8t.search.serialssolutions.com/?&genre=article&sid=ProQ:&atitle=The+role+of+social+support+in+mediating+the+stress+of+school+transitions&title=The+role+of+social+support+in+mediating+the+stress+of+school+transitions&issn=&date=1999-01-01&volume=&issue=&spage=&author=Kurita%2C+Janice+Amy

Ladd, G., Kochenderfer, B., & Coleman, C. (1996). Perceptions of peer social support scale. *Child Development, 67*(3), 1103-1118. doi: http://dx.doi.org/10.2307/1131882

Lane, J. (1989). Transition to tomorrow: An approach for the days ahead. *Management Quarterly, 29*(4), 28-31.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.

Lawson, M., Wyra, M., Skrzypiec, G., & Askell-Williams, H. (2008). Students' experiences of the first term in high school. *Annual Conference of the Australian Assoication for Research in Education. Brisbane, Australia* Retrieved 04/08/2013, from http://trove.nla.gov.au/work/153061733?versionId=166812398

Lester, L., Mander, D., & Cross, D. (2014). Chapter 4: Bullying behaviour following students' transition to a secondary boarding school context. In M. Taylor, J. Pooley & J. Merrick (Eds.), *Adolescents: Places and spaces* (pp. 35-46). New York, USA: Nova Science Publishers.

Levinson, D. (1978). *The seasons of a man's life*. New York, USA: Knopf.

Longaretti, L. (2006). *School transition: Aspirations and inspirations*. Paper presented at the AARE 2006 International education research conference Adelaide: Australia.

Lounsbury, J. (1960). How the junior high school came to be. *Educational Leadership, December 1960*, 145-147.

Lowenthal, M., & Chiriboga, D. (1975). Responses to stress. In M. Lowenthal, M. Thurnher & C. D (Eds.), *Four stages of life: A comparative study of men and women facing transitions*. San Fransisco, USA: Jossey-Bass.

Mander, D., Lester, L., & Cross, D. (2014). Chapter 3: Social and emotional wellbeing, and mental health implications for adolescents transitioning to secondary boarding school. In M. Taylor, J. Pooley & J. Merrick (Eds.), *Adolescents: Places and spaces* (pp. 21-30). New York, USA: Nova Science Publishers.

Maras, P., & Aveling, E.-L. (2006). Students with special educational needs: transitions from primary to secondary school. *British Journal of Special Education, 33*(4), 196-203. doi: 10.1111/j.1467-8578.2006.00439.x

Marsh, H. (1990). *SDQ manual : self-description questionnaire.* . Campbelltown, Australia: University of Western Sydney.

Marsh, H. (1992). *The Self Description Questionnaire (SDQ) II:A theoretical and empirical bases for the measurement of multiple dimensions of adolescent self-concept. A test manual and research monograph*. Macarthur, Australia: The University of Western Sydney.

Martínez, R., Aricak, O. T., Graves, M., Peters-Myszak, J., & Nellis, L. (2011). Changes in Perceived Social Support and Socioemotional Adjustment Across the Elementary to Junior High School Transition. *Journal of Youth and Adolescence, 40*(5), 519-530. doi: 10.1007/s10964-010-9572-z

Mason, K. (1997). The emotional transition of twelve year olds from home to a boarding situation Retrieved 25/05/2014, from http://files.eric.ed.gov/fulltext/ED429797.pdf

McGee, C., Ward, R., Gibbons, J., & Harlow, A. (2003). Transition to secondary school: A literature review. Report to the Ministry of Education Retrieved 09/03/2014, from http://www.educationcounts.govt.nz/publications/schooling/5431

McNeely, C., Nonnemaker, J., & Blum, J. (2002). Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health. *Journal of School Health, 72*(4), 138-147. doi: 10.1111/j.1746-1561.2002.tb06533.x

Measor, L., & Woods, P. (1984). *Changing schools*. Philadelphia, USA: Open University Press.

Meyer, L. (n.d). Nancy K Schlossberg's transition theory Retrieved 01/04/2014, from http://cspcompetencyportfolio.weebly.com/uploads/1/4/5/6/14568912/formal_theory_paper_6020.pdf

Mizelle, N. B. (2005). Moving out of middle school. *Educational Leadership, 62*(7), 56-60.

National Association of Secondary School Principals. (n.d). History of the middle school movement Retrieved 26/03/2014, from http://www.nassp.org/Content.aspx?topic=History_of_the_Middle_Level_Movement

National Institute of Child Health and Human Development Early Child Care Research Network. (2004). Fathers' and mothers' parenting behavior and beliefs as predictors of children's social adjustment in the transition to school. *Journal of Family Psychology, 18*(4), 628-638. doi: 10.1037/0893-3200.18.4.628

Natvig, G., Albrektsen, G., & Qvarnstrom, U. (2003). Associations between psychosocial factors and happiness among school adolescents. *International Journal of Nursing, 9*, 166-175. doi: http://dx.doi.org/10.1046/j.1440-172x.2003.00419.x

Neild, R. C., Stoner-Eby, S., & Furstenberg, F. (2008). Connecting entrance and departure: The transition to ninth grade and high school dropout. *Education and Urban Society, 40*(5), 543-569. doi: 10.1177/0013124508316438

Neugarten, B. (1979). Time, age, and the life cycle. *Americal Journal of Psychiatry, 136*(7), 887-894. doi: http://dx.doi.org/10.1176/ajp.136.7.887

Nolan, S. (2012). *An exploration of the primary to secondary school transition in an Irish context.* Professional Doctorate in Applied Educational and Child Psychology, University of East London, London.

NSW Department of Education and Training. (2006). Transition project. Sydney, Australia: NSW Department of Education and Training.

Nunnaly, J. (1978). *Psychometric theory*. New York: McGraw-Hill.

O'Kane, M. (2007). Chapter 3: Theorising transitions - Theoretical framework Retrieved 02/12/2011, from http://www.cecde.ie/english/maryokane.php

Olweus, D. (1996). *The revised Olweus Bully/Victim questionnaire*. Bergen, Norway: Mimeo Research Center for Health Promotion (HEMIL), University of Bergen.

Opara, I. M., & Onyekuru, B. U. D. (2013). Psychosocial predictors of secondary school students adjustment to school. [Report]. *European Scientific Journal, 9*(17), 303+.

Osborn, M., McNess, E., & Pollard, A. (2006). Identity and transfer: a new focus for home-school knowledge exchange. *Educational Review, 58*(4), 415-433. doi: http://dx.doi.org/10.1080/00131910600971867

Parker, A. K. (2009). Elementary organizational structures and young adolescents' self-concept and classroom environment perceptions across the transition to middle school. *Journal of Research in Childhood Education, 23*(3), 325-339. doi: 10.1080/02568540909594664

Parker, A. K., & Neuharth-Pritchett, S. (2009). Calming rough waters; Teacher strategies for smoothing the transition to middle school. *Childhood Education, 86*(1), 20-26. doi: http://dx.doi.org/10.1080/00094056.2009.10523103

Pascarella, E., & Terenzini, P. (2005). *How college affects students*. Springfield, USA: Jossey-Bass.

