Teacher-Pupil Relationships and Teacher Talk: Introducing Emotion Coaching as a Socio-Emotional Talk Strategy into a Primary School Setting

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Abstract

Teacher talk has been posited to be a malleable classroom construct, with a variety of strategies and theoretical standpoints presented on how practitioners can best utilize talk to support teacher-pupil relationships. The research explored teacher talk in a primary, mainstream educational setting, examining the use of classroom talk prior to, and following, the introduction of a verbal strategy to support pupils' socio-emotional functioning - Emotion Coaching (EC).

A Mixed Methods Convergent research design was utilized to address the research questions, with 12 participants recruited through convenience sampling. Participants' attitudes were examined through semi-structured interviews, and teacher talk practice was explored using classroom observations.

The results indicated that a variety of teacher talk strategies were used in the classroom to support relationships, with some disparity between the two data sets. For example, although teachers reported that the use of positive language and listening strategies were most effective, the observations indicated a wider talk strategy repertoire. There were some reported changes to the use of classroom talk following EC introduction, including an increased focus on well-being and empathetic talk, listening to others, and positive praise. The observational data concluded no statistical significance between pre- and post- EC training. Furthermore, a non-significant, low number of socio-emotional talk strategies were observed in practice in both phases of the research. The benefits and challenges of EC introduction were considered, with implementation effectiveness, time, and staff buy-in presented as the predominant challenges. The benefits included whole-school language consistency and emotional self-reflection for participants, their colleagues, and pupils throughout the school.

At the time of the research, observations of EC in practice had not previously been investigated alongside teacher perceptions of the effectiveness of EC, thus providing a novel contribution to the research. Moreover, the observational technique contributed to the understanding of teacher talk and classroom strategy as a whole, highlighting the potential for reflective practice. Arguably, understanding how teachers can use talk to support teacher-pupil relationships has important practical implications for teacher training and school strategy. Further exploration of talk strategies and EC in practice is warranted and important, given the potential impact of teacher-pupil relationships on pupils' feelings of school belonging, success, and future life pathways.

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Glossary of Abbreviations and Terms

Abbreviation or Term	Definition	
AF	Attachment Figure	
CPD	Continuing Professional Development: learning activities and	
	training for school staff	
DCSF	Department for Children, Schools and Families	
DfE	Department for Education	
DfES	Department for Education and Schools	
EC	Emotion Coaching	
EEF	Education Endowment Fund	
EYFS	Early Years and Foundation Stage	
IWM	Internal Working Models (Bowlby, 1969)	
KS1	Key Stage One: Ages 5 – 7 years in primary education settings	
	in the UK	
KS2	Key Stage Two: Ages 7 - 11 years in primary education	
	settings in the UK	
MEP	Meta-Emotional Philosophy (Gottman, 1997)	
PPCT	Process – Person – Context – Time model (Bronfenbrenner and	
	Evans, 2000): relationships and development can be effectively	
	researched when looking at these different, interacting	
	elements.	
RQ	Research Question	
SE	Socio-Emotional	
SEAL	Social Emotional Aspects of Learning	
SEL	Socio-Emotional Learning	
SEND	Special Educational Needs and Disability	
SPM	Statements Per Minute: Quantitative data analysis (Chapter	
	Seven)	
Teacher/s	'Teacher/s' within this thesis refer to qualified teaching	
	practitioners and teaching support staff (teaching assistants,	
	learning support assistants, cover supervisors, higher level	
	teaching assistants and early years support workers).	
WPM	Words Per Minute: Quantitative data analysis (Chapter Seven)	

Chapter One: Research Introduction

1.1. Introduction

"The quality of the teacher-student relationship may be the single most important factor for positive adaptation to school" (Kennedy and Kennedy, 2004:253)

Teacher-pupil relationships are imperative in order to support pupils' social, emotional, academic and cognitive development (Hamre and Piante, 2001; Prewett et al., 2019). However, there are conflicting perspectives on the most appropriate strategies teachers can use in order to support relationships in the classroom (Bergin and Bergin, 2009). This thesis explores the ways in which teachers can use talk to develop secure-type attachment relationships with their pupils in a primary, mainstream educational setting. Attention is given to teacher talk prior to, and following, the introduction of a teacher talk strategy – Emotion Coaching (Gottman et al., 1996) into the research school. The extent to which Emotion Coaching (EC) impacts teacher practice is inspected, particularly with reference to the impact on the facilitation of teacher-pupil relationships.

Chapter One provides an introduction to the research by discussing the importance of teacherpupil relationships and the justification for focussing on teacher talk as a strategy for improving relationships. The research aims, objectives and research questions will follow. Finally, the research context, significance and thesis structure will be considered.

1.2. Research Foundations

A successful teacher-pupil relationship can be defined as a supportive, affectionate, warm connection, encompassing open communication and low levels of conflict (Davis, 2003; Pianta, 2001; Baker, 2006; White, 2013); a definition that is underpinned by the tenets of attachment theory (Bowlby, 1953, 1969). This thesis is underpinned by the belief that successful, secure-type teacher-pupil relationships are seen as fundamental for enhancing learning opportunities within educational contexts, viewed from an attachment theoretical standpoint. Where teachers are referred to throughout this paper, the term encompasses qualified teaching practitioners, as well as teaching support staff (teaching assistants, learning support assistants, cover supervisors, higher level teaching assistants and early years support workers).

A classroom environment enables pupils to develop social competencies, language skills, negotiate emotions and foster trust between peers and adults through learning from and with each other: it can therefore be argued that the fundamental purpose of education cannot solely be to raise standards in academia (Frymier, 2007). Education is not a solitary activity, it

requires collaboration and interpersonal relationships between peers and teachers in order to create a sense of school community (Vygotsky, 1962; Dewey, 1958) in which optimal learning can take place. As Frymier (2007) suggests, pupils enter the classroom with relational goals: a need for teachers and pupils to forge relationships. Where strong (secure-type) teacher-pupil relationships exist, the effect size on learning outcomes (both linguistic and cognitive) has been shown to be as large as 0.72 (Fisher et al, 2016; Hattie, 2012). An effect size is the measure of strength between two variables, where an effect size between 0.5 – 1.0 is considered a large effect (Cohen et al., 2007). Therefore, an effect size of 0.72 suggests that where strong teacher-pupil relationships exist, learning outcomes are improved.

Secure-type relationships improve motivation, resilience and protective factors for later-life substance misuse, anti-social behaviour and mental health challenges (Howes and Richie, 1999; Dobbs and Arnold, 2009; Prior and Glaser, 2006; Resnick et al., 1997). Conversely, insecure or weak teacher-pupil relationships have demonstrated a greater propensity for pupil attention-seeking, off-task and challenging behaviours (Garner and Waajid, 2008). Teacher burnout and stress may be a result of a failure to effectively form secure-type relationships and classroom management (Hutchings et al., 2002; Clunies-Ross et al., 2008; Hastings and Bham, 2003).

From an attachment theoretical perspective, the presence of secure-type attachment relationships in the classroom is believed to bolster pupils' Internal Working Models (IWMs) of adults (teachers) as responsive, supportive, trustworthy and helpful (Bowlby, 1969; Bretherton and Munholland, 1999; Englund et al., 2004). Pupils feel safe and are able to develop optimally through the positive, foundational, relational structures in place (Kennedy and Kennedy, 2004; Bergin and Bergin, 2009). IWMs were first proposed by Bowlby (1969) who posited that infants use their relationship with their mothers to form mental representations (or prototypes) of other relationships. These prototypes are a set of cognitions regarding themselves and others, and how they interact and build relationships with others as they grow, known as IWMs. The support and development of IWMs may be especially important in a primary school setting, where the foundational beliefs of schooling are developed at an early age with one of two key staff members. A primary school setting may provide a basis for relationships outside of the family unit, with essential opportunities for building consistent, trusting and supportive relationships (Bretherton and Munholland, 1999; Bergin and Bergin, 2009).

The thesis formulation developed over years of researcher interest and reflexivity when supporting and advising educational practitioners in developing classroom relationships. It was noted that, whereas some practitioners were confident at implementing relational

strategies, others found particular challenges in building successful teacher-pupil relationships. The latter often resulted in suboptimal classroom conditions, such as challenging pupil behaviours, difficulties in establishing routines, coercion techniques and teacher stress. Conversely, successful relationships were linked to classroom atmospheres of trust and support, where errors were welcomed and where student feedback and questioning was high. This researcher reflexivity mirrored that of educational research, which highlighted the importance of teacher-pupil relationships.

1.3. Teacher Talk

Having decided on the research focus of teacher-pupil relationships within primary educational, mainstream settings, an extensive literature search was conducted over a span of two years between 2017 and 2019. The literature review was conducted using peer reviewed journal articles, academic theses and government publications accessed through the British Education Index, Educational Resources Information Centre (ERIC), PsycINFO, EBSCO eBook Open Access (OA) collection and government sources. The Boolean operator 'and' was used in all literature search terms. A snowball method of searching texts was also utilised, where literature that has been cited in other articles and publications was searched. Table 1 provides an overview of the literature review search terms used in the three main areas of the research: teacher-pupil relationships, strategies to support relationships and teacher talk.

Table 1: Literature review search terms

Area of Research	Search Terms	
Teacher-pupil relationships	Teacher-pupil relationships; adult-child relationships; classroom relationships; school belonging; school connectedness; school attachment; teacher attachment	
Strategies to support relationships	School relational strategies; school strategies; promoting/supporting school relationships; Pupil satisfaction	
Teacher Talk Strategies	Teacher talk, (teacher) verbal instructions; (teacher) verbal behaviours; teacher instruction, classroom talk, teacher-pupil talk, classroom discourse	

A myriad of recommendations and strategies were uncovered in supporting relationships in the primary classroom for forming good relational patterns. Recommendations included (but not exhaustively) the longevity of staff members, facilitated transitions, extra-curricular activities, class size, intervention strategies and teacher talk (Miller et al., 2000). These many school structures provided interesting areas for focus, however, the decision was taken to focus on one specific area – the verbal behaviour of teachers.

Teacher talk can be exhilarating or boring, engaging or alienating, or it can be used with precision or struggle to communicate meaning in a rapport-intensive environment (Frisby and Martin, 2010). The richness and experience of teacher talk vary greatly due to instructional communication competence - a critical role for teachers (Worley et al., 2007). The reasons for the focus on teacher talk throughout this thesis are threefold. Firstly, teacher talk can be engineered and altered directly by practitioners. Other areas of focus, such as class sizes or transitional packages, are not always able to be influenced directly by classroom practitioners, and rely more distinctly on outside agencies, such as government or local policy or budgetary requirements. However, teacher talk has direct practitioner applicability in primary education, both within the classroom and in the school environment. Teachers are able to directly influence and manipulate their talk towards pupils.

Secondly, educationalists have argued for many decades that talk is the main pedagogical tool. Vygotsky (1962) considered that talk was central to all learning. Social interactions between teachers and pupils, and between peers are critical in order to develop understanding, experience and provide new frames of reference (Dewey, 1958) within a supportive classroom community, based on trust and mutual respect. It can be argued that a successful classroom "depends on the social relationships, the communication system, which the teacher sets up" (Cazden (2001:152) where talk links the social and cognitive aspects of the classroom together, jointly creating knowledge and understanding through language (Mercer and Hodgekinson, 2008). Although the influence of non-verbal behaviour should be acknowledged as a communication system (such as eye contact, teacher stance and facial expression), a substantial part of our attitudes, emotions and cognitions are portrayed through verbal language in order to influence and be influenced by others (Mercer and Littleton, 2007).

Finally, systemic perspectives of child development, such as the Bio-Ecological Systems Model (Bronfenbrenner, 1995; 2005) posit that increasingly more complex reciprocal interactions between the child, people and the environment, drive optimal development. Although these interactions or 'proximal processes' (Bronfenbrenner, 1995) can be of many different forms, verbal interactions have been posited to be crucial in the successful cognitive development of individuals within a systemic model (Paquette and Ryan, 2001). In this respect, Mercer and Hodgekinson (2008) suggest that the sense of self and development of a relationship with an adult occurs as individuals make connections through more and more complex and sustained verbal interactions. Talk can support cognitive, social and academic development within the environmental system of primary school.

Studies on the attitudes and beliefs of pupils have supported the significance of teacher talk. Jennings and Greenberg (2009) concluded that the productive use of talk to support, guide and model behaviours was the most prevalent factor in deciding a 'good' teacher. Teacher talk could account for approximately 50% of whether students felt a sense of belonging in school (Leithwood et al., 1996) and Miller et al. (2000, 2002) highlighted pupil and parent attributions to a successful teacher as fairness and consistency of response as predominant aspects of teacher success. It could be argued that talk is imperative in the classroom and that instructors play a critical role in promoting and encouraging the 'correct' type of talk (Frisby and Martin, 2010). The *how* and *why* types of teacher talk are used to develop relationships forms the basis of this research.

1.4. Research Formulation

Given the potential implications of poor teacher-pupil relationships on pupil academic, social and emotional development, as well as on teacher retention, well-being, stress and job satisfaction; it would be beneficial to understand more about how teacher-pupil relationships can be fostered through talk. Conducting literature reviews (Table 1, Section 1.3.) in these areas elucidated a myriad of teacher talk strategies that may support classroom relationships from an attachment perspective. Strategies included (but were not exhaustive to) behaviourist perspectives on rewards and sanctions (Payne, 2015; Hayes et al., 2007); cognitive-affective strategies, such as positivity and motivation (Wilson et al., 2007; Cadima et al., 2015); specific feedback implications (Rocca, 2008); and Socio-Emotional (SE) strategies to improve emotional understanding and acknowledgement (Friedman-Krauss et al., 2014). At times, posited talk strategies appeared to be competing with each other theoretically and/or practically, as well as demonstrating varied results in the power of supporting teacher-pupil relationships in a classroom. However, it would be sensible to suggest that teachers use a variety of talk strategies in order to facilitate and support relationships.

With the increased focus on mental health in schools and emotional literacy within the last two decades, research into SE classroom universal and intervention strategies in order to support pupils' emotional well-being and regulation have grown in number. It is now considered that SE talk is important in fostering and maintaining teacher-pupil relationships (Prewett et al., 2019), although SE research is currently limited in approach (for example, a reliance on self-reported benefits) and results (for example, EEF, 2018). However, through the journey of reviewing talk strategies to facilitate relationships from an attachment perspective, a particular SE talk strategy came to light: EC, (Gottman et al., 1996). EC is described as a strategy that:

"can be a universal, supportive and empowering practice for working with other people's emotions, including challenging behaviours" (Gilbert, 2021: 15).

EC as a SE talk strategy in education was in the early stages of school implementation at the time of research formulation (for example, Gus et al., 2015; Rose et al, 2016), but in the geographical area in which the researcher worked, an EC training network was being developed across primary schools. EC as a SE talk strategy provided an interesting focus to the developing research topic.

It was therefore decided that an exploration into teacher talk to facilitate secure-type relationships would be undertaken alongside a school's journey of introducing EC. A key component was discovering *how* teachers mediate talk. In this respect, existing teacher talk strategies could be analysed and inspected prior to - and following - EC introduction across the school to explicate the types of talk strategies that are used and favoured. Moreover, an examination of EC as a relatively new talk strategy in schools could be examined to understand the impact on relationships, teacher attitudes, talk and school structures.

A number of objectives were presented regarding the research problem:

- To understand and identify the types of teacher talk used in primary classrooms
- To discover teacher attitudes towards teacher talk, particularly with reference to supporting teacher-pupil relationships in the school
- To evaluate the impact of a teacher SE talk strategy EC on teacher-pupil relationships and teacher talk
- To understand practitioner and school practicalities of introducing EC into the school

1.5. Research Questions

Two main research questions and one sub-question were formulated from the research objectives:

RQ1: How is teacher-pupil talk used in the primary classroom to facilitate teacher-pupil relationships?

RQ1a: To what extent does a socio-emotional talk strategy (Emotion Coaching) influence teacher talk within a primary classroom?

RQ2: What are the benefits and challenges of introducing Emotion Coaching as a whole school, socio-emotional learning strategy to support pupil-teacher relationships?