Patton, G. C., Glover, S., Bond, L., Butler, H., Godfrey, C., Di Pietro, G., & Bowes, G. (2000). The Gatehouse Project; a systematic approach to mental health promotion in secondary schools. *Australian and New Zealand Journal of Psychiatry, 34*, 586-593. doi: http://dx.doi.org/10.1080/j.1440-1614.2000.00718.x

Paulick, I., Watermann, R., & Nückles, M. (2013). Achievement goals and school achievement: The transition to different school tracks in secondary school. *Contemporary Educational Psychology, 38*(1), 75-86. doi: http://dx.doi.org/10.1016/j.cedpsych.2012.10.003

Pearlin, L., Menaghan, E., Lieberman, M., & Mullan, J. (1981). The stress process. *journal of Health and Social Behaviors, 22*(4), 337-356. doi: http://dx.doi.org/10.2307/2136676

Pereira, A., & Pooley, J. (2007). A qualitative exploration of the transition experience of students from a high school to a senior high school in rural Western Australia. *Australian Journal of Education, 51*(2), 481-492. doi: http://dx.doi.org/10.1177/000494410705100205

Pollard, A. (1987). Pupils and transfer: research and policy. *British Journal of Sociology of Education, 8*(4), 475-479. doi: http://dx.doi.org/10.1080/0142569870080408

Potter, L., Schlisky, S., Stevenson, D., & Drawdy, D. (2001). The transition years: When it's time to change. *Principal Leadership, 1*(7), 52-55.

Power, C., & Cotterell, J. (1981). Changes in students in the transition between primary and secondary school. Canberra: Australia: Australian Government Publishing Service.

Qualter, P., Whiteley, H. E., Hutchinson, J. M., & Pope, D. J. (2007). Supporting the development of emotional intelligence competencies to ease the transition from primary to high school. *Educational Psychology in Practice, 23*(1), 79-95. doi: 10.1080/02667360601154584

Queensland Indigenous Education Consultative Body. (2000). Position Paper: Boarding schools Retrieved 24/10/2014, from http://qiecc.eq.edu.au/index.php/about/qiecb-archive/

Rayle, A., & Chung, K. (2008). Revisiting first-year college students' mattering: Social support, academic stress and the mattering experience. *Journal of College Student Retention, 9*(1), 21-37. doi: http://dx.doi.org/10.2190/X126-5606-4G36-8132

Resnick, M., Bearman, P., Blum, R., Bauman, K., Harris, K., Jones, J., . . . Udry, R. (1997). Protecting adolescents from harm findings from the National Longitudinal Study on Adolescent Health. *The Journal of the American Medical Association, 278*(10), 823-832. doi: 10.1001/jama.278.10.823

Rice, F., Frederickson, N., & Seymour, J. (2011). Assessing pupil concerns about transition to secondary school. *British Journal of Educational Psychology, 81*(2), 244-263. doi: 10.1348/000709910x519333

Rice, J. (1997). *Explaining the negative impact of the transition from middle to high school on student performance in mathematics and science: An examination of school discontinuity and student background variables*. Paper presented at the Annual Meeting of American Educational Research Association, March 24-28, 1997, Chicago, USA.

Riglin, L., Frederickson, N., Shelton, K. H., & Rice, F. (2013). A longitudinal study of psychological functioning and academic attainment at the transition to secondary school. *Journal of Adolescence, 36*(3), 507-517. doi: http://dx.doi.org/10.1016/j.adolescence.2013.03.002

Roderick, M. (1993). *The path of dropping out*. Westport, USA: Auburn House.

Roeser, R., Eccles, J., & Freedman-Doan, C. (1999). Academic functioning and mental health in adolescence: Patterns, progressions, and routes from childhood. *Journal of Adolescent Health, 14*, 135-174. doi: 10.1177/0743558499142002

Roeser, R., Eccles, J., & Sameroff, A. (2000). School as a context of early adolescents' academic and social-emotional development: a summary of research findings. *The Elementary School Journal, 100*, 443-471. doi: http://dx.doi.org/10.1086/499650

Roeser, R. W., & Eccles, J. S. (1998). Adolescents' perceptions of middle school: Relation to longitudinal changes in academic and psychological adjustment. *Journal of Research on Adolescence, 8*(1), 123-158. doi: 10.1207/s15327795jra0801_6

Roffey, S. (2008). Emotional literacy and the ecology of school wellbeing. *Educational and Child Psychology, 25*(2), 29-39.

Russell, C., Mielke, M., Palmiter, A., Turner, T., & Vaden, Y. (2012). Evaluation findings from the New York City transition to high school initiative Retrieved 19/06/2013, from http://www.policystudies.com/_policystudies.com/files/OST_Transition_to_High_School_Evaluation_Report-_May_2012.pdf

Santos, J. (1999). Cronbach's alpha: A tool for assessing the reliability of scales. *Journal of Extension* Retrieved 13/08/2014, from http://www.joe.org/joe/1999april/tt3.php?ref

Sargent, A., & Schlossberg, N. (1988). Managing adult transitions. *Training and Development Journal, 42*(12), 58-60.

Schlossberg, N. (1981). A model for analyzing human adaptation to transition. *The Counseling Psychologist, 9*(2), 2-18. doi: 10.1177/001100008100900202

Schlossberg, N. (1984). *Counseling adults in transition: Linking practice with theory*. New York, USA: Springer Publishing Company.

Schlossberg, N. (1989). Marginality and mattering: Key issues in building community. *New Directions for Student Services, 48*, 5-15. doi: http://dx.doi.org/10.1002/ss.37119894803

Schlossberg, N. (2008). *Overwhelmed: Coping with life's ups and downs* (2nd. ed.). Lanham, USA: Evans and Company.

Schlossberg, N. (2011). The challenge of change: The transition model and its applications. *Journal of Employment Counseling, 48*, 159-162. doi: http://dx.doi.org/10.1002/j.2161-1920.2011.tb01102.x

Schlossberg, N., & Leibowitz, Z. (1980). Organisational support systems as buffers to job loss. *Journal of Vocational Behavior, 17*, 204-217. doi: http://dx.doi.org/10.1016/0001-8791(80)90005-6

Serbin, L., Stack, D., & Kingdon, D. (2013). Academic success across the transition from primary to secondary schooling among lower-income adolescents: Understanding the effects of family resources and gender. *Journal of Youth and Adolescence, 42*(9), 1331-1347. doi: 10.1007/s10964-013-9987-4

Shochet, I. M., Dadds, M. R., Ham, D., & Montague, R. (2006). School connectedness is an underemphasized parameter in adolescent mental health: Results of a community prediction study. *Journal of Clinical Child & Adolescent Psychology, 35*(2), 170-179. doi: http://dx.doi.org/10.1207/s15374424jccp3502_1

Simmons, R., & Blyth, D. (1987). *Moving into adolescence: The impact of pubertal change and school context*. New York, USA: Aldine De Gruyter.

Sirsch, U. (2003). The impending transition from primary to secondary school: Challenge or threat? *International Journal of Behavioral Development, 27*(5), 385-395. doi: 10.1080/01650250344000082

Smith, J., Akos, P., Lim, S., & Wiley, S. (2008). Student and stakeholder perceptions of the transition to high school. *The High School Journal, 91*(3), 32-42. doi: http://dx.doi.org/10.1353/hsj.2008.0003

Speering, W., & Rennie, L. (1996). Students' perceptions about science: The impact of transition from primary to secondary school. *Research in Science Education, 26*(3), 283-298. doi: 10.1007/bf02356940

Stevens, V., Bourdeaudhuij, I. D., & Van Oost, P. (2000). Bullying in Flemish schools: An evaluation of anti-bullying intervention in primary and secondary schools. *British Journal of Educational Psychology, 70*, 195-210. doi: http://dx.doi.org/10.1348/000709900158056

Stumpers, S. A., Breen, L., Pooley, J. A., Cohen, L., & Pike, L. T. (2005). A critical exploration of the school context for young adolescents completing primary education. *Community, Work & Family, 8*(3), 251-270. doi: 10.1080/13668800500142228

Tobbell, J., & O'Donnell, V. (2013). The formation of interpersonal and learning relationships in the transition from primary to secondary school: Students, teachers and school context. *International Journal of Educational Research, 59*, 11-23. doi: http://dx.doi.org/10.1016/j.ijer.2013.02.003

Topping, K. (2011). Primary–secondary transition: Differences between teachers’ and children’s perceptions. *Improving Schools, 14*(3), 268-285. doi: 10.1177/1365480211419587

Towns, S. (2010). *Measuring up: An examination of the expectations and realities of students during the primary to secondary transition.* Doctor of Philsophy, Southern Cross University, Lismore, Australia.

Turner, S. L. (2007). Preparing inner-city adolescents to transition into high school. *Professional School Counseling, 10*(3), 245-252. doi: http://dx.doi.org/10.5330/prsc.10.3.aq10271p3q0467ml

Vaillant, G. (1977). *Adaption to life*. Boston, USA: Little & Brown.

van de Mortel, T. (2008). Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing, 25*(4), 40-48.

Van Ryzin, M., Stormshak, E. T., & Dishion, T. (2012). Engaging parents in the family check-up in middle school: Longitudinal effects on family conflict and problem behavior through the high school transition. *Journal of Adolescent Health, 50*(6), 627-633. doi: http://dx.doi.org/10.1016/j.jadohealth.2011.10.255

Vieno, A., Perkins, D., Smith, T., & Santinello, M. (2005). Democratic school climate and sense of community in school: a multilevel analysis. *American Journal of Community Psychology, 36*, 327-341. doi: 10.1007/s10464-005-8629-8

Wajsenberg, J. (2004). Transition: from school to school, and beyond. *Teacher* (November 2004), 26-27.

Wampler, R. S., Munsch, J., & Adams, M. (2002). Ethnic differences in grade trajectories during the transition to junior high. *Journal of School Psychology, 40*(3), 213-237. doi: 10.1016/s0022-4405(02)00098-5

Waters, S., & Cross, D. (2010). Measuring students' connectedness to school, teachers, and family: Validation of three scales. *School Psychology Quarterly, 25*(3), 164-177. doi: 10.1037/a0020942

Waters, S., Cross, D., & Runions, K. (2009). Social and ecological structures supporting adolescent connectedness to school: A theoretical model. *Journal of School Health, 79*(11), 516-524. doi: http://dx.doi.org/10.1111/j.1746-1561.2009.00443.x

Waters, S., Lester, L., & Cross, D. (2014). Transition to secondary school: Expectation vs Experience. *Australian Journal of Education, 58*(2), 153-166. doi: http://dx.doi.org/10.1177/0004944114523371

Waters, S., Lester, L., Wenden, L., & Cross, D. (2012). A theoretically grounded exploration of the social and emotional outcomes of transition to secondary school. *Australian Journal of Guidance and Counselling, 22*(2), 190-205. doi: http://dx.doi.org/10.1017/jgc.2012.26

Weller, S. (2007). ‘Sticking with your mates?’ Children's friendship trajectories during the transition from primary to secondary school. *Children & Society, 21*(5), 339-351. doi: 10.1111/j.1099-0860.2006.00056.x

West, P., Sweeting, H., & Young, R. (2008). Transition matters: pupils’ experiences of the primary–secondary school transition in the West of Scotland and consequences for well-being and attainment. *Research Papers in Education, 25*(1), 21-50. doi: 10.1080/02671520802308677

Western Australia Department of Education and Training. (2007). The future placement of year 7 students in Western Australian public schools: A study. Perth: Government of Western Australia.

Western Australian Council of State School Organisations Inc. (2010). WACSSO Policy Retrieved 08/12/2011, from www.wacsso.wa.edu.au/getFile.php?getFile=763

Western Australian Primary Principals Association. (2006). The placement of year sevens: A position paper Retrieved 08/12/2011, from http://www.wappa.asn.au/

What works: The work program. (2014). *What works. The work program* Retrieved 26/05/2014, from http://www.whatworks.edu.au/dbAction.do?cmd=displaySitePage1&subcmd=select&id=396

Whyte, M., & Boylan, C. (2008). *Rural primary student transition to secondary boarding school*. Paper presented at the Australian Association for Research in Education Annual Conference, Brisbane, Australia. http://www.aare.edu.au/publications-database.php/5581/rural-primary-student-transition-to-secondary-boarding-school

World Bank. (2007). Development and the next generation *World Development Report 2007*. Washington, USA.

Wrigley, T., & Lofsnaes, N. F. (2005). Schools as social and learning communities: Scotland and Norway. *Improving Schools, 8*(1), 23-45. doi: 10.1177/1365480205052925

Zanobini, M., & Usai, M. C. (2002). Domain-specific self-concept and achievement motivation in the transition from primary to low middle school. *Educational Psychology, 22*(2), 203-217. doi: 10.1080/01443410120115265

Zeedyk, M., Gallacher, S., Henderson, M., Hope, G., Husband, B., & Lindsay, k. (2003). Negotiating the transition from primary to secondary school: Perceptions of pupils, parents and teachers. *School Psychology International*, *24*(1), 37-79. doi: http://dx.doi.org/10.1177/0143034303024001010

Zimbardo, P. (1999). Discontinuity theory: cognitive and social searches for rationality and normality - may lead to madness. *Advances in Experimental Social Psychology*, *31*, 345-413. doi: http://dx.doi.org/10.1016/S0065-2601(08)60276-2

APPENDICES

Appendix 1 School information letter and consent form

xx/xx/2013

<Principal name>
<School name>
<School address>

Dear <Principal name>,

Rising to the Challenge: Exploring the transition from Primary to Secondary education in a Western Australian School.

My name is Liz Wenden and I am a Master of Public Health student at Edith Cowan University. I am writing to you today to request the participation of your school in a research project that aims to understand how children feel about the move from primary to secondary school.

Building on a personal and professional interest in the transition process, I would like to propose carrying out an exploration of transition in <School name> 2014 Year 7 cohort. With your consent and after approval by the ECU Human Ethics Research Committee and the Catholic Education Office, I would proceed as follows:

1. By the middle of December 2013, provide the school with blank labels and prepaid consent packages containing an information sheet, a passive consent letter to allow parents to opt out of the research, and a reply-paid envelope addressed to myself.
2. Allocate all participants a unique identifying number to preserve anonymity and confidentiality.
3. In the first two weeks of Term 1 2014, have classroom teachers supervise with the assistance of myself the administration of an online survey of 30-40 minutes duration in which students will be asked about Year 6 retrospective and Year 7 immediate feelings about transition, and individual, school and family relationships.
4. In the first two weeks of Term 3 2014, have classroom teachers supervise a second survey of 25-30 minutes with their students that will ask about Year 7 feelings and experiences six months post transition.
5. Access student files around the time of each online survey to record student data for each participant. This data will include pre-transition and post-transition English and Maths marks, health status and absentee days.