1.6. Conceptual Framework

Attachment theory was utilised as the basis of the research conceptual framework, with an optimal, secure-type attachment relationship between teachers and pupils at the core. Secure-type attachment relationships are likely to influence pupils' IWMs (Bowlby, 1969; Bretherton and Munholland, 1999; Englund et al., 2004) - if relationships are secure, pupils hold IWMs of teachers as helpful and trustworthy, and view school as a supportive environment. However, a teacher-pupil relationship does not exist in isolation. In order to acknowledge the complexities of pupils and teachers within a school environment, a partial implementation of Bronfenbrenner's (1995, 2005) systemic theory was adopted. The Microsystem layer of Bronfenbrenner's Bio-Ecological Systems Theory (1995) represents the direct influences on a child's development in their environment – this may be home, family, or schooling. The Microsystem, therefore, acknowledges that the school environment, ethos, structures and other peers/adults may influence teacher-pupil relationships. The research attempted to understand the influences of talk on the pupil-teacher relationship: how talk is used, preferred and viewed by practitioners in a school setting. With the introduction of EC as a talk strategy, it was important to understand if EC influences talk, as well as subsequent practitioner attitudes towards EC.

Figure 1 presents a representation of the conceptual framework. The optimal, secure-type attachment relationship between teachers and pupils is shown by the intersection of circles. The Microsystem (Bronfenbrenner, 2005) – the school's environmental context, ethos and systems – is shown by the encompassing circle around the teacher and pupil.

Although talk is bi-directional and reciprocal between teachers and pupils, teacher talk is presented as an influence (arrow) on the teacher-pupil relationship within the teacher area. The one-directional arrow is not to deny the power of pupil talk, but represents the current research focus of teacher-led talk strategies. It is unknown whether the introduction of EC will impact teacher talk and therefore EC is shown as a dashed arrow. Other potential influences on teacher talk and EC acquisition and implementation are shown by dashed lines to both boxes - teacher attitudes and perceptions towards relationships and teachers' prior training - investigated as part of the research.

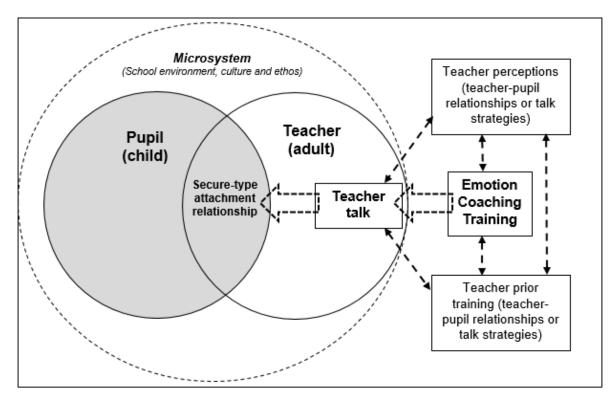


Figure 1: Research conceptualisation of Emotion Coaching training impact on teacher talk

1.7. Research Context

The research questions were addressed through a Mixed Methods framework, undertaken from the epistemological position of Pragmatism (Chapter Five). Within the research school setting, classroom observations of teacher talk were undertaken, as well as semi-structured interviews in order to ascertain participant intention, attitudes and practice (Chapter Six).

The research school was identified through an independent training network that wished to embed EC as a verbal, relational (SE) strategy between teachers and pupils, in the school. The head teacher's desire for EC resulted from a pupil voice questionnaire which concluded that pupils did not feel successfully communicated with, listened to or supported. The head teacher concluded that "the relationships [teachers and pupils] were just not there" and she wished to support and develop teacher-pupil relationships through a potentially tangible talk strategy that may develop staff knowledge and change classroom practice.

At the time of focus, the research school was an average-sized primary school (DfE, 2020) in the South East of England. The number of pupils on the Special Educational Needs and Disability (SEND) register was higher than the national average at 14.7% (12.6% nationally). The percentage of pupils with whom English is an Additional Language (13.2%) and those entitled to Free School Meals (15.5%) were both lower than the national average (21.2% and 23% respectively). Overall pupil absence rates were comparable to the national average at

4%. Pupils reaching the expected standards in reading/writing and Maths combined at key stage two in their National Standard Assessments Tests (SATs) were below average for a three-year period (2016 – 2019) in comparison to the national average (school average of 48% versus the national average of 63%). Pupils attaining greater than expected results in their combined SATs were also lower than the national average at 5% of pupils versus 10% nationally (DfE, 2020).

The research was conducted during the Covid-19 global pandemic, with the two phases of research taking place before and during the pandemic and associated changes to school structures (2019 – 2020). The pandemic created an interesting focus as, despite inspecting SE talk alongside other types of classroom talk, there was a potential shift in societal expectations of well-being and community support (Grigoryan and Krylov, 2020)

1.8. Research Contributions

The intention was to make the study a valuable one with regard to teacher-pupil relationships and teacher talk. Although a myriad of well-established literature has identified key themes regarding teacher talk and its' impact on relationships, little research has focused on combining teacher attitude acquisition (through semi-structured interviews) and observations of classroom practice within a Mixed Methods approach. This study, therefore, attempted to address these research gaps in order to provide practical applications within education.

It was hoped that the research would provide teachers with tangible strategies and practical tools on which to base classroom talk in order to support relationships. Although this research does not assert to be wholly generalizable due to the lack of sample representativeness, it was hoped that the study would allow for reflective practice and insight into classroom talk for practitioners. In this respect, an attempt to improve secure-type relationships would hope to benefit pupils in their feelings of security, comfort and support.

Moreover, although the SE talk strategy of EC is gaining attention within educational research in the UK (Gus et al., 2015; Rose et al., 2016), this study attempted to contribute to this field of research by including observations of EC practice, thus far limited in number. It was hoped that EC observations would drive further pathways in relation to SE educational strategies, with a practical application for teachers, school leaders, researchers and parents.

The research follows the journey of a novice Doctoral student in research design, refinement and execution. This thesis, therefore, aims to be reflexive in nature, ensuring transparency of methods, analysis and limitations throughout.

1.9. Thesis Structure

The structure of this thesis consists of ten chapters:

Chapter One, the current chapter, outlines the introduction, rationale and context for the study. It also outlines the research questions and gives a brief overview of the theoretical foundations, framework and methodological choices that guide the practice of the research.

Chapters Two, Three and Four take an in-depth look at the literature pertinent to this study. Chapter Two provides a discussion of the framework of attachment theory with regard to teacher-pupil relationships and how attachment theory can be used to guide research in the context of primary education. Chapter Three presents the main teacher talk strategies theorised to support relationships, including supporting literature and the limitations of strategies. Chapter Four provides an in-depth focus on EC as a SE talk strategy to support teacher-pupil relationships and the implications for school practice.

Chapter Five and Six present the methodological choices made in the research. Chapter Five presents the research design and the ontological and epistemological considerations informing the methodological approaches of the study. Descriptions and justifications are developed for the methodology; including research instruments, participant recruitment and ethical considerations. Chapter Six presents the method and analysis of data collection at the various stages of the research.

Chapters Seven and Eight present the quantitative and qualitative results from the research respectively.

Chapter Nine provides an in-depth discussion of the findings in relation to each research question, combining the results from the quantitative and qualitative information in order to address the research aims.

Chapter Ten offers some concluding thoughts for the research, including researcher reflections and limitations of the research. Theoretical contributions are discussed, including suggestions for further research.

Chapter Two: Literature Review Framework

2.1. Introduction

This chapter provides an overview of attachment theory as the theoretical and conceptual foundation of the research. Secure-type attachment relationships are the desirable construct between teachers and pupils within the classroom and beyond (Bergin and Bergin, 2009). An overview of attachment theory is provided within this chapter, with a consideration of its relevance and applicability within education and most importantly, the relevance to the research constructs. This chapter also makes reference to the context in which teacher-pupil relationships are formulated, drawing on a systems theory (Bronfenbrenner, 1995; 2005). Teacher-pupil attachment relationships within a primary, mainstream educational context provide the foundations of the research: whether attachment relationships can be fostered, maintained or improved using teacher talk strategies. Talk strategies are subsequently presented in Chapters Three and Four.

2.2. Attachment Overview

Based on the early work of Bowlby into attachment, separation and loss (1953, 1969), attachment theory posits that relationships between infants and their mothers affect the behaviours of infants which pervade later relationships, including those with peers and adults within educational settings (Barrett and Trevitt, 1991). Theoretical and empirical evidence regarding attachment theory was initially based on the work between mothers and their infants; attachment theory is now presumed relevant to other caregivers, known as Attachment Figures (AFs).

Early experiences (such as pain, hunger or emotional comfort) may be co-regulated or dysregulated by an AF, depending on the caregiver's responsiveness and sensitivity to the infant over time (Schore and Schore, 2007). Empirical studies with infants between the ages of 2-12 months across cultures, demonstrated that infants exhibit a range of proximity-seeking behaviours in the face of threat in order to achieve attachment (Van Ijzendoorn and Kroonenberg, 1988). By 18 months of age, distinct attachment styles are evident between infants and their AF (Ainsworth and Bell, 1970), categorised as *secure* or one of three types of *insecure* attachment. Two insecure attachment styles (insecure-avoidant and insecure-resistant) were initially proposed (Ainsworth, 1979) and a third style (insecure-disorganised) was latterly included (Main and Solomon, 1990). A secure attachment style is optimal, whereby securely attached infants are associated with higher rates of sensitivity and responsiveness from an AF (Ainsworth, 1979).

Table 2 provides an overview of the four main attachment styles, including a description of exhibited infant/child and AF behaviours within each attachment style. Although the four attachment styles are well-considered by researchers, some contention exists as to whether the boundaries and styles are as consistent and well-defined as purported. Researchers may consider that a continuum of attachment and emotional regulation may be more appropriate, ranging from insecure-avoidant at one end, to insecure-resistant at the other end with secure attachment styles based in the centre of the continuum. Thus infants may display attachment behaviours more fluidly across the continuum, rather than in set categories (Bomber, 2015; Bergin and Bergin, 2009).

Table 2: The four attachment types (Ainsworth and Bell, 1970; Main and Solomon, 1990)

Attachment type	Infant/child presentation	AF presentation
Secure	 Interested in novel situations when AF present Positive, open interactions with AF Older children seek joint problem solving 	 Sensitive to child's needs Accurate interpretations of needs from child Warm, positive statements – good communication
Insecure – avoidant	 Independent of AF, may turn away Avoidance of emotional closeness Keeps AF close in case need help Older children do not seek comfort when distressed 	Avoidance of emotional states
Insecure – resistant	 Difficult to move away to explore novel situations Exaggerated emotions Can be impulsive/reactive Seeks contact but difficult to be comforted 	 Exaggerated emotions Low levels of sensitivity Use of coercion Inconsistent/inadequately responsive
Insecure – disorganised	 Lack of predictable response Heightened emotions Incomprehensible or frightening behaviour as a response to similar pattern from AF 	Lack of predictable responseContradictory behaviour

Despite such debate, theorists generally accept the explanation that early interactions with AFs underpin how children view themselves in relation to the social world via IWMs (Bowlby, 1969). IWMs allow infants to develop mental representations of themselves and expectations of others in order to approach the world. In secure infant-AF relationships, children create IWMs of others as trustworthy, supportive, responsive and positive (Baumeister and Leary, 1995) as well as a model of the self as valuable and effective when communicating with others.

For a secure infant, the development of language and cognitive ability means that positive representations become more elaborate, stable and symbolic over time (Bretherton and Munholland, 1999). Conversely, those who form insecure attachments with AFs are more likely to have IWM representations of themselves and others as less responsive, and unable to support and help in times of need. Insecure relationships create a higher risk for both internalising and externalising behaviour problems, presumably via the child's IWM (Bergin and Bergin, 2009).

Secure attachments may also be linked to biological elements of development, thus providing a "modern attachment theory" (Schore and Schore, 2007:9). Through psychological attunement of the mother to an infant, a co-regulation of the central and autonomous nervous systems may occur, such as reducing the stress response through soothing a child when distressed (Porges and Furman, 2011). Although an infant initially co-regulates with a caregiver, attached individuals learn to become increasingly self-regulated through an adaptive capacity. Secure attachments may be the basis for emotional regulation (Bergin and Bergin, 2009), regulators of homeostasis (Ovtscharoff and Braun, 2001) and possible promotors of synaptic connections (Sullivan and Gratton, 2002) in the maturation of the brain system. Through dyadic interactions, secure attachments may shape the early organisation of the right inferior frontal cortex, shown to fire in emotional regulation situations (Bucheim et al., 2006). It appears that the strength of the infant-AF relationship in the early stages of life may have a biological and physiological impact, as well as emotional and relational impact, whereby responsiveness and sensitivity are key factors for optimal development (DeWolff and van lizendoorn, 1997).

2.3. Attachment Implications for Education

An explosion in understanding about the implications of early attachment experiences on brain structures, social and emotional development have occurred in the literature (Porges and Furman, 2011; Bucheim et al., 2006; Bretherton and Munholland, 1999). Consequently, the influences of attachment theory on education, teaching and learning have become areas of focus for researchers. Attachment theory has implications for education in two main ways, both indirectly and directly (Bergin and Bergin, 2009).

Indirectly, early infant-AF attachments pervade later school success (Bergin and Bergin, 2009). Early experiences with AFs are particularly important in shaping the IWM of how infants view themselves and future relationships, serving as a prototype for approaching relationships with school adults and peers. Secure attachments in infancy are thus predictive of school success, including academic performance and social competence (Kennedy and Kennedy,

2004). Longitudinal studies of attachment (for example, Sroufe et al., 1983) have demonstrated links to several outcomes relevant to school success. Secure infant-AF relationships have been associated with higher levels of willingness to accept challenges, school engagement and emotional regulation and coping skills, as well as lower risk factors for pathology and delinquency (Weinfield et al., 1999; Dobbs and Arnold, 2009; Prior and Glaser, 2006; Bergin and Bergin, 2009).

Directly, schools may provide opportunities for child IWMs to be modified or developed through relationships with teachers, re-attuning IWMs by a 'good enough' carer (Bergin and Bergin, 2009). For children whose AF attachment style is insecure, other adults (such as teachers) may be able to buffer these effects and provide a secure and stable base for the development of emotional regulation, resilience, socialisation and independence (Bretherton and Munholland, 1999). Teacher-pupil relationships may allow for pupils to foster positive representations of themselves and others. A strong argument is therefore presented for giving teachers the *understanding and tools* in order to assist pupils in establishing more positive internal representations (or IWMs) of themselves in relation to others (Englund et al., 2004).

Beyond an infant-AF relationship, Howes and Richie (1999) identified three criteria for identifying attachment relationships that are relevant to schools: physical/emotional care, consistent presence and emotional investment. All three of these criteria have the potential to be present in educational settings, and studies involving daycare providers and teachers (Pianta and Steinberg, 1992) have concluded that teacher-pupil attachments are qualitatively similar to those with primary AFs. Pianta et al. (1997) and Howes and Richie (1999) concluded that in secure pupil-teacher relationships, pupils exhibited trust, felt safe, sought help appropriately and accepted comfort, similar to secure infant-AF attachments. Conversely, insecure pupil-teacher relationships were defined as either fussy, clingy or demanding or avoidant of tasks and people. Howes and Richie (1999) also defined pupils who were *near* secure: attachment relationships in the making. These pupils demonstrated some avoidant and some secure-type behaviours. Similarly to infant-AF relationships, it is difficult to ascertain whether attachments with teachers are easy to categorise or present along a continuum of variable behaviours. However, it still appears that secure relationships between teachers and pupils are optimal, as presented in further detail in Section 2.4.

It is important to note here that not all successful pupil-teacher relationships are attachment relationships. Whereas some teacher-pupil relationships may be attachment relationships, some may not (Bergin and Bergin, 2009) and therefore it can be difficult to define pupil-teacher relationships as secure, insecure, or merely non-attachments. Some school structures mean that attachment-type relationships are more challenging to form and define. For example,

secondary schools make forming attachments relationships between teachers and pupils more challenging due to changing, subject-specific teachers, moving between classrooms and the pre-established pupil IWMs as later in life (Eccles et al., 1993; DeMulder et al., 2003). The current research, therefore, is based within a primary school setting, where teachers and classrooms are more stable throughout an academic year. Further information on the research setting is included within Chapter Five.

For these reasons, the term *secure-type* relationships (rather than secure) will be used in this thesis and examined within a primary educational setting. Secure-type attachments are optimal between pupils and teachers and are seen as exhibiting mutual warmth and trust, holding high expectations and respect (Davis 2003).

2.4. The Impact of Secure-type, Teacher-Pupil Relationships

Secure infant-AF relationships correlate with improved social, emotional and cognitive development later in life (Prior and Glaser, 2006; Kennedy and Kennedy, 2004; Bergin and Bergin, 2009). Research into teacher-pupil attachments in primary educational settings has also demonstrated pervasive effects later in life, highlighting the importance of developing secure-type attachment relationships within schools. These effects include providing protective factors for mental health in childhood (Prior and Glaser, 2006); reduction in later substance misuse and violent behaviour (Resnick et al., 1997) as well as influencing later linguistic, social and cognitive efficacy (Pianta et al., 1997; Howes and Richie, 1999; Dobbs and Arnold, 2009).

Ubha and Cahill (2014) noted the differences in how teacher-pupil attachment styles may impact and elicit varying pupil behaviours within the classroom. Primary-aged pupils who developed positive, supportive, attachment-type relationships with their teachers were more likely to seek support and communicate distress when tasks were overwhelming. Pupils who believed that their teachers cared displayed productive coping strategies, were more motivated, resilient, and were less likely to display antisocial behaviour (Howes and Richie, 1999; Osterman, 2000, McNeely et al., 2002). Conversely, insecurely attached pupils were more likely to seek attention at a higher frequency, both positively and in negative ways (talking out of turn, off-task behaviour, for example). Poor behaviour in the classroom may also be associated with weaker or insecure teacher-pupil relationships (Garner and Waajid, 2008).

Finally, primary-aged academic capacity may be enhanced through successful, warm and sensitive teacher-pupil relationships, including increased participation in lessons (Rocca,

2008), improved reading and maths scores (Pianta et al., 2008; Garner and Waajid, 2008) or motivation and engagement over time (Ryan et al., 1994; Hughes et al., 2008). Some research has shown that secure-type attachments can be particularly beneficial to those who are underperforming academically or find it more difficult to access learning in line with their peers (Hamre and Piante, 2001; Osterman, 2000). Where secure attachment-type relationships are reported by students, academic gaps can be reduced for underperforming pupils.

Although there appears to be valid arguments for the value of teacher-pupil relationships from an attachment perspective, caution must be expressed in stating that aspects such as pupil academic performance, behaviour and self-regulation are reliant on relationships. Although correlational, it does not necessarily mean that successful attachment relationships are causal. Moreover, relationships are bidirectional, suggesting that pupils and teachers may influence each other also, rather than assuming directionality from teachers to pupils. Pupils who display certain pre-existing attachment-type behaviours, may change and influence teacher behaviours. Where teacher-pupil relationships are weaker, potential consequences can compound the importance of attachments for teachers as well as the possible significance for pupils. For example, a failure to manage relationships successfully can be detrimental, resulting in considerable stress for teachers (Hutchings et al., 2002; Clunies-Ross et al., 2008); Hastings and Bham (2003) noted that poor relational and behavioural maintenance predicted teacher burnout.

Teachers bring to the classroom their own pre-existing IWMs, presenting behaviours towards pupils that may be consistent with insecure or secure attachment styles (Bergin and Bergin, 2009). For example, teachers with a dismissing style of behaviours, may lack warmth, trust and sensitivity towards others and therefore be intermittently attuned to pupils' needs. Not only is it imperative that teachers have an understanding of pupils' attachment behaviours and presentation, but also teachers should be aware of their own IWMs and behaviours towards pupil-teacher relationships. Facilitation of teachers' own understanding of their attachment styles should be in place so that teachers are able to understand the impact of relationships on classroom dynamics.

It is necessary to note here the value and impact of peer attachments: Rosenfeld et al. (2000) highlighted that both successful teacher and peer relationships led to improved attendance, school satisfaction and engagement. Pupils value their peer group who can hinder, facilitate and create perceptions of schooling (Dwyer et al., 2004). Therefore, the dynamics and perceptions of multiple relationships may have an influence on the developing child. Despite the potential influence of peer relationships, the priority focus will remain on the importance of

teacher-pupil relationships and the potential to strengthen these; other areas of focus are simply beyond the scope of this thesis.

However, it appears that children may benefit from secure-type relationships with teachers, regardless of the infant-AF relationships, with better predictive outcomes for later in development (Prior and Glaser, 2006; Pianta et al., 2008). Secure-type attachment relationships with teachers may partially compensate for insecure infant-AF relationships (O'Connor and McCartney, 2007) - a caring teacher can disconfirm a pupil's insecure IWM of hostility, rejection and unresponsive interactions. Further understanding in how pupil-teacher relationships can support all pupils (including those with insecure AF attachments) provides a basis for this research.

2.5. Attachment Theory in Context

Attachment theory provides the theoretical basis for investigating classroom relationships in the current research, arguing that secure-type attachment relationships aid optimal development and school success for pupils. However, teacher-pupil relationships cannot be viewed in isolation, as classrooms are undoubtedly multifaceted, interactive systems within a school structure. For this reason, it is important that the theoretical basis of the research incorporates systems that may influence the teacher-pupil relationship, including the school environment, ethos and systemic structures. For this reason, part of Bronfenbrenner's Bioecological Systems theory (1995; 2005) – the Microsystem - will be synthesised alongside attachment theory in order to represent pupil-teacher relationships in context. Where attachment theory may fall short with regard to contextual factors, wider environment or specific interactions between elements of a school (Bergin and Bergin, 2009); these disputes are addressed through the incorporation of Bronfenbrenner's Microsystem: for example, how a culture of a school can support the development of relationships outside of teacher-pupil interactions within the classroom.

The full Bio-Ecological Systems Model (Bronfenbrenner, 1995; 2005) encompasses perspectives from a multitude of disciplines in order to create a holistic child developmental stance, where relationships and the environment are viewed as fundamental, interconnecting components. Bronfenbrenner (1995) posits that the stronger the ties between the child and other entities such as the family, school, community and society, the more successful the child development - emotional, social and cognitive competence. Therefore, relationships between teachers and pupils in a school environment can be argued as a key component to the theory.

Bronfenbrenner's model encompasses layers of influence contained within each other, represented by concentric circles as shown in Figure 2. Structures that are closest to the developing child - the Microsystem - have the greatest direct influence on the child within their environment (Bronfenbrenner, 1995). Relationships within the Microsystem can be bidirectional, where the child may influence those around them, but others may also influence the child (Aubrey and Riley, 2018). Outer layers (such as the Exo- or Macrosystem) may or may not be a direct part of the child's environment, but can influence them positively or negatively through interactions within the other layers (Paquette and Ryan, 2001). The outermost layer, the Chronosystem, addresses changes throughout time of the developing child (Aubrey and Riley, 2018). The full systemic model with explanations of each layer can be found in Appendix A.

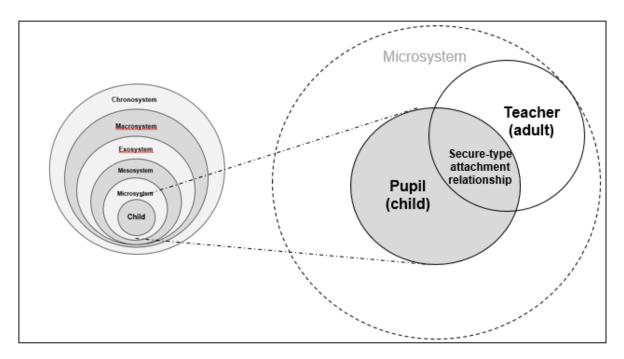


Figure 2: An optimal teacher-pupil, secure type attachment relationships as encompassed within the Microsystem from the Bio-Ecological Systems Theory (Bronfenbrenner, 2005)

Situating attachment theory alongside this systemic theory is valid for a number of reasons. Firstly, a child's relationships within the Microsystem are believed to be imperative (Bronfenbrenner, 1995). Similarly to attachment theory, these relationships include AFs but also other key figures in the child's life, such as teachers in an educational context. Where some relationships within the Microsystem may fall short (such as poor parent-child relationships), other relationships can buffer the effects. Paquette and Ryan (2001) argued that the role of teachers within a primary school is to provide stable, positive and long-term relationships. Therefore, interactions within the Microsystem and the tenets of attachment theory synthesise appropriately for the purposes of the research.

Secondly, the systemic theory presumes that child development occurs due to verbal interactions between the child, people and environment around them, known as proximal processes (Bronfenbrenner, 1995). As a child develops, the complexity of such interactions grows as both cognitive and physical structures develop (Paquette and Ryan, 2001). Interactions need to occur on a regular basis over an extended period of time in order to be primary engines of development (Bronfenbrenner, 1995, 2005). Bronfenbrenner's theory may have been used to suggest that frequent, high-quality interactions between teachers and pupils lead to optimal developmental processes occurring and thus strengthened teacher-pupil relationships. Teachers, therefore, have a critical role to play, particularly within the earlier years of life, as proximal processes are developing, becoming increasingly more complex and intricate in order to support cognitive development. These proximal processes reflect the importance of teacher-pupil talk within a primary school setting and the ability to shape development through secure-type, teacher-pupil relationships (although proximal processes can encompass many different forms, talk is most relevant to this research). Bronfenbrenner and Evans (2000) developed this proposition by suggesting that developmental processes are strengthened when proximal processes reflect a mutual attachment-type relationship.

Lastly, the model allows for other influences on the teacher-pupil relationship to be recognised. Classrooms are multifaceted and therefore it would be naïve to disregard school influences, culture and ethos when researching pupil-teacher relationships. In this respect, Bronfenbrenner and Evans (2000) provide a framework for researching relationships in context within the systemic model. This framework is particularly relevant when investigating the influence of teacher-talk on pupil-teacher relationships alongside the introduction of EC as a teacher-talk strategy. Based on the Process – Person – Context – Time model (PPCT), Bronfenbrenner and Evans (2000) argued that relationships and development could be effectively researched when looking at different, interacting elements. The elements of the PPCT model are shown in Table 3 with the relevance and particular reference to the current research study included:

Table 3: The PPCT model for researching relationships within the Systems Theory (Bronfenbrenner and Evans, 2000)

	Definition	Relevance to research
Process	Proximal processes: The interaction between child, adults and the environment	The process of teacher talk towards pupils
Person	The developing child and peers/adults around them in the Microsystem	Teacher influences
Context	The culture, ethos and environment in which the child is based	A Primary, mainstream, educational setting
Time	The time span for the developing relationships	Research looks at teacher talk prior to and following the introduction of EC

By utilizing the model within this study, research that aims to discover teacher-pupil relationships within a single setting - observing verbal interactions and processes – should encompass the elements of the PPCT in order to establish rigour (Rosa and Tudge 2013). Therefore, reflections of this stance feature in the methodological choices of this research in order to shape a thorough investigation into teacher talk with the introduction of a school-wide relational strategy (Chapters Five and Six). The processes by which the environment (primary school) and personal attributes (teacher influences) interrelate in order to reach a desired developmental outcome (successful teacher-pupil relationships) will be investigated.

2.6. Theoretical Framework: Summary

A primary school classroom requires a sophisticated negotiation of interactions, relationships and environments as directed by a skilled practitioner within the setting who first and foremost need to build rapport with their pupils (Ubha and Cahill, 2014). In this respect, teacher-pupil relationships can be seen as crucial through an attachment perspective, a perspective that will be adopted for the purposes of this research and is considered an essential framework for understanding the impact of early social relationships.

A number of research prepositions and foundations have been formulated throughout Chapter Two:

- Child-adult attachments are formed early in life with AFs and can be defined as secure
 or insecure. Secure child-AF relationships are linked with academic, social and mental
 health successes later in life.
- AF relationships can form with AFs outside of the family unit, including with teachers in schools.

- Pupil-teacher attachment-type relationships may impact school success, relationships and protective factors later in life.
- Pupil-teacher relationships are not formed in isolation the context, environment and ethos of the school system all play a part: the Microsystem (Bronfenbrenner, 1995).
- In order to understand the complexities of a teacher-pupil relationship from an attachment perspective, it is useful to look at various factors, including the proximal processes (talk), the people (teachers), context (primary school) and time (an academic year).

Taking these foundations into account, it can be argued that education would be more effective if teachers had a clear understanding how secure-type attachment relationships within the Microsystem can influence students' success, as measured through emotional regulation, resilience, social competency and cognitive development (Bergin and Bergin, 2009). Additional work, therefore, is required to understand how secure-type attachment relationships can be fostered, through a focus on one potential area: teacher talk. Teacher talk will be addressed throughout the proceeding chapters in order to provide further understanding on how and why teacher-pupil relationships may or may not be successful.

Chapter Three: Teacher Talk Strategies

3.1. Introduction

Interest in teacher talk has led to a vast amount of research and practitioner attention regarding which types of talk best facilitate successful, secure-type relationships and learning environments for pupils (Pianta, 2001; Davies, 2003, Bergin and Bergin 2009; DfE, 2018). Teacher talk is considered a malleable tool within classrooms and is therefore chosen as the focus of this thesis (Miller et al., 2002; Clunies-Ross et al., 2008; Frisby and Martin, 2010; Doumen et al., 2011; Cadima et al., 2015). Chapter Three, therefore, considers the main teacher-talk strategies that have been identified in the research literature to support secure-type, teacher-pupil relationships. Strategies are discussed and critiqued, providing a grounding for the methodological choices made in the research (Chapter Five).

Although relationships are considered bidirectional and influential upon each other from an attachment perspective (see Chapter Two), the focal point of this thesis is *talk strategies used* by teachers in the primary classroom. The focus on teacher talk is not to disregard pupil influences upon the classroom and relationship, but merely to reduce the scope to a manageable research project within ethical constraints.

3.2. Identification of Teacher-Talk Strategies

While considering strategies for developing secure-type attachment relationships between pupils and teachers, peer reviewed journal articles, academic books and government publications were accessed as part of the literature review, spanning a two year period (2017) - 2019). These sources were accessed through the British Education Index, Educational Resources Information Centre (ERIC), PsycINFO, EBSCO eBook Open Access (OA) collection and government sources. Key literature search terms (using the Boolean operator 'and') included (but were not exhaustive to): 'teacher instruction', 'classroom talk', 'teacher verbal behaviour' and 'teacher talk' (Section 1.3., Table 1). The intention was to identify and review teacher verbal strategies that may promote secure-type attachment relationships with pupils: the promotion of feelings of security, safety, trust, warmth and support (Bowlby, 1969; Pianta, 2001; Davies 2003; White 2013). Extensive literature was reviewed, spanning over five decades of educational research. However, a few key texts became instrumental to this thesis, summarising key strategies to support secure-type attachment relationships in the primary classroom, including Bergin and Bergin (2009); Bomber (2015); Colley and Cooper (2017) and Ubha and Cahill (2014). These texts were deemed particularly influential due to their focus on attachment theory, primary school contexts and a focus on teacher talk strategies to support relationships.

Strategies derived from the accumulation of literature were categorised into three main recommendations for supporting secure-type relationships between teachers and pupils, as presented and defined in Table 4: positive versus negative talk; specificity; and socioemotional (SE) talk.

These three main recommendations were further divided into two categories: whole school strategies (where the whole school staff and pupils were introduced to the strategy, embedded into the school culture) and intervention strategies (where targeted groups of pupils such as a small group or one class were introduced to the strategy only). Interventions versus whole-school approaches are interwoven within the three key strategies throughout this chapter and are therefore presented as an additional construct in Table 4. Chapter Three moves on to look more closely at these recommendations, considering why these strategies may be useful, key studies, results and the implications for the current research.