The resulting data will allow me to achieve the aim of my research and explore the nature of transition in a cohort of adolescents over time, determine the predictors of a successful transition process, and to determine the differences in transition experience between feeder and non-feeder school students.

Participation is entirely voluntary and you can withdraw your consent at any time. I would like to stress that at all times the confidentiality of the school and the students will be preserved throughout the research project, and in any publications resulting from this research. No personally identifying information will be kept and all survey data will only be accessible by myself and my supervisors. All data will be stored on a secure server at Edith Cowan University under password, or in a secure locked cabinet. All records will then be retained and destroyed in line with current University policy of 5 years. A report detailing findings of the research will be provided to your school and the Catholic Education Office (as required by CEO ethics) once the project is complete.

Please sign and return the enclosed copy of this letter indicating your consent or non-consent for <School name> to be involved in this research project, either in the reply paid envelope provided or email to me at the address below. If you have any questions or require any further information about the research project, please feel free to contact me as show below.

Thank you for your consideration of this project.

Yours sincerely,

Ms. Liz Wenden
Master of Public Health student
Faculty of Health, Engineering and Science
Edith Cowan University
Email: e.wenden@ecu.edu.au
Ph: 08 9370 6519
Monday, Tuesday, Thursday.

If you have any concerns about the research project and wish to talk to an independent person, you may contact:

Research Ethics Officer
Edith Cowan University
270 Joondalup Drive
JOONDALUP WA 6027
Phone: (08) 6304 2170
Email: research.ethics@ecu.edu.au

.

Rising to the Challenge

PRINCIPAL CONSENT FORM

EDITH COWAN UNIVERSITY

“Rising to the Challenge: Exploring the transition from Primary to Secondary education in a Western Australian School”.

I have discussed this research project with the researcher, and freely consent for <School name> to participate in the research project:

and;

- I have been provided with a copy of the letter requesting my school’s participation and explaining the research project.
- I have read and understood the information provided.
- I have been given the researcher’s contact details and understand I can contact the researcher if I have any questions about the research project.
- I understand that the students’ participation in the research involves the completion and return of two surveys, and access to their student file.
- I understand that my school’s participation and that of the students in this research is voluntary and I can withdraw my consent at any time.
- I understand that the information provided by the schools and students will be kept confidential, responses will be de-identified, and that the school or students identities will not be revealed in any way.
- I understand that all information will be securely stored and destroyed after 5 years.
- I understand I will be provided with a copy of the project findings once the research is completed.

☐ **I GIVE PERMISSION** for <School name>Year 7 Cohort to participate in the Rising to the Challenge project.

OR

☐ **I DO NOT GIVE PERMISSION** for <School name> 2014 Year & Cohort to participate in the Rising to the Challenge project.

<Principal name> ____ Date___________________

Appendix 2: Parent information and opt-out consent letter

PARENT INFORMATION LETTER

Dear parents and caregivers;

Rising to the Challenge: Exploring the transition from Primary to Secondary education in a Western Australian School.

My name is Liz Wenden and I am a Master of Public Health student at Edith Cowan University. I am writing to you today to request the participation of your child in a research project that aims to understand how children feel about the move from primary to secondary school. <Principal name> has approved the school's involvement in this project, and has allowed me to contact you through the school.

Why is this project important?
Starting secondary school is both an exciting and challenging milestone in the lives of children, and previous research has shown there are many factors that influence how well a child adjusts to their new school. For most children this adjustment is an easy process, but others can find it more difficult. The information from this project will be used to identify what makes adjusting to a new school a success, and how we can improve the way children transition to their secondary school.

What are the benefits of this project?
The results of this research will be used by <School name> to improve the transition process for future groups of Year 7 students, and ease adjustment to secondary school. The researcher will use these results to inform further research in this area.

What does my child need to do?
Your child, along with all other children in Year 7 at <School name> will be asked to complete two surveys – one at the end of 2013 and one in the middle of 2014, during non-academic classes. Student files will also be accessed to monitor your child's school progress. Please rest assured that confidentiality will be maintained at all times, and no personally identifying information will be collected.

What sort of questions will my child be asked?
Your child will be asked questions about how they felt in Year 6 about the move to secondary school, how they feel about secondary school at the beginning of Year 7, and how they are going in secondary school in the middle of Year 7. Questions will ask about your child's individual, school and family relationships and feelings from the end of Year 6 to the middle of Year 7.

Participation is voluntary and you can withdraw your consent at any time. If you choose to withdraw, your child from this research project this will in no way affect you or your child's relationship with Mercy College and your child's data will be removed from the project. If you choose to allow your child to participate then you need not take any further action. If you **DO NOT** want your child to participate please read, sign and date the consent form, put into the reply paid envelope and post to me by the 07/02/2014. Once the project is complete, results will be available on Edith Cowan University's Child Health Promotion Research Centre website www.chprc.ecu.edu.au in 2015.

Please be assured survey responses will completely confidential. Your child will be assigned a reference number that will be separated from their name. This information will be used to track survey respondents over the term of the project and will only be known to myself. No personally identifying information will be kept and all survey data will only be accessible by myself and my supervisors. All data will be stored on a secure server at Edith Cowan University under password, or in a secure locked cabinet. All records will then be retained and destroyed in line with current University policy of 5 years.

If you have any questions or require any further information about the research project, please feel free to contact me as show below. This project has been approved by the Edith Cowan University Human Research Ethics Committee and the Catholic Education Office.

Thank you in advance for allowing your child to participate in this project.

Regards,

Ms. Liz Wenden
Master of Public Health student
Faculty of Health, Engineering and Science
Edith Cowan University
Email: e.wenden@ecu.edu.au
Ph: 08 9370 6519
Monday, Tuesday, Thursday.

If you have any concerns about the research project and wish to talk to an independent person, you may contact:

Research Ethics Officer
Edith Cowan University
270 Joondalup Drive
JOONDALUP WA 6027
Phone: (08) 6304 2170
Email: research.ethics@ecu.edu.au

PARENT/CAREGIVER CONSENT FORM

"Rising to the Challenge: Exploring the transition from Primary to Secondary education in a Western Australian School".

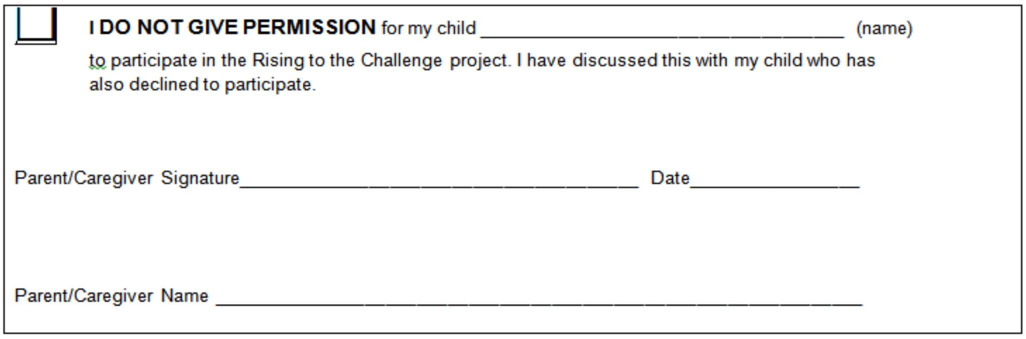
I have discussed this research project with my child, and freely consent for them to participate in the research project:

and;

- I have been provided with a copy of the 'Parent Information Letter' explaining the research project.
- I have read and understood the information provided, or have had it explained to me in a language I understand.
- I have been given the researcher's contact details and understand I can contact the researcher if I have any questions about the research project.
- I understand that my child's participation in the research involves the completion and return of two surveys, and access to their student file.
- I understand that my child's participation in this research is voluntary and I can withdraw my consent at any time.
- I understand that the information my child provides will be kept confidential, their responses will be anonymous, and that their identity will not be revealed in any way.
- I understand that all information will be securely stored and destroyed after 5 years.
- I understand I can request a summary of the project findings once the research is completed.

NO ACTION IS REQUIRED BY YOU AS THE PARENT/CAREGIVER IF YOU GIVE CONSENT FOR YOUR CHILD TO PARTICIPATE IN THIS RESEARCH.

If you DO NOT want your child to participate in this study, please complete and sign the form below, and return in the reply paid envelope by 07/02/2014.



☐ **I DO NOT GIVE PERMISSION** for my child ________________________________ (name) to participate in the Rising to the Challenge project. I have discussed this with my child who has also declined to participate.

Parent/Caregiver Signature___________________________________ Date_______________

Parent/Caregiver Name ____

Appendix 3: Matrix of research questions linked to survey questions and model

RESEARCH QUESTIONS	MODEL		BASELINE SURVEY Q	FINAL SURVEY Q	Instrument
Does students' perception of transition at the end of Year 6 have an impact on their transition experience at the commencement of Year 7 and six months post-transition, after controlling for gender and primary school origin? H0: There is no relationship between perception of transition at the end of Year 6 and transition experience at commencement of Year 7, after controlling for gender and primary school origin. H0: There is no relationship between perception of transition at the end of Year 6 and transition experience in Year 7 at six months post-transition, after controlling for gender and primary school origin.	**Perception of the particular transition**				
	Role change:	gain or loss	18	16	Akos & Galassi 2004
			19	17	Akos & Galassi 2004
	Affect of transition:	positive or negative	9	9	Akos & Galassi 2004
	Source of transition:	internal or external			
	Timing of transition:	on-time or off-time	24	n/a	new question
	Onset:	gradual or sudden			
	Duration:	permanent, temporary or uncertain			
	Degree of stress:	concurrent stressors	8	8	K10
			6	6	new question
Does students' transition environment at the end of Year 6 have an impact on their transition experience at the commencement of Year 7 and six months post-transition, after controlling for gender and primary school origin? H0: There is no relationship between transition environment at the end of Year 6 and transition experience at commencement of Year 7 after controlling for gender and primary school origin. H0: There is no relationship between transition environment at the end of Year 6 and transition experience in Year 7 at six months post-transition after controlling for gender and primary school origin.	**Characteristics of pre and post transition environments**				
	Internal support systems:	family, network of friends	5	5	McNeely 1997 adapted, Waters & Cross 2010 adapted
			2	2	Loneliness & Social Dissatisfaction Q, Cassidy & Asher 1997 adapted
			1	1	Perception of Peer Support Scale, Ladd et al 1996 adapted
			13	12	open-ended
			14	13	open-ended
	Institutional supports		17	n/a	new question
			4	4	Olweus 1996, adapted
			21	18	Resnick 1997, McNeely 2002
			3a-e	3a-e	Resnick 1997, McNeely 2002
			15	14	open-ended
			16	15	open-ended
	Physical settings		3e	3e	Resnick 1997, McNeely 2002
			11	10	open-ended
			12	11	open-ended
Do students' interpersonal factors at the end of Year 6 have an impact on their transition experience at the commencement of Year 7 and six months post-transition, after controlling for gender and primary school origin? H0: There is no relationship between interpersonal factors at the end of Year 6 and transition experience at commencement of Year 7, after controlling for gender and primary school origin. H0: There is no relationship between interpersonal factors at the end of Year 6 and transition experience in Year 7 at six months post-transition, after controlling for gender and primary school origin.	**Characteristics of the individual**				
	Psychosocial competence		8	8	K10
	Sex role identification		23	20	demographic
	Age/life stage		24	21	demographic
	State of health		Student file	Student file	
	Race/ethnicity		25	n/a	demographic
	Socioeconomic status		26-32	21-27	HBSC Family Affluence Scale
	Value orientation		7	7	Self Description Q1 a-j, Self Description Q2 k-t , Marsh
	Previous similar transition experience:		10	n/a	new question
Do students' academic results in Year 6 have an impact on their actual transition experience in Year 7 and six months post-transition, after controlling for gender and primary school origin? H0: There is no relationship between academic results in Year 6 and transition experience at commencement of Year 7 after controlling for gender and primary school origin. H0: There is no relationship between academic results in Year 6 and transition experience in Year 7 at six months post-transition, after controlling for gender and primary school origin.	**Academic progress:**				
	Academic progress:		22	19	new question
			student file	student file	not applicable

Appendix 4: Baseline survey instrument

Rising
to the
Challenge

ECU
EDITH COWAN
UNIVERSITY

Dear Year 7 Student

My name is Liz Wenden and I am from Edith Cowan University. I am very interested in how young people just like you feel about their move into secondary school. Today I would like to ask you to some questions about being in primary school, how you feel about your new secondary school, you, your friends and your family.

All information you provide will remain confidential. No one at your school or your home will see your answers.

Please read this page carefully before you start so you know how to answer the questions.

Please use the password printed on the card you have been given to login to the survey, and follow the instructions on the screen. Please ensure you click on the ‘submit’ button when you are finished.

This is not a test and there are no wrong or right answers. Please answer all the questions as honestly as you can. I am very interested in what you have to say. If you don’t want to answer any questions, you don’t have to.

If you have any questions about the survey or would like to talk to someone about the Rising to the Challenge project please contact me, Liz Wenden, by email at e.wenden@ecu.edu.au.

Thank you for taking the time to complete this survey. I really appreciate your help.

Regards

Ms Liz Wenden

The following questions ask you about YEAR 7 so far.