Table 4: Definitions of the four main talk strategies presented for supporting teacher-pupil relationships

Talk Strategies	Key recommendations/definitions derived from the literature	
Positive versus	Positive verbal interactions from teachers to pupils	
negative talk	Using inductive talk (choice and positivity) rather than coercive talk (threats and negativity)	
	Consistent positive discipline with clear boundaries	
	Noticing desired pupil behaviour, positive messages	
Specificity of talk	Providing specific feedback, rather than sweeping statements —	
	learning or behaviourally	
	Reduction in ambiguous statements	
Socio-Emotional	Sensitivity, warmth and responsiveness to distress	
talk	Explicit communication and teaching about emotions	
	The teaching of regulation strategies	
	Encouraging empathy	
	Restorative practices	
Intervention versus whole-school strategies	Interventions to support individual or small groups of pupils in SEL or positive learning practices, routines, etc.	
	Or Whole school talk approaches to ensure consistency across staff	

3.3. Positive versus Negative Talk: Overview

Initially guided by Behavioural Learning Theory (Bandura, 1997), positive versus negative talk has been presented as a malleable talk strategy in the classroom. Positive responses are defined as praise, satisfaction or approval towards a specific behaviour; whereas a negative response includes a reprimand, dissatisfaction or disapproval (Harrop and Swinson, 2000). Arguments for this distinction were originally based on a behaviourist notion that positive teacher talk may serve as an external drive to reinforce desired pupil behaviour, increasing the likelihood of reoccurrence. Conversely, the use of negative or punitive types of talk may weaken the likelihood of the behaviour occurring again, deterring the receiver (or pupil) from repeating that behaviour (Payne, 2015). Hayes et al. (2007) argued that positive verbal reinforcement is a fundamental tool, arguably the most powerful in a teacher's repertoire and to strengthen teacher-pupil relationships in the classroom, teachers should use predominantly positive responses. However, it would be interesting to understand the degree to which positive talk is used in practice to support teacher-pupil relationships to ascertain whether theory and practice concur.

Researchers (for example White, 1975; Wheldell, Houghton and Merrett, 1989; Harrop and Swinson, 2000) suggested that positive or negative verbal responses could be categorized into two main types, depending on the pupil's behaviour: *social behaviours* (following class rules and displaying appropriate classroom manners) and *learning behaviours* (effort and attainment towards school work, such as reading, maths and answering classroom questions). White (1975) collated research from 16 different school settings across a school district in America. Eight observers undertook classroom observations in situ (104 in total), using a systematic recording system to note the rates of approval and disapproval. The study concluded that positive talk from teachers were more frequent towards learning behaviours than social behaviours, whereas social behaviours were more likely to elicit negative responses. White also noted that positive responses were more frequent towards younger children for both learning and social behaviours. As children moved through their schooling years, social behaviour was more likely to be reprimanded through social, negative talk. These conclusions were replicated by Wheldell, Houghton and Merrett (1989).

Harrop and Swinson (2000) also replicated the intention of White's (1975) study in the UK, attempting to understand the rates of approval and disapproval in infant, junior and secondary classrooms (N = 30). However, Harrop and Swinson (2000) noted some of the limitations of White's study, including researcher presence in classrooms and the inability to have a permanent recording of approval and disapproval rates. In order to address these limitations, Harrop and Swinson used a recording device to capture teacher talk in Numeracy and Literacy lessons, allowing for recordings to be systematically reviewed and checked for reliability. The

results indicated a lack of positive responses for classroom social behaviours, with negative responses highly correlated with social behaviour and positive responses being far more likely to be given for learning behaviours, however, the frequency of positive responses remained low across the study in general. Schreeve et al. (2002) found that middle school, pupils' perceptions corroborated these results, with pupils reporting that rewards were more likely to be given for academic behaviours; sanctions and negative responses were more likely to be associated with social behaviour. These examples of research provide an interesting proposition as they suggest that positive and negative responses may serve to enhance or hinder pupil engagement in the classroom, perhaps signifying that teacher-pupil relationships in the classroom may be improved through positive teacher talk (Harrop and Swinson, 2000; Schreeve et al., 2002; Cadima et al., 2015). Beaman et al. (2007) found that when predominantly negative teacher talk was observed, primary pupils' on-task behaviour reduced and pupils were less engaged. Improved pupil engagement and subsequently enriched teacher-pupil relationships could provide a plausible explanation as to why positive talk has been interwoven into UK government and school policy (Wheldell et al., 1989; Payne, 2015; Bennett, 2017; DfE, 2018).

It is therefore valuable to explore the potential use of positive (and negative) teacher talk in the primary classroom further, and to understand teachers' perceptions of this type of talk through this research study.

3.3.1. Implications of Positive Talk

Although early studies into the use of positive versus negative talk were rooted in behaviourist principles, such principles are now considered inadequate in explaining and defining the effects of positive teacher talk (Cadima et al., 2015). Although it appears that behaviourist foundations to classroom management permeate through policy, behaviourist approaches to teaching and learning have predominantly been superseded by other areas of focus, such as cognitive psychology (Payne, 2015). A shift in focus means that there are competing theories represented in approaches to teaching and learning as encountered by classroom teachers. Secondly, the idea that positive reinforcement (through positive teacher talk) leads to repetition in behaviour and punishment reduces reoccurrence, appears a simplistic viewpoint based on observable phenomena and external drives for behaviour in isolation. Although Skinner (1953) acknowledged a social element to behaviourism, it largely does not take into account socioemotional or cognitive elements for changes in behaviour and the development of relationships: it denies context, pupil agency and emotional competencies (Weare and Gray, 2003).

A more useful theoretical basis for the use of positive teacher talk is presented: an internal element based on cognitions, self-esteem or feelings of attachment that are fostered in the pupil. Considering the use of positive talk from an attachment perspective and the effects on IWMs is far more plausible. Frequent praise and positive teacher talk increase feelings of a predictable, safe, friendly environment, whereby pupils are encouraged to engage in social interactions and are more likely to take risks (Wilson et al., 2007). IWMs develop representations of teachers as warm, positive and supportive. Conversely, negative talk has been suggested to undermine pupils' trust in teacher sensitivity and emotional availability (Doumen et al., 2011), thus lowering pupils' global self-concept and conceptual understanding of adults through their IWM.

Moreover, pupil motivation could be important in explaining why pupils feel more warmth towards their teachers, are engaged in lessons, and have a greater sense of belonging in the classroom through the use of positive teacher talk (Leithwood et al., 1996; Cadima et al., 2015). Positive talk may allow pupils to feel more motivated in lessons (Ellis, 2004). The Self-Determination Theory of Motivation (Ryan and Deci, 2000) may help to support pupil IWMs and provide additional understanding for the use of positive teacher talk. The theory suggests that humans strive for psychological needs to be met: autonomy, competence and relatedness (or attachment) to others. Researchers (Cameron and Pierce, 1994; Webster-Stratton and Reid, 2004) highlighted that internal, psychological motivations have a far greater impact on a developing child and their learning or behavioural patterns, rather than external rewards.

Deci and Ryan (1985) suggested that motivation can be both extrinsic (rewards and sanctions that align with the behaviourist arguments of positive and negative talk) or intrinsic, the latter being an internal drive to fulfil core values and interests. Although seemingly diametrically opposed, extrinsic and intrinsic motivation can merge in different situations. For example, the use of positive feedback from a teacher "yes, that is a wonderful example...get a point for your table for that lovely answer" can be seen as both an extrinsic reward (earning a table point and receiving public praise) but may also serve to motivate internally through a sense of pride and confidence. Teacher-pupil relationships may be strengthened in this respect through an external and internal pupil motivational reward through teacher talk, thus bolstering the arguments for the use of positive teacher talk in the classroom. A further distinction was made between autonomous and controlled motivation (Ryan and Deci, 2008). motivation can be developed through IWMs, as well as extrinsic sources (such as a teacher) that identify with the self and an individual's core values. It is self-directed. On the other hand, controlled motivation results from an external regulation of behaviours; an attempt to seek approval and receive rewards for actions from others or a fear of punishment and the avoidance of shame (aligning with behaviourist principles). There is no self-sufficiency or internal drive in the latter. Autonomous pupil motivation could be relevant in explaining why pupils feel more engaged in lessons and a greater sense of belonging in the classroom through the use of positive teacher talk (Leithwood et al., 1996; Cadima et al., 2015). It would also seem sensible to suggest that, as teachers foster autonomy and self-regulation in pupils through positive talk; teachers become more motivated to use positive talk in the classroom, thus creating a positive feedback loop between adults and pupils. Reciprocal motivation aligns with the theoretical underpinnings of the study where relationships are bidirectional, influencing and being influenced by others within the Microsystem (Bronfenbrenner, 2005), although for the purposes of this study within methodological constraints, teacher talk (one-directional) is the predominant focus.

Research endorses Ryan and Deci's (2000) model as a useful explanation for the use of positive teacher talk in the classroom environment and how IWMs are supported. Tibiero and Elwell (1994) concluded that positive talk was motivational, citing that 89% of students in their study preferred the use of praise to motivate and 88% desired more praise in lessons. Hadyn (2007) highlighted pupil feelings of self-control associated with positive talk, where students took accountability for their behaviours and became increasingly dependent. Payne (2015) speculated that through positive talk, pupils may recall prior positive experiences and can anticipate positive consequences, giving them confidence and improving self-esteem. Conversely, researchers have suggested that negative teacher talk may deny the development of internal control and self-regulated behaviours, aligning with the notion of controlled motivation (McCaslin and Good, 1992; Maag, 2001).

The detrimental effects on pupils' self-esteem (and thus self-IWM) through the use of negative teacher talk have also been documented. Negative talk in the classroom may lead to a negative climate (Cadima et al., 2015) and may have effects on pupils' attitudes in class, resulting in more withdrawn behaviours from learning material and peers, as well as displaying avoidant attitudes in class (Reyes et al., 2012; Cadima et al., 2015). Leff et al. (2011) showed that as the rates of praise decreased or where it was less frequent in comparison to other classes, levels of defiance and off-task behaviour increased. It is not clear, however, which influence is more prevalent: negative talk from the teacher influencing pupil behaviour negatively, or previous displays of off-task behaviour from pupils influencing teacher talk. It is, however, probable that reprimanding publically may serve to lower self-concept and trust in others, and contribute to the wider overall classroom climate negatively (Leff et al., 2011).

Given the potential benefits of positive teacher talk on pupil motivation, self-esteem and development of attachment-type relationships, pertinent questions are raised as to whether

classroom practitioners have access to information and training regarding the use of positive talk and how this may be used to foster relationships in the primary classroom.

3.3.2. Increasing Positive Talk through Intervention Studies

Having provided reasoning for the use of positive talk through an attachment and motivational lens, the proceeding section presents studies from peer reviewed journal articles that have aimed to increase the frequency of positive talk in various classroom settings. These studies have attempted to evaluate the impact of positive talk on the development of teacher-pupil relationships and classroom climate. Primary school intervention studies such as Chalk and Bizo (2004) found that where positive teacher talk was increased during numeracy lessons, pupils reported a greater sense of lesson enjoyment and engagement. Pupils felt distinctly more confident about their lessons, their relationships with their teachers and schooling in general. Where teachers have been specifically targeted to increase the number of positive statements in the classroom, results have been promising on pupil engagement, feelings of connectedness to school and relationships with adults. Hayes et al. (2007) encouraged adults in the classroom to increase their use of positive statements through real-life examples and the association to teacher-pupil relationships. The researchers found an overall increase of positive statements from 0.6 statements per minute before the staff training, to 0.9 statements per minute. Negative responses were reduced from 0.9 statements per minute to 0.7 after the targeted teacher training. This replication of the Harrop and Swinson (2000) study yielded similar results, further supported by other studies also (Apter et al., 2010; Spilt et al., 2016). Intervention studies highlight questions regarding teachers' attitudes and the value placed on positive teacher talk: if teachers consider that positive talk is valuable in the classroom, why is this so and what can be done further to support use in the classroom from this perspective.

Additional intervention studies have further added to this body of research regarding the potential impact of positive teacher talk in the primary classroom. Guided by Behavioural Learning Theory and the principles of operant conditioning, the Good Behaviour Game (GBG) (Barrish et al., 1969) utilizes positive reinforcement and contingent praise to develop the social functioning of pupils, through verbal techniques as guided by the teacher. The intervention adheres to the notion that punitive talk is counterproductive (Stormont et al., 2007) and that negative talk equals a negative classroom climate, with reduced self-esteem and security (Cadima et al., 2015; Reyes et al., 2012). The principles of this intervention acknowledge the external positive versus negative divide, but also the internal processes of self-esteem and self-representation. The process of GBG is prescriptive and manualised: within the 'game', dedicated time is given to group tasks in the classroom, where groups can earn points and

feedback is given through positive praise. Negative feedback is prohibited and desired responses are reinforced.

GBG research has yielded discrepancies in efficacy. In a study of 30 teachers across 15 primary schools, Spilt et al. (2016) found that teachers significantly improved their rates of positive praise in other areas of the curriculum and not just within the 'game' sessions. Peer hyperactivity was reported to be reduced. Conversely, EEF (2018) evaluated the GBG in 77 schools over two years in the north of England and found no discernible, overarching difference in classroom behaviour as a whole, nor curriculum progress (such as reading skills), however, there were some small effects seen for at-risk boys with conduct difficulties. Despite some individual differences between schools, there was also no general effect on teacher outcomes or attitudes, such as stress or retention. The variation in results highlights the need for further clarification on whether an increase in positive teacher talk supports the development of engagement, academic progress and teacher-pupil relationships.

Despite inconsistent results from these intervention studies, the notion of positive talk still appears to permeate through research and government policy. Questions are therefore raised as to the extent to which positive talk transpires in primary classrooms. For example, recent publications on relationships, behaviour and mental health guidance include behaviourist undertones: "The vision [of the school] should be underpinned by a clear system of rewards and sanctions and an accountability system that sets expectations for all staff, parents and pupils" (DfE, 2018: 8). Policy makers appear to support behaviourist tenets by advocating rewards and sanctions as a key strategy to improve classroom behaviour, relationships and Further national documentation over the last decade advocates this subsequent learning. approach: Getting the Simple Things Right (Taylor, 2011: 4) argues for teachers to "display the tariff of rewards and sanctions in classrooms; Tom Bennett's independent review, Creating a Culture, discusses sanctions in order to deter others and influence future behaviours (2017); and the Education Endowment Fund (2018), further references behaviourrelated praise as a key classroom management step. It can therefore be argued that a behaviourist approach to developing relationships in the classroom has authority throughout UK educational policy (and beyond), which may be due to the large body of research in this area that has been developed over a number of years.

There is still some contention as to whether positive teacher talk is used favourably within classrooms and as frequently as recommended through policy and research – this thesis will investigate the use of positive versus negative talk in further detail through classroom observations to add to the body of literature. It appears that some classrooms are still relying on other strategies that are not as effective in order to manage relationships and to respond

to academic and social behaviours, whether desired or not (Infantino and Little, 2005). Poulou and Norwich (2000) highlighted that a large proportion of teachers reported they still rely on threats and punishment to control classrooms, despite teachers' self-reports that they would recommend and wish to use proactive, positive strategies to develop classroom climate. Conversely, Clunies-Ross et al. (2008) reported that the majority of primary school teachers in their Australian study felt confident in maintaining positive relationships in the classroom through positive talk (self-reported through a questionnaire). Observations in the classroom (N = 20) concluded a strong correlation between actual and self-reported levels of verbal behaviour. In this study, positive responses far outweighed negative responses observed, and on-task behaviour was positively associated with this; although it is difficult to ascertain whether this was a stable factor throughout time or due to the researcher's presence in the classroom during the observations. Moreover, participants volunteered to take part in the classroom observations and therefore questions are raised regarding sampling bias - teachers who volunteered may be more likely to feel confident to demonstrate their classroom relational skills.

Apter et al.'s (2010) study noted that teachers displayed higher levels of positive talk than previous research suggested (Wheldell et al., 1989; Harrop and Swinson, 2000; Schreeve et al., 2002). Through observations over 141 classrooms, Apter and colleagues posited that this could be due to the increased focus and recommendations surrounding the use of positive responses and feedback in the classroom from government policy or through academic research (DfE, 2018; Canter and Canter, 2001). This idea appears plausible that as teacher knowledge of effective talk increases, strategies that are used to enhance on-task behaviour, engagement and relationships are utilized more frequently. Moreover, it could be suggested that where levels of positive feedback statements are observed to be lower in some classrooms, this may be due to perceived or actual competency and confidence of teachers in delivering such messages.

It therefore remains that there is some disparity between teachers' self-reported and actual behaviours, as well as varying degrees of positive talk within the classroom. Although personal teaching styles are certainly a factor in the execution of positive talk throughout, it could be due to an intricate balance of a multitude of factors, such as teacher understanding and training in the use of positive strategies to explain why some teacher-pupil relationships and classrooms are not as successful as others. To address this, as well as classroom observations, semi-structured interviews allowed for an understanding of teacher attitudes and behaviour towards positive talk in the classroom within this research.

3.3.3. Critique of Positive versus Negative Talk

Interesting arguments have been presented regarding the value of positive and negative teacher talk in facilitating teacher-pupil relationships; however, these seemingly dichotomous entities invite critique. This section attempts to address the critique and provide further direction for the current research.

Firstly, the division between positive and negative talk appears diametrically opposed and is often referenced as such, however in reality this is not so. Teacher talk can be both positive and negative (or interpreted as so) at the same time, for example: "that's a lovely effort [positive], however, you need to rethink that second part of your answer as that is not correct [negative?]". Secondly, although a teacher's intention may be to provide positivity, the response may be interpreted differently by the receiver within the context, depending largely on the individual's (either pupil or teacher) prior experience, frames of reference or pre-existing IWM of self and others within their Microsystem (Bowlby, 1969; Bronfenbrenner, 2005). The definition of positive and negative talk is not straightforward and denies IWMs and subjectivity to be acknowledged and referenced. Cognitive processes such as motivation, as referenced in the Self Determination Theory (Ryan and Deci, 2000), as well as prior experiences and attachment relationships influences will undoubtedly have an impact on external behaviours as presented by both teachers and pupils.

The categorization of complex interactions into two main categories (positive and negative talk) does not allow for nuanced language patterns between teachers and pupils to be acknowledged, nor the complexities of classroom incidents to be explained. Moreover, the prescriptive nature of intervention studies (such as in the GBG) can also be seen as overly simplified for the necessity of 'evidence-based' research. Research aiming to improve teacher-pupil relationships or to reduce risk factors for pupils has received the most academic attention when based on an intervention style; measuring both pre and post-intervention with a small group of pupils. There appears to be a focus in education on "empirical intervention studies based on the model of clinical research to generate statistically verified... knowledge" (Trohler, 2015:13) that are short-term, measurable and have replicable efficacy (Cooper and Cefai, 2013). In the age of audit culture and austerity (Thwaite, 2015) this approach tends to deny small effect sizes, qualitative measures and the longer-term outcomes of such interventions: currently there appears a lack of interventional research regarding long-term effects on relationships and positive language. The latter consideration is of particular importance for the sustainability of teacher-pupil relationships over time. Interventions may seek to address individual relationships for particular staff members or pupils. However, given the longevity of pupils' education in one setting, a whole school approach may provide greater consistency, sustainability and transferability across classrooms and adults, as well as predictability for pupils. A whole-school approach could be argued to reduce the stigmatisation of individuals and be more cost-effective (Clarke et al., 2015).

Finally, it appears that there should be more intense scrutiny of the semantics used within research, policy and practice. By using terms such as positive and negative, practitioners are being encouraged to view teacher-pupil relationships from this perspective, for example, an intensified focus on social behaviour in the classroom and how to reduce incidents of undesired (negative) social behaviour (DfE, 2018). Terms such as 'social behaviour' or 'negative' appear unrepresentative of internal processes as well as complex and multiple relational systems within a school setting. More caution and context could be given to such categorisations.

3.3.4. Positive versus Negative Talk: Summary

Despite the presented critique of positive (praise or approval) and negative (reprimands or disapproval) teacher talk categorisations, there still appears that these terms are used frequently both in research and in practice. For example, reviewing the GBG and the suggestions of presenting classroom tariffs through government policy and research (EEF, 2018; DfE, 2018). It is for this reason that the categorisations of positive and negative will be utilized further in this research, alongside caution and reflexivity throughout. Positive versus negative talk will be investigated through classroom observations and teacher interviews, alongside other types of talk that may be present in the primary classroom.

3.4. Other Types of Teacher Talk, including Specificity: Overview

Although positive (praise) and negative (reprimand) teacher talk has been argued to be a significant, malleable classroom factor, it would also be productive for researchers to look at alternative types of teacher talk to address the above critique and to reflect the complexities of nuanced language patterns (Spilt et al., 2016). If teacher talk is believed to be a mediating mechanism in promoting self-concept, self-esteem, relationships, cognition and competence from an attachment perspective (LeFlot et al., 2010), it is likely that a combination of features of teacher talk serves to enhance such feelings and to create a successful climate.

Researchers have looked into other variants of teacher talk that may or may not help to foster teacher-pupil relationships within the classroom climate. For example, student participation and learning have been shown to be positively correlated with instructor immediacy of response (Rocca, 2008) and through confirmation (positive talk) and support (Fassinger,

2000; Frisby and Martin, 2010). Where classroom discussions are more frequent, utilise open-ended questioning, seek contributions from all and where teachers address students by name (rather than generic address), increased engagement, motivation, reported feelings of rapport with the class teacher and improved academic achievement have been observed (Frymier and Houser, 1999; Goodboy and Myers, 2008; Frisby and Myers, 2008). Improved results are plausible as teacher behaviours demonstrate to pupils that they are paying attention, valuing input and are willing to engage in dialogue, thus promoting a positive and responsive learning climate. These teacher behaviours may serve to foster feelings of attachment, self-esteem or confidence in pupils as demonstrated through the theory of motivation (Ryan and Deci, 2000).

An area of particular interest to this research is the degree to which a teacher provides specific information when giving feedback (Hattie, 2012). Teacher specificity can include stating to pupils why an action is favoured or why it needs to be changed. This could be learning-based or socially-based, as categorised in the previous sections. For example, a response to a writing (learning) task could be non-specific or specific as shown in the following examples respectively. These teacher talk examples would be considered positive using the previously posited categorisation:

- Non-specific: "well done, great".
- Specific: "well done for putting that full stop in the correct place".

A plethora of research considers specific, teacher verbal feedback to be a powerful moderator in pupil learning success, with an effect size of up to 0.75 (although effect sizes range hugely between studies: Fisher et al.,2016). An effect size is the measure of strength between two variables, where an effect size between 0.5 – 1.0 is considered a large effect (Cohen et al., 2007). However, for the purposes of this research, the focus will lie on the impact of specificity on the teacher-pupil relationship from an attachment perspective as the vast degree of research on feedback is outside of the scope of this research.

3.4.1. Implications of Specificity

Talk specificity can be argued to foster feelings of trust, security and warmth in teachers through pupil IWMs (Bomber, 2015; Colley and Cooper, 2017). Pupils who receive specific feedback that helps them to improve in learning or socially, may believe teachers are supportive and attentive to their needs. Specificity can be particularly useful for pupils who are insecurely attached to AFs, where IWMs do not represent teachers as caring and responsive. Bomber (2015) suggests that blanket statements of social or learning feedback, or ambiguity can lead to insecurity in pupils, as they are unable to interpret teacher intentions.

The recommendation is that teacher talk encompassing specificity enables pupil understanding, ensuring pupils are clear on learning and social intentions. Carless (2006) highlighted that teachers should be explicit in individual, specific feedback as feedback can often be too generic, addressing the whole class. Pupils, therefore, do not always believe or understand that the feedback is relevant to them, potentially creating insecurity in the classroom. Through specific, directed teacher feedback, pupils are more likely to view adults as supportive of their actions and caring in order to support them to improve.

Research into verbal feedback and specificity provides an interesting perspective regarding the positive versus negative talk divide as outlined previously, particularly concerning learning in the classroom. Hattie (2012) summarises the four main types of specific learning verbal feedback, including task talk (the need to acquire further knowledge); process talk (changing a strategy to progress in learning); conditional feedback (relating to pupils monitoring and evaluating their learning) and self-feedback (praise for effort and the pupil as a whole). The last category aligns with praise (or positive) teacher talk. Hattie (2012) concluded that selffeedback is rarely related to learning tasks - more often associated with social behaviours. 'Self' feedback is therefore not seen to be beneficial in increasing engagement in learning. Moreover, some researchers have argued that praise may have the opposite effect when given during learning feedback. Kessels et al. (2008) found that praise statements rendered feedback less specific for pupils, diluting the information given. Kluger and deNisi (1996) concluded that no praise was more beneficial for pupils, rather than praise coupled with learning feedback. In a study looking at rates of teacher verbal feedback, Hyland and Hyland (2006) concluded that nearly half of teacher statements were praise related, with premature and gratuitous praise confusing students, rather than supporting them.

These studies are in direct contrast to research that considers praise vital in increasing engagement, learning and motivation (Spilt et al., 2016; Apter et al., 2010; Hadyn, 2007). It would be sensible to predict that, if teachers have secure-type attachments with pupils, pupils may be more responsive to specific learning feedback and may not require as many praise statements. This is due to the pupil already feeling comfortable taking risks, being more independent in their learning, and seeking support where needed (Hattie, 2012). Pupils' IWMs already represent the teacher as supportive, responsive and safe. Praise (or positive statements) may help to foster relationships initially, where pupils feel comforted and supported by praise statements for learning or social behaviours.

For a pupil to progress, learning feedback must strive for errors and correction. For example, Hattie (2012) discusses that disconfirmation of a pupil's response is more powerful than confirmation. In this respect, disconfirmation can be a positive construct (serving to move the

learning forward for the pupil), blurring the boundaries of the dichotomous positive versus negative divide. However, accepting specific corrections may be more challenging for a child with insecure relationships with a teacher or AF: pupils may interpret that they are being criticised or reprimanded (Bomber, 2015).

3.4.2. Specificity: Summary

Specific feedback from teachers is imperative when considering learning and achievement, but questions are raised as to whether specificity helps to develop teacher-pupil relationships. What appears fundamental is that specificity provides clarity - whether interpreted as negative, positive, confirming or disconfirming. Pupils who have clarity on learning and social behaviours can more likely regulate and modify behaviours in the moment, as well as understand appropriate behaviours for the future (Bomber, 2015; Fisher et al., 2016). Clarity may enhance predictability and feelings of safety for pupils.

These debates highlight further the intricate nature of pupil-teacher relationships and the nuances of teacher language that may or may not support such relationships. To consider this further, this research will look at the specificity of teacher talk through classroom observations. Specificity will be considered as a separate theme during the semi-structured interviews.

3.5. Socio-Emotional (SE) Talk: Overview and Implications

One particular area of classroom practice that is gaining resonance in the research community is that of SE talk in the classroom: the acknowledgement and discussion of emotions in oneself and within others. The following sections present teacher-pupil relationships from a SE perspective - one which allows pupils and teachers to develop secure-type relationships and feelings of attachment through emotional talk and joint empathy. Zins and Elias (2007: 234) note: "...social and emotional learning (SEL) is the capacity to recognise and manage emotions, solve problems effectively, and establish positive relationships with others, competencies that are clearly essential for all students. Thus, SEL targets a combination of behaviours, cognitions, and emotions".

Based on the seminal work of Goleman (1995), SE (or SEL) talk allows pupils to develop skills in five areas: self-awareness, self-regulation, motivation, empathy and social skills. Although these skills begin to develop early in life (before school), they may be developed to a greater or lesser extent depending on the attachment relationship between the infant and AF. Therefore, direct teaching of SEL within education contexts may support the development of

emotional understanding in oneself and others. As teachers directly teach and support pupils to regulate their emotions and solve problems, pupils may perceive the teacher as helpful, supportive and empathetic, thus representing a secure-type attachment relationship.

Researchers (Evans et al., 2009; Spilt et al., 2016) argue that SE management, classroom organisation and instructional behaviours (based on positive teacher talk), are the three main factors associated with a successful classroom climate, all supported through teacher talk. Therefore, this section presents literature pertinent to SEL as a teacher talk strategy, reviewing whole school and small group intervention studies to support secure-type attachment relationships. SEL also underpins EC (see chapter four) – a whole school talk strategy that forms the basis of this research.

3.5.1. Increasing SE talk through Intervention Studies

Varied outcomes are presented regarding the role of SE talk interventions and how these support secure-type, teacher-pupil attachment relationships. Although it is acknowledged that classroom climates are indeed influenced by SE dynamics (Friedman-Krauss et al., 2014), it is not well understood how teachers can be supported in creating such climates through emotional-based talk (Hughes and Barrois, 2010). Although teachers themselves identify that emotional management can be a key factor in school (Gus et al., 2015), there is little research with definitive results surrounding teacher SE talk (Buckholdt et al., 2016) and therefore highlights a particular focus for further scrutiny within this study. SE research in education has predominantly focussed on targeted, individualised support for pupils in a variety of schools. However, whole-school SE talk strategies are developing in UK education, particularly in primary settings.

Individual child or small group SEL interventions attempt to strengthen emotional, mental health or social understanding through teacher-supported talk. Well-considered SEL intervention programmes include Play Therapy, The Art Room and Zones of Regulation, all reporting varied results which may or may not support the development and continuation of such programmes (Axline, 1969; Kuypers, 2011). The Targeted Mental Health in Schools Programme in the UK (TaMHS; DCSF, 2009) continues to be an SEL-based programme in supporting children (5 – 13 years) and families at risk of- or experiencing- mental health problems. The aim is to develop socio-emotional understanding in parents, children and teachers and communicate effectively with others using SEL understanding. TaMHS attempts to develop secure-type attachment relationships through a systemic approach. However, results are varied: although a reduction in behavioural problems was seen in primary-aged

pupils, there appeared no reduction in emotional outbursts, nor any effect for secondary-aged pupils (DCSF, 2009).

These targeted programmes may provide some benefit in supporting teacher-pupil (or adult-child) relationships, however, concerns are raised as to the rationale behind the implementation of such programmes. Motivation for these programmes appears to be underpinned by a deficit model, focussing on individual concerns or issues arising within child development. In this respect, such programmes can be seen as reactive rather than proactive, targeting and selecting individuals that lead to discreet implementation for the aim of therapy (Ecclestone, 2017; Humphrey et al., 2013). These small-scale, discreetly applied strategies do not encompass larger groups of pupils, classes or whole-school implementation over time. As previously discussed (see Chapter Two), strategies to support all teacher-pupil relationships over time are more desirable in order to sustain the impact on child functioning.

Arguments for a shift in focus towards whole-school, socio-emotional talk in education are emerging. Researchers (for example Murray-Harvey, 2010; Banerjee et al., 2014) argued that SEL is not explicitly represented enough within UK schools. SEL forms part of the non-statutory curriculum and can often be seen as an add-on, such as in Personal, Social and Health Education (DfE, 2013), rather than embedded by practitioners and school ethos. The focus on SEL could be argued to be more beneficial when woven into the daily life of the classroom – an integrated, universal approach - to support pupils in forming strong relationships with adults and peers (Jones and Bouffard, 2012; Banerjee et al., 2014). There appears a small amount of research literature to date regarding this whole school approach. With the current focus on mental health for children and young people (Department of Health, 2015; DfE, 2018) and society in general (particularly through the 2020 global pandemic), it could be argued that SE-based approaches for pupils should be at the forefront of research and practice. Practitioners may benefit from verbal techniques to support relationships within schools – an area that this thesis aims to address and evaluate through EC - a whole-school approach towards socio-emotional talk in the classroom and subsequent learning.