Thinking about your first few weeks in YEAR 7;

1. **Are there students in Year 7 who would;**

(please choose one answer for each statement)

	Lots of times	Sometimes	Never
Choose you on their team at school?	○	○	○
Tell you you're good at doing things?	○	○	○
Explain something if you didn't understand?	○	○	○
Invite you to do things with them?	○	○	○
Help you if you are hurt?	○	○	○
Miss you if you weren't at school?	○	○	○
Help you if something is bothering you?	○	○	○
Ask to work with you on group work?	○	○	○
Help you if other students were treating you badly?	○	○	○
Ask you to join in when you are alone?	○	○	○
Share his/her things with you?	○	○	○

2. **For each sentence, choose the answer that shows how much you agree or disagree.**

(please choose one answer for each statement

	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly Disagree
I feel alone at secondary school	○	○	○	○	○
I have lots of friends to talk to at secondary school	○	○	○	○	○
It's hard for me to make friends at secondary school	○	○	○	○	○
I have nobody to talk to in my classes	○	○	○	○	○
I don't have anyone to spend time with at secondary school	○	○	○	○	○
I'm lonely at secondary school	○	○	○	○	○
I feel left out of things at secondary school	○	○	○	○	○

3. How do you feel about your school?

(please choose one answer for each statement)

	Strongly Agree	**Agree**	**Neither agree or disagree**	**Disagree**	**Strongly disagree**
I feel close to people at this school	○	○	○	○	○
I feel like I am part of this school	○	○	○	○	○
I am happy to be at this school	○	○	○	○	○
The teachers at this school treat students fairly	○	○	○	○	○
I feel safe at this school	○	○	○	○	○

4. At my school, there is a teacher or some other adult who:

(please choose one answer for each statement)

	Not at all true	**A little true**	**Pretty much true**	**Very much true**	**Unsure**
Really cares about me	○	○	○	○	○
Tells me when I do a good job	○	○	○	○	○
Notices when I’m not there	○	○	○	○	○
Always wants me to do my best	○	○	○	○	○
Listens to me when I have something to say	○	○	○	○	○
Believes that I will be a success	○	○	○	○	○

The next question asks about your family.

For each of the following statements, decide how much you agree/disagree:

(please choose one answer for each statement)

I Feel;

	Strongly agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
Very close to my family	○	○	○	○	○
I am an important member of my family	○	○	○	○	○
Someone in my family cares what happens to me	○	○	○	○	○
I am able to discuss my problems with a family member	○	○	○	○	○
I have a good relationship with all my family	○	○	○	○	○
No-one in my family understands my problems	○	○	○	○	○
Everyone in my family are valuable members	○	○	○	○	○
At least one person in my family listens to my opinions	○	○	○	○	○
At least one person in my family listens to my problems	○	○	○	○	○
At least one member in my family takes an interest in my school work	○	○	○	○	○
I do things with at least one other family member (e.g. shopping)	○	○	○	○	○
There is almost always a parent or other adult at home before school	○	○	○	○	○
There is almost always a parent or other adult at home after school	○	○	○	○	○
There is almost always a parent or other adult at home at dinner time	○	○	○	○	○
There is almost always a parent or other adult at home in the evening after dinner	○	○	○	○	○

The next questions are about you.

5. **So we can find out how things have been going for you lately, please indicate if you have experienced any MAJOR PROBLEMS (e.g. parents separating, someone dying) in your life in the last 6 months.** (please choose one answer)

○ Yes

○ No

6. **Please read each statement and choose the answer that indicates how much the statement applies to you. There are no right or wrong answers. Do not spend too much time on each statement.**
   (please choose one answer for each statement)

	False: Not like me at all; isn't like me at all	**Mostly false**	**More false than true**	**More true than false**	**Mostly True**	**True: This statement describes me well; it is very much like me**
I do lots of important things	○	○	○	○	○	○
In general, I like being the way I am	○	○	○	○	○	○
Overall I have a lot to be proud of	○	○	○	○	○	○
I can do things as well as most other people	○	○	○	○	○	○
Other people think I am a good person	○	○	○	○	○	○
A lot of things about me are good	○	○	○	○	○	○
I can't do anything right	○	○	○	○	○	○
I am as good as most other people	○	○	○	○	○	○
When I do something, I do it well	○	○	○	○	○	○
Overall I am no good	○	○	○	○	○	○
I sometimes take things that belong to other people	○	○	○	○	○	○
I sometimes tell lies to stay out of trouble	○	○	○	○	○	○
Honesty is very important to me	○	○	○	○	○	○
I always tell the truth	○	○	○	○	○	○
When I make a promise I keep it	○	○	○	○	○	○
I sometimes cheat	○	○	○	○	○	○
I often tell lies	○	○	○	○	○	○
I am honest	○	○	○	○	○	○
Cheating in a test is OK if I do not get caught	○	○	○	○	○	○
People can really count on me to do the right thing	○	○	○	○	○	○

7. **In the past FOUR WEEKS about how often:**

(please choose one answer for each statement)

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
Did you feel tired out for no good reason?	○	○	○	○	○
Did you feel nervous?	○	○	○	○	○
Did you feel so nervous that nothing could calm you down?	○	○	○	○	○
Did you feel hopeless?	○	○	○	○	○
Did you feel restless or fidgety?	○	○	○	○	○
Did you feel so restless you could not sit still?	○	○	○	○	○
Did you feel depressed?	○	○	○	○	○
Did you feel that everything was an effort?	○	○	○	○	○
Did you feel so sad that nothing could cheer you up?	○	○	○	○	○
Did you feel worthless?	○	○	○	○	○

The following questions ask about how you feel about your new school, the students at your new school and the staff at your new school.

8. **How was the move from primary to secondary school for you?**

(please choose one answer)

○ Difficult

○ Somewhat difficult

○ Somewhat easy

○ Easy

Please explain why:

9. **Before moving to secondary school in Year 7, have you ever changed schools before?** (please choose one answer)

○ Yes → Please write how many times have you changed schools: ____________

○ No

10. **Please describe the main things you <u>like</u> about being in YEAR 7 in your NEW SECONDARY SCHOOL (not including teachers or students):**

11. **Please describe the main things you <u>dislike</u> about being in YEAR 7 in your NEW SECONDARY SCHOOL (not including teachers or students):**

12. **Please describe the main things you <u>like</u> about the STUDENTS at your NEW SECONDARY SCHOOL:**

13. **Please describe the main things you dislike about the STUDENTS at your NEW SECONDARY SCHOOL:**

14. **Please describe the main things you like about the TEACHERS at your NEW SECONDARY SCHOOL:**

15. **Please describe the main things you dislike about the TEACHERS at your NEW SECONDARY SCHOOL:**

The next questions are about the time before you started year 7.

16. **In YEAR 5 OR YEAR 6, did you receive any information about going to secondary school?** (please choose one answer)

○ No - go to Q18.

○ Yes ↓

Please choose the answer for each item that applies to you:

	In Year 5		**In Year 6**	
	Yes	**No**	**Yes**	**No**
Primary school visit from staff or students of my new secondary school	○	○	○	○
Information evening at my new secondary school	○	○	○	○
I have had or am going to an orientation day at my new school	○	○	○	○
I have had information booklets about my new school in the mail	○	○	○	○
My primary teacher has talked about going to secondary school	○	○	○	○
My friends and I have talked about going to secondary school	○	○	○	○
My brothers and/or sisters have talked to me about going to secondary school	○	○	○	○
My parents or caregivers have talked to me about going to secondary school	○	○	○	○
Other ways I have learned about going to secondary school (please write your answer here)	○	○	○	○

17. **In YEAR 6, what things about moving to secondary school were you looking forward to, or were you happy about?**

(please choose the answer that applies to you)

	Yes	**No**
Being in a larger school	○	○
More freedom	○	○
More students	○	○
Being able to choose some classes	○	○
Changing classes	○	○
Older students	○	○
Making new friends)	○	○
Having new teachers	○	○
Participating in sports, clubs etc.	○	○
Having lockers	○	○
Getting good grades	○	○
More school activities	○	○
More choices at lunch	○	○
Attending more school events (eg. football games, social events)	○	○
Other (please write your answer here)	○	○

19. **In Year 6, what things what things were causing you to be concerned or worried about moving from primary to secondary school?**

(please choose the answer that applies to you)