Social Emotional Aspects of Learning (SEAL) was a nationally researched and audited school-wide strategy (DfES, 2005). Based on Goleman's seminal work (1995), SEAL supported pupils to learn about emotions, motivation, social skills, empathy and managing feelings, integrating such talk into daily school life. The materials provided a loose framework that could be adapted for whole class sessions, focus areas for staff professional development and could be supplemented for targeted work for individuals and groups of pupils (Durlak et al., 2011). Although SEAL was abandoned due to a lack of supporting evidence alongside the change in government (Lendrum et al., 2013), it was reported that SEAL was undertaken by 90% of

primary schools and 70% of secondary schools nationally (Humphrey et al., 2013), highlighting some authority to this approach. In a review of 49 primary schools, Banerjee et al. (2014) reported a distinct variation in the implementation of SEAL within schools and thus improvements in relationships and socio-emotional learning were variable. Where schools anchored SEAL into their setting (rather than a curriculum add-on) participation and effects mirrored that of the ethos (Clarke et al., 2015) where teacher-pupil, socio-emotional talk was commonplace.

SE talk research is emerging as a focus of the formation and sustainability of teacher-pupil relationships, as well as pupil mental health as a whole. For example, the Attachment Aware Schools project (AAS) (Parker et al., 2016), attempted to develop SE understanding in practitioners from a whole school approach. Practitioners were given extensive training and support in attachment theory and how to foster relationships within educational settings, as well as whole school processes (such as behaviour and relationship policies) from an attachment-based theoretical lens. Although initial results of the AAS appear promising for whole school practice, practitioner efficacy and pupil outcomes (Gus et al., 2015, 2017), it remains to be seen if long-term and ongoing effects are advantageous and note-worthy. More information, research and attention are needed to establish if SE talk strategies impact on teacher-pupil relationships and the associated benefits as such and this thesis aims to add to this body of research.

3.5.2. Critique of SE Talk

As seen previously in this chapter, it is important to understand and critique approaches in the interest of maintaining critical awareness, as well as clarity in research focus. This section highlights SE talk critique and presents arguments for addressing it via this research.

Primarily, research into SE talk to support whole classroom relationships is currently limited to a small number of studies with varying research methods, many of which rely on solely participant, self-reported outcomes. Due to the subjective and personalised nature of emotions, it can be argued that data collection is both challenging and varied, leading to uncoordinated approaches in data collection and reporting of findings (both quantitative and qualitative). Although undoubtedly useful, it means that comparisons between studies are more challenging, particularly when rigour in data collection and quantitative information may have greater scientific credence (Troher, 2015; Cooper and Cefai, 2013; Thwaite, 2015). Where single methodologies have been employed, the complex structures of teacher-pupil relationships from a socio-emotional point of view may have been denied (Bannerjee et al., 2014). For example, SEAL was abandoned as an approach in schools due to government

costs and the lack of research-based evidence, however, this does not mean that that SEAL was not significantly effective for some pupils and schools as a whole. Some of the materials in SEAL were still in use by schools after the programme ended (Banerjee, 2014), although no further research in this area was identified within literature searches. Researcher reflexivity also acknowledged that SEAL materials may still be useful, suggesting the focus of emotion-based research is a valuable concept to pursue. To address the complexities of SE research, a Mixed Methods approach will be employed to counteract the focus on only one methodology in previous research (see Chapter Five).

Secondly, the focus on emotions in the classroom, particularly those that could be seen as undesirable (such as sadness and anger), may place a pathological gaze on education. Maturo (2012:126) argues that the focus on emotions and mental health is perhaps the "most medicalised part of human life" and by concentrating on this, schooling becomes a form of intervention for those at risk of experiencing sadness or anger (Furedi, 2014). interventional perspective may lead to practitioners categorizing children with 'normal' or 'abnormal' expressions of emotions: a deficit approach that can be argued to undermine schooling and has the potential to be dangerously decontextualized (Gillies et al., 2011; Craig, 2007). The focus on emotions may lead to a therapeutic model within education, with the capacity to disempower rather than promote resilience (Ecclestone and Brunila, 2015). By focusing on the self, pupils may become overly introverted, leading to a lack of responsibility and a shared sense of care for others. To reduce such alienation or stigmatization, Clarke et al. (2015) argued for a whole school approach to SEL. This appears appropriate to reduce the focus on individuals, as well as negating critique around the long-term outcomes for intervention studies as previously discussed. However, caution is still required to ensure that a whole school approach does not lead to disempowerment and an emphasis on the medicalised and therapeutic (Furedi, 2014).

3.5.3. SE Talk: Summary

Although the critique presented for SE talk suggests potential limitations, researching talk from this perspective may still be useful in supporting teacher-pupil relationships. Through SE talk, relationships are approached from a supportive, emotional-regulation standpoint, one that may serve to foster feelings of motivation, improved self-esteem and attachment between pupils and teachers. Riley (2009) suggests that viewing relationships from this SE perspective is the most appropriate lens and is possible that emotion-led, verbal strategies in education might be more influential than previously thought. This potential impact of SE talk will be

explored through the closer inspection of teacher-pupil relationships within one educational setting - SE provides an additional layer of focus regarding teacher talk strategies.

3.6. Teacher Talk Strategies: Summary

To feel securely connected to others has been posited to be a basic human need (Maslow, 1954; Deci and Ryan, 1985; Bauermeister and Leary, 1995; Martino et al., 2017) and teachers may have the ability to support and foster secure-type relationships with their pupils through a variety of talk strategies. Questions have arisen as to the specific forms of talk that impact secure-type attachment relationships (Hamre and Piante, 2010) and how these can best be implemented within a primary school setting. This chapter has discussed three main strategies: positive versus negative talk, specificity and SE talk. Each strategy has presented the implications for teacher-pupil relationships from an attachment perspective, intervention versus whole school studies and main critique. The reason for critique is not to support or deny the impact of one strategy over another, but merely to suggest that there are multiple influences in the development and sustainability of teacher-pupil relationships using talk.

However, herein lies potential tensions regarding teacher-pupil relationships: a problem may lie with the reconciliation of disparate or too narrowly defined theoretical standpoints, or that theory and practice are at odds. Behaviourist notions (such as rewards and sanctions) appear to be central to government policy, a plethora of research and often individual school policy. However, SE strategies have been shown to demonstrate successful results but appear to feature less in school policy. For this reason, Riley (2009) acknowledges that this failure to adequately connect theoretical standpoints in childhood development lies at the heart of the apparent unease of appropriate whole-school support programmes or teacher interventions in supporting SE dynamics in schools.

Praise (or positive) statements are acknowledged as useful (Gable et al., 2009), but perhaps serve as mediating mechanisms (Spilt et al., 2016) and in combination with specificity and SE talk. Kennedy and Kennedy (2004) argued that a combination of such strategies would best support teacher-pupil relationships and the development of pupil IWMs: a whole school, attachment-orientated approach for all pupils, combined with transitional behavioural interventions for small groups and individuals.

In Chapter Four, an SE teacher-talk strategy for supporting relationships - EC - is presented and critiqued.

Chapter Four: Emotion Coaching

4.1. Introduction

Having reviewed various types of teacher talk to support teacher-pupil relationships from an attachment perspective, this chapter provides an in-depth account of EC, a SE talk strategy. Originally developed to support parental styles, EC has now been adapted for schools with emerging results for teacher-pupil relationships. This research follows the introduction of EC into a primary school and attempts to inspect and evaluate teacher talk strategies both before and following EC introduction. Chapter Four, therefore, outlines the key principles of EC, research studies and implications for classroom practitioners to ascertain the basis of the thesis research. Finally, this chapter concludes with the research conceptualisation.

4.2. EC: Key Principles

The origins of EC are rooted in parental-child verbal support and emotional regulation to support children to develop socially and emotionally (Westby, 2020). Within the last decade, EC is beginning to emerge in educational contexts as a potentially adaptive and compelling verbal relational strategy for school practice.

The key principles of EC were developed by Gottman et al. (1996, 1997) who had a keen interest in attachment theory, psycho-physiology and family-focused therapy to support adultchild relationships. Through a longitudinal observation of 56 families over three years with children between three to 15 years old, Gottman noted parent-child verbal interactions, parental attitudes towards their own emotional understanding, children's regulatory tone measurements and teacher assessments of characteristics (such as aggression, empathy and academic achievement). Gottman et al. (1996, 1997) concluded four different types of parental-child interactions (summarised in Table 4), one of which was the EC style: a verbally supportive, empathetic and joint problem-solving interactive style that supported a child's emotional development and regulation. The style of EC is predicted to be closely associated with secure attachment relationships. The components of the EC style were adapted and later informed the foundation steps of the EC parenting programme, launched by Gottman and DeClaire (1997), as well as programmes used within educational contexts. The other three styles were less responsive and attentive toward their children and their emotions: Emotion Dismissing, Emotion Disapproving and Lassez-Faire (Gottman et al., 1996, 1997). These three styles would reflect tenets of insecure attachment relationships as outlined in Chapter Two (Section 2.2.).

Table 5 includes a brief description of each parenting style, the degree to which parents show empathy towards their child's emotions and the amount of guidance and support given to their child within each style. The predicted association to attachment styles are included in the final column of the table. The EC parenting style presents optimal (high) empathy and guidance levels, reflecting a secure attachment relationship.

Table 5: Overview of the four parenting styles (summarised from Gottman et al., 1996)

Parental Style	Key components of parental style	Degree of parental empathy	Degree of parental guidance	Predicted Attachment relationship
Emotion Dismissing	 Parents are sensitive to some emotions but have a preference for positive emotions Some negative emotions are believed to be transient and would pass without intervention Short-lived emotional support 	Low	Low	Insecure
Emotion Disapproving	 Critical of negative emotions Emotions are believed to be weapons of manipulation and require control Focus on behaviour arising from emotion, rather than emotion itself 	Low	High	Insecure
Lassez-Faire	 Acceptance of emotions Rarely an opportunity for joint problem solving Emotions are seen as states that once released, disappeared No parental reflection of emotions 	High	Low	Insecure
Emotion Coaching	 Parents understand emotions expressed by their children Validation and support in labelling emotions Negative emotions viewed as opportunities for joint problem solving 	High	High	Secure

Gottman concluded several correlations between adult-child interaction styles and child measures. Physiologically, Gottman identified a link between children's vagal tone at five years of age, with their ability to downregulate emotionally at eight years of age: he concluded that regulatory physiology links to parental approach and contributes positively to self-regulation later in life (Gottman et al. 1997). Moreover, parental styles correlated with teacher views of academic achievement and peer relations: children of EC-style interactions were evaluated as having higher academic achievement, as well as more successful peer

relationships. In contrast, the children of parents observed as dismissive or disapproving generally scored lower in academic achievement and social competence. It appeared from the study that parental affect could influence socialisation and emotional regulation, a notion concurred by other researchers (Baumrind, 1971; Blandon et al., 2010; Duncombe et al. 2012). However, some caution must be acknowledged in the potential over-simplification of parenting styles. The operationalised terminology may lead to parents and practitioners viewing the categories as fixed and permanent (Eisenberg et al. 1998). It is more likely that styles are more fluid in approach, with parents moving between different styles, depending on context (Katz et al., 1996).

Gottman et al. paid particular attention to, and coined the term Meta-Emotional Philosophy (MEP) as a key concept of EC, defined as an "organized set of feelings and thoughts about one's own emotions and one's children's emotions" (1997:7). MEP, it was argued, was a significant component of supporting children's emotions and regarded as fundamental to develop a strong and lasting attachment relationship: what parents (or adults) believe about emotions and how they behave accordingly (Chen et al., 2012). The MEP component appears central to the notion that EC is an effective verbal strategy for supporting relationships (Gottman, 1997; Clearly and Katz, 2008; Blandon et al., 2010). Moreover, the adult's ability to be aware of their own emotions forms a key step in the EC parental programme which has since been adapted for educational practitioners by Gottman and DeClaire (1997). Figure 3 represents the key five steps in the EC programme used within parental and educational training programmes (summarised from Gus et al., 2017; Westby, 2020). These five steps form the basis of the current EC educational training offered to practitioners and represent the whole school approach that is employed within this research.

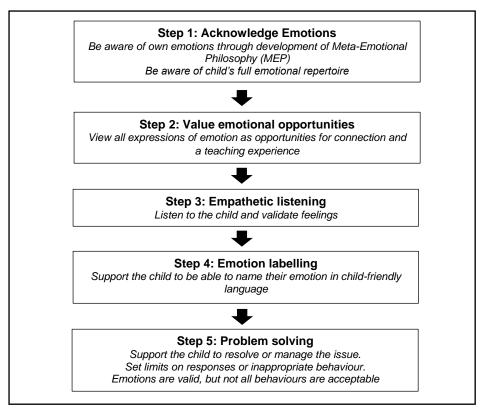


Figure 3: The five steps of the Emotion Coaching development programme (summarised from Gus et al., 2017; Westby, 2020)

4.3. Implications of EC: Parental Studies

EC as an approach to support adult-child relationships was developed between parents and their children by Gottman and DeClaire (1997) and the tenets and outcomes of such EC parenting programmes are discussed below. These principles form a strong theoretical basis for EC within educational contexts to support the emotional and social development of pupils, as well as the potential bolstering of teacher-pupil relationships through talk.

EC parenting programmes, delivered over the course of several sessions, include developing adult understanding of their own MEP, basic bio-psychological understanding of emotional regulation, developing empathetic practice and problem-solving techniques. Research emerging from such EC programmes has highlighted potential successes in adult-child relational experiences. For example, the Tuning into Kids programme (Havighurst and Harley, 2007) and Tuning into Teens programme (Havighurst et al., 2012) both demonstrated ongoing emotional regulation competencies in children months after the initial EC training took place with parents. Havighurst et al. (2013) demonstrated a reduction in child behavioural incidents and intensity, as well as increased emotional discussion for four and five year olds who struggled with emotional and behavioural regulation. The EC parental programme has also

demonstrated positive outcomes for children within maladaptive circumstances. Merchant et al. (2019) found that EC input mediated child regulation within adoptive families: children who reported a better attachment to their adoptive family were more likely to have adoptive mothers who demonstrated EC techniques regularly and thus had a larger repertoire of regulation strategies. EC training for parents has also been shown to have a positive effect on buffering the effects of depression (Hunter et al., 2011), domestic violence and community conflict (Katz et al., 2008, Cunningham et al., 2009), as well as anxiety disorders (Hurrel et al., 2015). Zimmer-Gembeck et al. (2017) reported that the invalidation and suppression of emotions may play a key role in leaving children more susceptible to maladaptive methods of managing emotions and may lead to significant dysregulation problems and psychopathology such as Borderline Personality Disorder (Linehan, 1993), eating disorders (Ford et al., 2011) and Post Traumatic Stress Disorder (Perez et al., 2020). Where emotions are supported effectively, it can be argued that social, emotional and mental health functioning and development are supported.

Initial findings from parental-based studies (Havighurst et al., 2013; Merchant et al., 2019) provide a strong rationale for EC as a verbal strategy in supporting relationships between adults and children. EC could be advantageous for a number of reasons: EC may provide a social learning aspect with regard to parental MEP. As children look to those around them within their Microsystem for guidance, to learn and emulate adult behaviours (Bronfenbrenner, 1995), emotional socialisation skills develop. Three social learning mechanisms may be established: expression/regulation of emotions, reactions to others' emotions and the acceptability of the discussion of emotions (Clearly and Katz, 2008). Although behaviourists may argue that positive effects are due to the external attention given within the EC conversation that reinforces the behaviour, EC advocates would suggest that social learning mechanisms create an IWM for the child of whether types of emotions are permissible (Katz et al., 2008). Furthermore, EC appears to foster attachment and responsiveness between adults and children. The verbal strategies of validation, labelling and joint problem-solving fit seamlessly within attachment theory, where EC responses are 'good enough' to build securetype attachments. As children test out their world by looking to key adults for security, a supportive and attentive response allows for a sense of safety to be created (Merchant et al., 2019). The EC structure provides such a response, thus potentially supporting optimal child development.

Finally, EC may have a physiological impact. Through validation and expression of child emotions during heightened events, physiological arousal may be dampened. Conversely, where emotions are suppressed, physiological arousal may be increased (Szcygiel and Maruszewski, 2015; English et al., 2017). Schore and Schore (2007) suggested empathetic,

calm and responsive communication strengthens attachments to caregivers through the development of neurological connections and the strengthened regulation function (Porges, 1995; Porges and Furman, 2011). Despite some neurological evidence of the benefits of attachments and EC (Gottman et al., 1996; Porges and Furman, 2011; Schore and Schore, 2007), it would be imprudent to focus the main benefits of EC within this area, particularly considering the complex nature of bio-psychological and physiological processes within the human body. Moreover, it could be argued that variations in predisposed physiological regulation may have an impact on parenting behaviours i.e. it is difficult to ascertain whether EC supports regulation or whether physiological processes impact parenting styles (Perlman et al., 2008; Hurrel et al., 2015). Although presented in brief here, the biological impact of attachments and EC are beyond the scope of this research.

The potential influence and impact of EC programmes on adults and children appear exciting. Based on the premise that adult-child relationships are fundamental, both within the family and within an educational context (Bronfenbrenner, 2005; Bowlby 1969), it would be valuable to consider whether the tenets of EC influence educational settings as well as within parent-child relationships. This thesis aims to consider whether the introduction of EC has an impact on teacher-talk within one educational setting, in an attempt to support secure-type, teacher-pupil relationships.

4.4. Implications of EC: Education

Although Gottman and DeClaire (1997) acknowledged the key role that teachers may have within EC, it has only begun to filter into schools in the UK within the last decade, with potentially promising results (Havighurst et al., 2010; Cuicci et al., 2015; Rose et al., 2016). Based on a similar training structure to that of the parenting programme, practitioners attend initial training events (usually two days), followed by network meetings to discuss practice, overcome barriers and share ideas. The training sessions focus on attachment theory, emotional regulation and physiological and basic bio-psychological processes in the developing child (an example of training session content is included in Appendix B).

Havighurst et al. (2010) highlighted that teachers who were EC-trained, reported increased positivity, empathy and self-awareness towards pupils. Similarly, Gus et al. (2015) found that teachers reported greater self-regulation ability in stressful incidents in the classroom, which led to a reduced number of incidents that required pupil restraint. In both of these studies, as teachers' understanding of MEP developed, so did their understanding of how to approach, support and empathise with pupil incidents effectively, rather than relying on other members of staff to jointly support incidents. Although both of these studies relied on self-reporting only

and therefore may demonstrate exaggerated positive results for EC to appease the researcher (see critique, Section 4.5.), the results remain intriguing and highlight the potential importance of MEP within EC as a strategy. It could be argued that teachers (or adults in general) who have a greater understanding and acceptance of their own emotions, may be more likely to accept and help support others' emotions, particularly that of pupils in an educational setting. Ciucci et al. (2015) concurred, explaining that MEP in teachers pervade practice in the classroom: to create a calm, purposeful and successful classroom, based on mutual respect and strong teacher-pupil relationships, training to improve teachers' MEP could support emotional classroom climates. This notion fits seamlessly with research discussed in Chapter Three: where teachers' knowledge to support relationships is evidenced, strategies are utilized more often (Apter et al., 2010) Teacher efficacy and knowledge are key areas of note.

In a larger scale study with participants across a range of practitioners from the children's workforce (including early years, primary and secondary schools, police and CAMHs), Rose et al. (2016) also described several benefits of EC training. 127 'champions' were trained in EC, and then disseminated and implemented the approach in their settings. Through selfreported questionnaires, focus groups and case studies, Rose et al. (2016) concluded that the results were significant. These included improvements in adult self-regulation, mental health, empathy and patience with their colleagues. Within the classroom, teachers reported that they felt calmer, more empathetic and consistent with students and more positive in their language as a result of the EC training. Increased empathy and consistency had a direct positive effect on children's social behaviour and led to a reduction in the use of sanctions and rewards when responding to pupils, as well as incidents where a multi-agency, problemsolving approach to child behaviour was needed (Rose et al., 2016). However, similarly to previous research (Havighurst et al., 2010; Gus et al., 2015), this study also utilized selfreported benefits only, raising questions about reliance and accuracy of EC benefits, particularly with a participant sample who had self-selected to take part. Additionally, there are relatively few studies that utilize observations of practitioner practice of EC, tending to rely on self-reporting as a key method (Section 4.5.). The lack of observational information is something which demonstrates the need for further research, one to which this research attempts to contribute. It may also be that EC in a school setting has wider implications for pupils than solely classroom based. Bariola et al. (2011) highlighted that EC strategies could have macro-relational implications outside of the classroom in teaching both adults and children the importance of listening to and validating others. Moreover, Buckholdt et al. (2016) suggested that EC may serve to buffer the effects of poor peer relationships and associated negative self-perception. 129 pupils in years 4-6 were asked to complete rating scales based on their friendships, peer emotions, parental emotions and self-perceptions. Pupils were

found to cope more consistently and maintain a sense of school connectedness where EC was present with an adult, albeit where peer relationships were poor. However, this study was based on pupil views only and did not take into account teacher views or parental behaviour.

4.5. Critique of EC in Education

Current EC educational research is predominantly based on practitioners attending central EC training (from a variety of educational settings), collecting information and returning to their setting. Practitioners implement EC in their classroom and then may or may not disseminate EC practice among other colleagues in the setting. In this respect, EC training can lead to certain practitioners becoming 'EC champions'. However, this method of dissemination raises several questions: The standard of EC training when disseminating the course information by the practitioner; how influential the practitioner can be among staff to forge change across a whole school setting; how convinced all staff are to take on the key messages; and the time needed to disseminate, embed and review practice.

Gus et al. (2017) attempted to address these issues through whole-school training and implementation of EC in response to Sebba et al. (2015). Sebba et al. (2015) reviewed the national data of pupils who were looked after or in care (including school performance and exclusion data) and conducted 26 interviews with pupils, their carer and social workers. The study recommended that initiatives to support pupils with Social Emotional and Mental Health difficulties such as EC should become more widely known in varying educational settings. Therefore, Gus et al. (2017) sought to embed EC in a small school for social, emotional and mental health needs through a case study approach. Whole school EC training was undertaken and the perspectives of pupils, staff and families were sought using structured questionnaires and interviews. Gus et al. (2017) concluded several positive effects of the implementation of EC: Improvements in adult self-regulation, prosocial behaviour of pupils and strengthened relationships between staff members. Reductions in pupil restraint, disruptive behaviour, staff stress and the use of sanctions were also noted. Although participant sample sizes were very small and the research was only based in one setting, Gus' study highlighted a potential interest for a whole-school approach - there appears a distinct lack of research into whole-school EC implementation in mainstream educational settings as a relational strategy. Parker et al. (2016) argued that this could be due to the apparent difficulties in reconciling between the humanist, SE approach held by EC and the behaviourist principles endorsed by government policies on teacher-pupil relationship strategies. However, EC appears a relatively novel opportunity - critical consideration of the benefits of EC is needed throughout a variety of settings, including whole school and mainstream educational settings.

EC appears to be gathering momentum within educational settings, albeit presenting some key issues for researchers. Funding in education remains scarce and therefore changes in approach, such as a move towards a whole-school approach to SE regulation, can be expensive and difficult to implement. Funding challenges may account partially for the lack of whole-school research in this area thus far. Such translations to whole-school approaches remain difficult regardless of funding issues, such as practicalities in whole-staff buy-in, time to implement and review effectively, and ongoing training support (Murray-Harvey, 2010). Research so far in this area may therefore be unrepresentative: sample sizes are relatively small and have relied on the goodwill of individuals to be researched. The majority of studies rely on self-reporting for impact, thus highlighting practitioner motivation to take part and the potential for social desirability bias.

For these reasons, Rose et al. (2019) acknowledge that there is further research needed to address some of these issues in EC distribution, as well as emotion-based relational strategies as a whole to ascertain potential potency. As best to the researcher's knowledge at the time of writing, there appeared a lack of research surrounding mainstream, whole school implementation of EC as a verbal strategy in supporting pupils, practitioners and relationships between the two. Moreover, there appeared a gap in the literature regarding classroom observations of EC implementation and associated evaluation by teachers. EC as a verbal strategy to support relationships has predominantly relied on self-reported impact thus far. This thesis responds to the questions raised in this section regarding EC critique and is presented in the following section – the research conceptualisation.

4.6. Literature Conclusion and Research Conceptualisation

Throughout Chapters Two, Three and Four, arguments have been presented for the importance of the teacher-pupil relationship, underpinned by the theoretical standpoint of attachment theory (Bowlby, 1969) and tenets of the Bio-Ecological Systems theory (Bronfenbrenner, 2005). Relationships are viewed as fundamental within education and a consideration of how teacher-pupil relationships can be improved is imperative. To develop and sustain relationships, one potential area of teacher influence is that of teacher talk. Varying theoretical standpoints have been presented and critiqued as to the types of talk that may impact relationships, including behaviourism, motivation, specificity and SEL. Each type of talk has implications on classroom practice, and talk types have been presented and critiqued.

The emerging interest in EC in schools as a verbal, relational strategy has also been presented, identifying current gaps in research and methodological critique. Therefore, an

investigation into teacher-talk within a primary setting will be undertaken before, during and following the whole-school introduction of EC as a relational strategy.

Several objectives are identified for the research:

- To understand and identify the types of teacher talk used in primary classrooms
- To discover teacher attitudes towards teacher talk, particularly with reference to supporting teacher-pupil relationships in the school
- To evaluate the impact of a teacher SE talk strategy EC on teacher-pupil relationships and teacher talk
- To understand practitioner and school practicalities of introducing EC into the school

Figure 4 shows a diagrammatic representation of the research conceptualisation (as replicated from Chapter One). The optimal, secure-type attachment relationship between the teacher and pupil is shown through the overlapping circles, encompassed by the Microsystem (Bronfenbrenner, 1995, 2005). The dashed arrows represent the potential impact of teacher talk on the relationship, and the potential impact of EC upon teacher talk. Finally, potential influences upon the EC training for the teacher are shown as arrows towards the EC training. It is hoped that understanding of these potential influences will be uncovered further during the research.

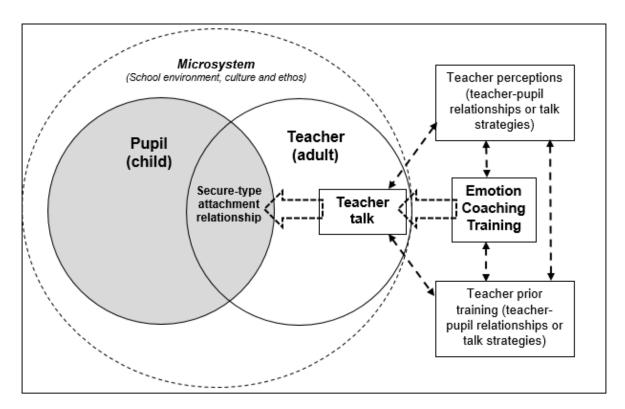


Figure 4: Research conceptualisation of Emotion Coaching training impact on teacher talk

Having argued the foundations of the research supported by educational literature, Chapters Five and Six outline the methodological approach taken in order to address the objectives raised in this chapter.

Chapter Five: Methodology

5.1. Introduction

The aim of the research is to understand teacher talk strategies prior to and following the introduction of EC as a SE talk strategy. Therefore, Chapter Five considers the methodological choices made for the research: the design frame, philosophical assumptions, methodological rationale, participant recruitment and ethical considerations of the research. These methodological considerations are presented as the foundations of the research to address the research questions:

RQ1: How is teacher-pupil talk used in the primary classroom to facilitate teacher-pupil relationships?

RQ1a: To what extent does a socio-emotional talk strategy (Emotion Coaching) influence teacher talk within a primary classroom?

RQ2: What are the benefits and challenges of introducing Emotion Coaching as a whole school, socio-emotional talk strategy to support pupil-teacher relationships?

5.2. Methodological Approach: Design Frame

The research employed a Mixed Methods Convergent design (Creswell and Plano Clark, 2018) within the philosophical foundation of Pragmatism, to explore a single primary school case involved in an EC programme.

Figure 5 diagrammatically represents the stages of the Mixed Methods Convergent research model (Creswell, 2015). The two main phases of the research - Exploratory and Explanatory - occurred on either side of the EC training. In both phases, data types (qualitative and quantitative data obtained through semi-structured interviews and classroom observations) were collated and interpreted simultaneously (rather than separately or sequentially), reflecting the Convergent nature of the design frame. Finally, the results of each phase were evaluated, compared and contrasted with each other to explore the process of EC and potential teacher practice change.

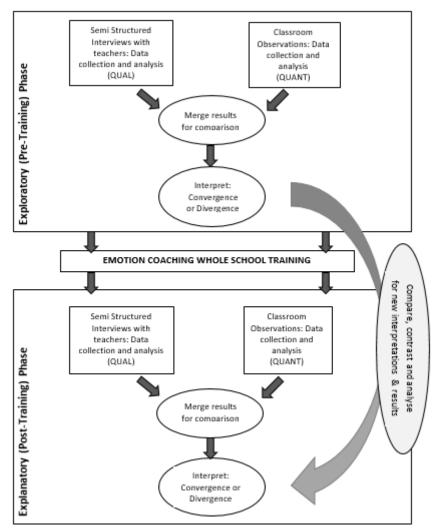


Figure 5: The research study's Mixed Methods Convergent Design (adapted from Creswell, 2015)

5.2.1. Mixed Methods Convergent Design Rationale

The use of Mixed Methods in this research allowed for a multitude of evidence to be collated in an attempt to discover complementary strengths and non-overlapping weaknesses of quantitative and qualitative data (Johnson and Turner, 2003), rather than relying on one single method to understand the complexities of teacher-pupil relationships. Using a Mixed Methods design allowed for multiple research questions to be addressed using a variety of methods to strive for methodological superiority (Tashakkori and Teddlie, 1998; Symonds and Gorard, 2010).

A Mixed Methods approach therefore harnessed the strengths of one approach to offset the weaknesses of the other. For example, qualitative, semi-structured interview data provided a thorough understanding of practitioner attitudes towards EC and teacher talk. However, the interviews would not allow for an understanding of teacher talk and EC practice within a classroom setting. In contrast, the quantitative data collated through classroom observations

could provide an understanding of teacher talk in practice. However, the latter does not reflect the nuances of teacher attitudes and decision-making in context.

Although some may express caution in merging different types of data in Mixed Methods research (for example, Creswell and Plano Clark, 2011), others acknowledge that it allows for more advanced research designs with increased validity (Denscombe, 2010; Biesta, 2003). The latter position was favoured in this research, hoping for more precise questions of quality and depth of information on teacher attitudes and behaviours towards relationships than could be gained through quantitative or qualitative data alone. Additionally, Creswell et al. (2003) referred to the transformational dimension of research and how, through using a Mixed Methods design, both the technical role of research and the cultural role of research can work together (Biesta, 2003) to provide transformational outcomes for education: "...to promote a shared responsibility in the quest for attaining accountability for educational quality" (Johnson and Onwuegbuzie, 2004:24). Concerning the above arguments, a Mixed Methods design was utilised since it was considered a robust framework for merging multiple approaches to address the aims of the research within Pragmatism (Onwuegbuzie and Leech, 2002; Creswell and Plano Clark, 2018).

The study employed a Convergent design (Cameron, 2009), where the intent was "to obtain different but complementary data on the same topic" (Morse, 1991:122). Throughout the semi-structured teacher interviews and observations of teacher practice, both quantitative and qualitative data sets were collected separately but concurrently, and once evaluated and analysed, the intent was to compare, contrast and validate responses from the data sets in response to the research questions. This design was relevant as quantitative and qualitative data were assumed to be of equal weight to the research questions, not one type over the other. However, the challenges of merging text and numerical data sets, heterogeneous sample sizes and explaining divergence in results (Creswell and Plano Clark, 2018) were acknowledged and are discussed in further detail in Chapter Ten.