	Yes	No
Finding my way around or getting lost	○	○
Getting along with other students	○	○
Pressure to do well	○	○
Safety or being hurt by other students	○	○
Being bullied	○	○
Fitting in or making friends	○	○
New and more students	○	○
Hard or unfriendly teachers	○	○
Hard classes	○	○
New rules and expectations	○	○
How much homework I would have	○	○
Feeling pressure to do things I don’t want to do	○	○
Being made fun of	○	○
Using a locker	○	○
Riding the bus	○	○
Getting to class on time	○	○
Older students	○	○
Getting good grades	○	○
Other (please write your answer here)	○	○

20. **What is the name of the primary school where you completed Year 6?**
(please write your answer below)

21. In Term 4 of YEAR 6, in an AVERAGE WEEK did you participate in any activities (such as sports, youth groups, drama groups, church groups etc) outside of school hours? (please choose one answer)

○ No – go to Q22

○ Yes ↓

Please write down the out-of-school activities you were involved in:

22. Compared to other students in your YEAR 6 group, which of the following best describes MOST of the results on your last school report in YEAR 6? (please choose one answer)

○ Better than most other students in my year group

○ About the same as most other students in my year group

○ Not as good as most other students in my year group

○ I don't know

These last questions are about you and your family.

23. Are you male or female? (please choose one answer)

○ Male

○ Female

24. Please write the MONTH and YEAR you were born in;

MONTH: ________________________

YEAR: _________________________

25. Were you born in Australia? (please choose one answer)

○ Yes

○ No - Please write the name of the country where you were born: ____________________

26. Does your family own a car, truck or van?

○ No

○ Yes, one

○ Yes, two or more

27. Do you have your own bedroom for yourself?

○ No

○ Yes

28. How many computers do your family own? (including laptops and tablets, NOT including game consoles and smartphones)

○ None

○ One

○ Two

○ More than two

29. How many bathrooms (room with a bath/shower or both) are in your home?

○ None
○ One
○ Two
○ More than two

30. Does your family have a dishwasher at home?

○ No

○ Yes

31. How many times did you and your family travel out of Australia for a holiday/vacation last year?

○ Not at all

○ Once

○ Twice

○ More than twice

32. How well off do you think your family is?

○ Very well off

○ Quite well off

○ Average

○ Not so well off

○ Not at all well off

Thank you for completing this survey.
If questions in this survey have raised any issues for you, please talk to an adult you can trust or contact Kids Helpline on 1800 55 1800

Appendix 5: Post-transition survey instrument

Rising
to the
Challenge

ECU
EDITH COWAN UNIVERSITY

Dear Year 7 Student

My name is Liz Wenden and I am from Edith Cowan University. I am very interested in how young people just like you feel about their move into secondary school. Today I would like to ask you to some questions about being in secondary school, and how you feel about your friends and your family.

All information you provide will remain confidential. No one at your school or your home will see your answers.

Please read this page carefully before you start so you know how to answer the questions.

Please use the password printed on the card you have been given to login to the survey, and follow the instructions on the screen. Please ensure you click on the ‘submit’ button when you are finished.

This is not a test and there are no wrong or right answers. Please answer all the questions as honestly as you can. I am very interested in what you have to say. If you don’t want to answer any questions, you don’t have to.

If you have any questions about the survey or would like to talk to someone about the Rising to the Challenge project please contact me, Liz Wenden, by email at e.wenden@ecu.edu.au.

Thank you for taking the time to complete this survey. I really appreciate your help.

Regards

Ms Liz Wenden

The following questions ask you about YEAR 7 so far.

Thinking about TERM 2 in YEAR 7;

1. **Are there students in Year 7 who would;**

(please choose one answer for each statement)

	Lots of times	Sometimes	Never
Choose you on their team at school?	○	○	○
Tell you you're good at doing things?	○	○	○
Explain something if you didn't understand?	○	○	○
Invite you to do things with them?	○	○	○
Help you if you are hurt?	○	○	○
Miss you if you weren't at school?	○	○	○
Help you if something is bothering you?	○	○	○
Ask to work with you on group work?	○	○	○
Help you if other students were treating you badly?	○	○	○
Ask you to join in when you are alone?	○	○	○
Share his/her things with you?	○	○	○

2. **For each sentence, choose the answer that shows how much you agree or disagree.** *(please choose one answer for each statement)*

	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly Disagree
I feel alone at secondary school	○	○	○	○	○
I have lots of friends to talk to at secondary school	○	○	○	○	○
It's hard for me to make friends at secondary school	○	○	○	○	○
I have nobody to talk to in my classes	○	○	○	○	○
I don't have anyone to spend time with at secondary school	○	○	○	○	○
I'm lonely at secondary school	○	○	○	○	○
I feel left out of things at secondary school	○	○	○	○	○

3. **How do you feel about your school?**

(please choose one answer for each statement)

	Strongly Agree	Agree	Neither agree or disagree	Disagree	Strongly disagree
I feel close to people at this school	○	○	○	○	○
I feel like I am part of this school	○	○	○	○	○
I am happy to be at this school	○	○	○	○	○
The teachers at this school treat students fairly	○	○	○	○	○
I feel safe at this school	○	○	○	○	○

4. **At my school, there is a teacher or some other adult who:**

(please choose one answer for each statement)

	Not at all true	A little true	Pretty much true	Very much true	Unsure
Really cares about me	○	○	○	○	○
Tells me when I do a good job	○	○	○	○	○
Notices when I'm not there	○	○	○	○	○
Always wants me to do my best	○	○	○	○	○
Listens to me when I have something to say	○	○	○	○	○
Believes that I will be a success	○	○	○	○	○

The next question asks about your family.

For each of the following statements, decide how much you agree/disagree:

(please choose one answer for each statement)

I feel;

	Strongly agree	**Agree**	**Neither agree or disagree**	**Disagree**	**Strongly disagree**
Very close to my family	○	○	○	○	○
I am an important member of my family	○	○	○	○	○
Someone in my family cares what happens to me	○	○	○	○	○
I am able to discuss my problems with a family member	○	○	○	○	○
I have a good relationship with all my family	○	○	○	○	○
No-one in my family understands my problems	○	○	○	○	○
Everyone in my family are valuable members	○	○	○	○	○
At least one person in my family listens to my opinions	○	○	○	○	○
At least one person in my family listens to my problems	○	○	○	○	○
At least one member in my family takes an interest in my school work	○	○	○	○	○
I do things with at least one other family member (e.g. shopping)	○	○	○	○	○
There is almost always a parent or other adult at home before school	○	○	○	○	○
There is almost always a parent or other adult at home after school	○	○	○	○	○
There is almost always a parent or other adult at home at dinner time	○	○	○	○	○
There is almost always a parent or other adult at home in the evening after dinner	○	○	○	○	○

<u>The next questions are about you.</u>

5. **So we can find out how things have been going for you lately, please indicate if you have experienced any MAJOR PROBLEMS (e.g. parents separating, someone dying) in your life in the last 6 months.** *(please choose one answer)*

○ Yes

○ No

6. **Please read each statement and choose the answer that indicates how much the statement applies to you. There are no right or wrong answers. Do not spend too much time on each statement.**
(please choose one answer for each statement)

	False: Not like me at all; isn't like me at all	Mostly false	More false than true	More true than false	Mostly True	True: This stater describes well; it is v much like
I do lots of important things	○	○	○	○	○	○
In general, I like being the way I am	○	○	○	○	○	○
Overall I have a lot to be proud of	○	○	○	○	○	○
I can do things as well as most other people	○	○	○	○	○	○
Other people think I am a good person	○	○	○	○	○	○
A lot of things about me are good	○	○	○	○	○	○
I can't do anything right	○	○	○	○	○	○
I am as good as most other people	○	○	○	○	○	○
When I do something, I do it well	○	○	○	○	○	○
Overall I am no good	○	○	○	○	○	○
I sometimes take things that belong to other people	○	○	○	○	○	○
I sometimes tell lies to stay out of trouble	○	○	○	○	○	○
Honesty is very important to me	○	○	○	○	○	○
I always tell the truth	○	○	○	○	○	○
When I make a promise I keep it	○	○	○	○	○	○
I sometimes cheat	○	○	○	○	○	○
I often tell lies	○	○	○	○	○	○
I am honest	○	○	○	○	○	○
Cheating in a test is OK if I do not get caught	○	○	○	○	○	○
People can really count on me to do the right thing	○	○	○	○	○	○

7. **In the past FOUR WEEKS about how often:**

(please choose one answer for each statement)

	All of the time	Most of the time	Some of the time	A little of the time	None of the time
Did you feel tired out for no good reason?	❍	❍	❍	❍	❍
Did you feel nervous?	❍	❍	❍	❍	❍
Did you feel so nervous that nothing could calm you down?	❍	❍	❍	❍	❍
Did you feel hopeless?	❍	❍	❍	❍	❍
Did you feel restless or fidgety?	❍	❍	❍	❍	❍
Did you feel so restless you could not sit still?	❍	❍	❍	❍	❍
Did you feel depressed?	❍	❍	❍	❍	❍
Did you feel that everything was an effort?	❍	❍	❍	❍	❍
Did you feel so sad that nothing could cheer you up?	❍	❍	❍	❍	❍
Did you feel worthless?	❍	❍	❍	❍	❍

The following questions ask about how you feel about your school, the students at your school, and the staff at your school.

8. **How was the move from primary to secondary school for you?**

(please choose one answer)

❍ Difficult

❍ Somewhat difficult

❍ Somewhat easy

❍ Easy

Please explain why:

____

____

____

9. Please describe the main things you like about being in YEAR 7 in your SECONDARY SCHOOL (not including teachers or students):

10. Please describe the main things you dislike about being in YEAR 7 in your SECONDARY SCHOOL (not including teachers or students):

11. Please describe the main things you like about the STUDENTS at your SECONDARY SCHOOL:

12. Please describe the main things you dislike about the STUDENTS at your SECONDARY SCHOOL:

13. **Please describe the main things you <u>like</u> about the TEACHERS at your SECONDARY SCHOOL:**

____

____

____

____

14. **Please describe the main things you <u>dislike</u> about the TEACHERS at your SECONDARY SCHOOL:**

____

____

____

____

15. **Since starting YEAR 7, what things about your secondary school have you enjoyed or have been happy about?**

(please choose one answer for each statement)

	Yes	No
Being in a larger school	○	○
More freedom	○	○
More students	○	○
Being able to choose some classes	○	○
Changing classes	○	○
Older students	○	○
Making new friends)	○	○
Having new teachers	○	○
Participating in sports, clubs etc.	○	○
Having lockers	○	○
Getting good grades	○	○
More school activities	○	○
More choices at lunch	○	○
Attending more school events (eg. football games, social events)	○	○
Other (please write your answer here)	○	○

16. **Since starting YEAR 7, what things about your secondary school were causing you problems, or were you unhappy about?**
(please choose one answer for each statement)

	Yes	**No**
Finding my way around or getting lost	○	○
Getting along with other students	○	○
Pressure to do well	○	○
Safety or being hurt by other students	○	○
Being bullied	○	○
Fitting in or making friends	○	○
New and more students	○	○
Hard or unfriendly teachers	○	○
Hard classes	○	○
New rules and expectations	○	○
How much homework I would have	○	○
Feeling pressure to do things I don’t want to do	○	○
Being made fun of	○	○
Using a locker	○	○
Riding the bus	○	○
Getting to class on time	○	○
Older students	○	○
Getting good grades	○	○
Other (please write your answer here)	○	○

17. **In Term 2 of YEAR 7, in an AVERAGE WEEK did you participate in any activities (such as sports, youth groups, drama groups, church groups etc) outside of school hours?** **(**please choose one answer)

- ○ No – go to Q19
- ○ Yes ↓

Please write down the out-of-school activities you were involved in:

18. **Compared to other students in your YEAR 7 group, which of the following best describes MOST of the results on your last school report in YEAR 7?** *(please choose one answer)*

- ○ Better than most other students in my year group
- ○ About the same as most other students in my year group
- ○ Not as good as most other students in my year group
- ○ I don't know

19. **What is the name of the primary school where you completed Year 6?** *(please write your answer below)*

<u>These last questions are about you and your family.</u>

20. **Are you male or female?** *(please choose one answer)*

- ○ Male
- ○ Female

21. **Please write the MONTH and YEAR you were born in;**

MONTH: ________________________

YEAR: _________________________

22. **Were you born in Australia?** *(please choose one answer)*

○ Yes

○ No - Please write the name of the country where you were born: ____________________

23. **Does your family own a car, truck or van?**

○ No

○ Yes, one

○ Yes, two or more

24. **Do you have your own bedroom for yourself?**

○ No

○ Yes

25. **How many computers do your family own? (including laptops and tablets, NOT including game consoles and smartphones)**

○ None

○ One

○ Two

○ More than two

26. **How many bathrooms (room with a bath/shower or both) are in your home?**

○ None
○ One
○ Two
○ More than two

27. Does your family have a dishwasher at home?

○ No

○ Yes

28. How many times did you and your family travel out of Australia for a holiday/vacation last year?

○ Not at all

○ Once

○ Twice

○ More than twice

29. How well off do you think your family is?

○ Very well off

○ Quite well off

○ Average

○ Not so well off

○ Not at all well off

Thank you for completing this survey.
If questions in this survey have raised any issues for you, please talk to an adult you can trust or contact Kids Helpline on 1800 55 1800

Appendix 6: Student file record sheet

Student File Record Sheet

Date (T1): Date (T2):

	Maths grade			English grade			Ongoing medical conditions	Absentee days
Student ID	Year 6	Source	Year 7 (T2)	Year 6	Source	Year 7 (T2)		
Notes		Source Yr 5 ☐ Yr 6 ☐			Source Yr 5 ☐ Yr 6 ☐			

Date (T1): Date (T2):

	Maths grade			English grade			Ongoing medical conditions	Absentee days
Student ID	Year 6	Source	Year 7 (T2)	Year 6	Source	Year 7 (T2)		
Notes								

Date (T1): Date (T2):

	Maths grade			English grade			Ongoing medical conditions	Absentee days
Student ID	Year 6	Source	Year 7 (T2)	Year 6	Source	Year 7 (T2)		
Notes								

Date (T1): Date (T2):

	Maths grade			English grade			Ongoing medical conditions	Absentee days
Student ID	Year 6	Source	Year 7 (T2)	Year 6	Source	Year 7 (T2)		
Notes								