Through a Mixed Methods Convergent design, the attitudes and behaviours of teachers in the classroom were collated in multiple ways to compare and contrast data concerning the research questions (Tashakkori and Teddlie, 1998). Yin (2009) suggested that multiple sources of information and data should be converged and combined to create chains of evidence that lead to tentative findings, thus supporting construct validity. To address potential threats to construct validity, the exact procedures for collecting and analysing data have been reported to ensure transparency for the research community. These procedures include precise methods for observations and semi-structured interviews, interview themes,

and methods for analysing, interpreting and reporting on data (presented in Chapters Six and Seven).

5.2.2. Single Case Rationale

Research based on one case highlights a "particular instance in order to reveal the ways in which events come together" (Hitchcock and Hughes, 1989: 214). This research attempted to address the relationships between teacher talk and EC training within one primary school setting in the South of England. The focus on one school meant a rich and vivid understanding could be sought of real people in real situations in an attempt to make it relatable to other educational practitioners (Bassey, 1999). As Thomas (2017) posited, the most productive and popular research in the field of education and applied social sciences are case-based, first-rate examples which illuminate and explain the worlds in which we belong. This "science of the singular" (Simons, 1980) informs educational practitioners in their environments, researching both phenomena in practice and on practice, thus highlighting the suitability of this approach.

The choice to study only one school allowed a commitment to studying the complexities in a given situation and provided a strong rationale for the choice of what it was to be studied, rather than merely a methodological choice (Thomas, 2017). To explicate broader themes within the school Microsystem (Bronfenbrenner, 1995), a focus on one school allowed for the questioning, analogy, consonance and dissonance of experiences to be highlighted and warranted assertions to be brought to light. In this respect, the tenets of Pragmatism were also supported through the singular approach.

At the time of writing, research within singular cases of EC and teacher talk appeared to be the predominant approach (Havighurst, 2010; Rose et al., 2016; Gus et al., 2017). The case-based approach may be due to the early stages of EC within education, but could also be due to the researcher's preference for data richness and contextualisation through singular cases. The developing research regarding educational EC, leading to the creation of new cases of study, appeared exciting and a foundation for the research at hand. This study adds to this body of evidence, as well as coupling classroom observations into the research design to provide a novel approach.

Despite the favourable aspects of only using a singular school, several criticisms need to be overcome to ensure transparency in design choices. Dyer (1995) and Yin (2009) argued that singular cases are challenging to demonstrate objectivity and that certain decisions (for example, sampling techniques of participants and reporting evidence fairly) have already

taken place in favour of the research question and direction. Shaughnessey et al. (2003) also highlighted this potential concern, suggesting that systematic research is hard to demonstrate within only one setting. Lastly, issues of generalizability are often cited as a design flaw and a lack of scientific construct and theory testing (Thomas 2017) may be uncomfortable in the research community. However, these arguments could be seen as valid only if viewing objectivity as a significant principle in research - the dualisms of objectivity and subjectivity have been rejected in favour of a different philosophical position, Pragmatism (section 5.3.). The observation of teacher-pupil experiences and transactions is not a neutral act, nor subjective; it is not claiming to be so within the primary school setting in which this Mixed Methods study is based. Moreover, Thomas (2017) argues that scientific, objective constructs are in fact pseudo-scientific within the complexities of a given situation. The impartial researcher's position as neither an advocate nor critic of EC, as well as reflections on validity, positionality, truth claims and reflexivity are discussed further in this chapter in an attempt to buffer potential criticisms of single case research.

Cohen et al. (2007) highlighted that an inability to generalise findings to other educational settings or theories could be a disadvantage of small-scale studies. However, the intention of this research was not to presume application to a wide-ranging audience, nor that universal 'truths' would be extrapolated. It was hoped that an understanding of the specific context and temporal space of EC in one setting was found and that this led to recommendations that may be useful for an educational community within which the research was situated, striving for relatability to other educational practitioners. Such recommendations and conclusions drawn from this research were therefore presented tentatively and not confidently (Thomas, 2009) to reflect the dynamic nature of the educational setting and to not presume the generalisability of results.

5.3. Philosophical Assumptions

This research design employed in this study assumed a Pragmatic philosophical position. There is consensus that Pragmatism is the most appropriate epistemology for Mixed Methods research, due to its flexibility and practical nature (Johnson and Onwuegbuzie, 2004; Tashakkori and Teddlie, 2003; Greene, 2007; Symonds and Gorard, 2010). Three main advantages of Pragmatism were considered when formulating the research study.

Firstly, Pragmatism offers principles that are both practical and outcome-orientated. As Johnson and Onwuegbuzie argued, "*Pragmatism takes an explicitly value-orientated approach to research*" (2004:17). The practical nature of Pragmatism underlines the compatibility with the thesis research area: the desire to adapt and advance teacher talk

practice to support teacher-pupil relationships within primary educational settings. Consequently, the relationship between research and practice should be at the forefront of research design, highlighting a needs-based approach (Dewey, 1948).

Researchers should "choose the combination or mixture of methods and procedures that work best for answering [the] research questions" (Johnson and Onwuegbuzie, 2004: 17). In this respect, the research question is the key, as Tashakkori and Teddlie (1998: 20) highlighted, there is a "dictatorship of the research question". Classroom observations and semi-structured interviews were considered the most practical and relevant methods to address the research questions - these choices were particularly appropriate given time constraints in an educational context and data collection during the Covid-19 pandemic.

Secondly, Pragmatism avoids classical philosophical assumptions and allows for multiple perspectives to be synthesised for the interest of the research approach. Philosophically and methodologically, the two classical paradigms of Positivism and Interpretivism have historically held deep-seated assumptions that can be argued to be unhelpful in the everchanging, complex and dynamic interdisciplinary world of educational research. A primary misconception is that there is a strict divide in the type of data collected between Positivism and Interpretivism: quantitative and qualitative data, respectively (Biesta, 2003). In this respect, the use of qualitative, semi-structured interviews may be classically associated with Interpretivist approaches whereby knowledge is constructed and subjective. Conversely, classroom observations, which reduce talk occurrences to quantity and are analysed as such, would be situated classically with a Positivist approach. Although some researchers argue that "accommodation between paradigms is impossible" (Guba, 1990: 81), this does not mean that data types are incompatible and cannot be used alongside each other to provide a systematic inspection in one area of research. Hammersley (1996) argues that such strict associations between ontology and method should therefore be challenged to reflect the interdisciplinary world of research, particularly in educational contexts. challenges and abandons the dualisms of these philosophical standpoints between the natural and the social world, between the objective and between methodological positions and is only interested in what works concerning the research at hand (Johnson and Onwuegbuzie, 2004). A Mixed Methods design from a Pragmatic perspective, therefore, encourages approaches to work together to provide a systematic and careful inspection of teacher-pupil relationships in an educational context.

Finally, within Dewey's Pragmatism, 'truth' is not defined as 'truth' in the classic sense, but instead as reasonable claims based on careful observation of experience. Such "warranted assertions", Dewey (1941: 169) argued, should not be mistaken or labelled as 'truth' as they

are temporal, contextual and related to action. Meaning is defined as being taken from experience put into practice. All modes of experience are equally real and fragments of experience can be systematically and logically put together to result in knowledge, which can then lead to intelligent action – it is not blind trial and error. This position helps us to overcome the stalemate between objectivity and subjectivity in an ever-changing, fallible world (Johnson and Onwuegbuzie, 2004).

By considering warranted assertions (rather than 'truth'), Pragmatism helps to overcome issues of reliability – the degree of replicability and stability over time (Thomas, 2009). Reliability was considered difficult using this definition, for two reasons: the design frame of a Convergent, Mixed Methods design and the overarching lens of Pragmatism. The former highlighted that reliability was unfeasible, as this research was demarcated research in a specific time and space (Yin, 2009). More specifically, this research was based in one school during one year: the demographics of children, staff, subjects, resources and environment were not likely to remain stable outside of this period, especially during an unprecedented pandemic. Secondly, the notion of stable 'truth' and replicability aligns with a Positivist stance which was rejected in favour of Pragmatism.

5.4. Data Collection: Rationale and Participant Recruitment

The proceeding section outlines the rationale for the data collection methods, the school and participant recruitment, and the process of EC training in the research school. Throughout this section, acknowledgement is given to the complexities of the data collection process at a time compounded by the Covid-19 global pandemic. The chapter concludes with a reflection on the ethical principles considered throughout the research.

Table 6 presents the research questions within the study and the methods utilised for the exploration of each research question. RQ1 and sub-RQ1a utilize both semi-structured interview and classroom observational data in order to address the questions. RQ2 utilizes semi-structured interview data only.

Table 6: Research questions and data collection methods for the exploration of the research questions

Research Questions		Methods of Data Collection		
RQ1	How is teacher-pupil talk used in the primary classroom to facilitate teacher-pupil relationships?	 Classroom observations of practice, with a focus on teacher talk from teachers to pupils (before and after training sessions) Semi-structured interviews with teaching practitioners, both before and after the Emotion Coaching training sessions 		
Sub	To what extent does a socio-	Classroom observations of practice, with a		
RQ1a	emotional talk strategy (Emotion Coaching) influence teacher talk within a primary classroom?	focus on teacher talk from teachers to pupils (before and after training sessions) • Semi-structured interviews with teaching practitioners, both before and after the Emotion Coaching training sessions		
RQ2	What are the benefits and challenges of introducing Emotion Coaching as a whole school, socio-emotional strategy to support teacher-pupil relationships?	Semi-structured interviews with teaching practitioners, both before and after the Emotion Coaching training sessions		

5.4.1. Research Methods Rationale: Observations

To obtain a snapshot of classroom practice and teacher talk, naturalistic observations were chosen for both pre- and post- EC training sessions using an audio recording device. Naturalistic observations are considered useful for studying pupils in their classroom environment without any outside influence or control (Cohen et al., 2007). The audio recording device allowed for lessons to be recorded without intrusive video recording devices or researcher presence – the latter being particularly useful during the pandemic where access to classrooms was more challenging.

The observational method attempted to contribute to direct research of EC in practice and was deemed advantageous for several reasons. Firstly, by observing the spontaneous behaviour of pupils and teachers in their natural surroundings, the complete environment was examined rather than a focus on one specific variable within a controlled observation or experiment, meaning that all interactions between pupils, teachers and the environment had the opportunity to be observed, rather than selective attention in one area (Robson and McCartan, 2016). Secondly, to obtain information that was representative of teacher-pupil talk, it was deemed advantageous to observe within a pupil's everyday environment — the classroom. Pupils' everyday environment was especially important as Aubrey and Riley (2018) argued

that Microsystem influences are best observed when children are in their natural environment; ecological validity is thus improved. In this way, the PPCT model for researching child development was also reflected through the use of naturalistic observations (Bronfenbrenner, 2005; Rosa and Tudge, 2013: Chapter Two, Section 2.5.).

5.4.2. Research Methods Rationale: Semi-Structured interviews

To discover school and personal values underpinning classroom practice, semi-structured interviews were undertaken in both pre- and post-EC training. Semi-structured interviews allowed for comparisons to be drawn between participants' attitudes towards teacher-pupil relationships and classroom practice (through the observations), but also allowed for richness and depth of response where required (Thomas, 2016). This method also allowed for comparisons to be drawn between the current research and previous EC research, which has relied most heavily on interviews and/or self-reported measures (for example, Rose et al., 2016; Gus et al., 2015).

Although a predetermined list of topics was identified for an overarching structure to the interviews (Chapter Six), the process allowed for modification during the flow of the interview to adapt to the research topics in situ as determined by the participants' responses. This flexibility allows for a unique window into the beliefs and attitudes of the participants regarding teacher-pupil relationships, teacher talk and school ethos (Robson and McCartan, 2016) rather than relying on a structured approach which may stifle interviewer follow-up, participant elaboration or the exposure of alternative viewpoints (Thomas, 2009). Conversely, the omission of any structure may have meant a less focussed interview within the control of the interviewee (Cohen et al., 2007).

An area of consideration for the preparation and delivery of the interviews was researcher neutrality: it was apparent that the head teacher of the setting saw EC in a favourable light as they were attempting to disseminate EC throughout the school community. However, the researcher aimed to maintain a critical stance, not in favour of nor promoting EC philosophy. This critical stance was stressed to participants during the introduction to the interviews, as well as matters of confidentiality. It was made transparent that there would be no feedback to the head teacher regarding participants' attitudes on EC training or classroom practices-unless safeguarding concerns were raised. Moreover, the degree of reciprocity given by the researcher during the interviews required delicate thought - the researcher did not want to interrupt, stifle or confirm any attitudes or opinions expressed - as Powney and Watts suggested: "the quality of the data collected will depend on the skill of the interviewer" (1987:35)

To attempt to reduce the above concerns and to improve the clarity of questions and structure, the semi-structured interviews were tested with fellow doctoral, critical friends. The rehearsal ensured that the process was manageable in length, depth of questioning and use of the audio recording device. The feasibility tests meant that some questions were discarded in the pre-EC interviews as they were deemed irrelevant, ambiguous or repetitive. Discarded questions centred on the whole school's intended structures (details of which could be mostly found in the target school's policies and procedures document) and specific examples of behavioural or emotional incidents (which caused challenges for anonymity purposes). Research questions, probes and themes are presented in Table 12, section 6.3.1.

5.4.3. Research School Recruitment

The research school was chosen through non-probabilistic, purposive sampling. Initial recruitment took place during marketing for a two-day, EC course as part of a county school's CPD programme in the South of England, during Autumn 2019. On application to the EC course, candidates were asked to contact the researcher if they were interested in taking part in the doctoral study. Three primary school head teachers were interested in the research to study the impact of EC both pre- and post- dissemination and through purposive sampling, the intentional selection of one school was agreed upon.

The research school was chosen due to the size of staff (large enough to ensure anonymity amongst staff) and the head teacher's wish to embed EC as a strategy across the whole school community, encompassing all staff members, not just class teachers. The school is an average-sized primary school within an academy trust in the south of England. There are between 250 – 300 pupils (national average = 280, DfE, 2022) and 44 members of staff. The desire to embed EC was part of a school-wide focus on improving relationships and mental health for both pupils and staff. The school had been through a period of instability, having previously been graded as 'requiring improvement' by Ofsted. The school was graded 'Good' under the last school Ofsted inspection (additional school characteristics can be found in Section 1.7.).

5.4.4. Participant Recruitment

Research participants were recruited through non-probabilistic, convenience sampling. During recruitment, the researcher presented an overview of the study to the school's staff during a briefing in November 2019. It was hoped that at least eight staff members would participate across the school, however, through convenience sampling, 12 agreed to take part. Often referred to as accidental sampling (Etikan et al., 2016), convenience sampling allowed

those willing to participate in taking part in the study, regardless of personal or professional characteristics (such as gender, time working in the school or job role). The choice to participate was specifically important within the specific school context so that staff members did not feel an obligation to take part. Convenience sampling allowed for ease of accessibility, although some criticisms are acknowledged such as concerns regarding unrepresentative samples, issues of generalizability and the potential for outlier data to have a devastating impact on the results as a whole (Etikan et al., 2016). Limitations of the sampling methods are presented further in Chapter Ten.

Table 7 below presents an overview of the participants and their educational experience in the role. 12 participants were recruited in total. The number of participants in each job role is included: eight qualified teachers (including the head teacher) and four teaching support staff. The number of years' experience that participants have had within that role is included, with 11 out of 12 participants having worked in their role for over three years. Teaching experience in only the research setting (N = 5) versus teaching in more than one educational setting (N = 7) is also included.

Table 7: Participant demographics by experience

Staff type	Total number of staff	Experienc	e (number role	of years) in	Experience in role at other schools?	
		Less than 3 years	3 - 5 years	More than 5 years	Yes	No
Head Teacher	1	0	0	1	1	0
Qualified Teachers	7	0	3	4	4	3
Teaching Support Staff	4	1	3	0	2	2
Total	12	1	6	5	7	5

5.4.5. EC Training

The training was initially delivered to the school's head teacher by EmotionCoachingUK. Subsequent in-school training (using EmotionCoachingUK material with permission and direction from EmotionCoachingUK staff) was disseminated to school staff by the head teacher during teacher training sessions and support staff training sessions in December 2019 (Appendix B: training content). During both the central and in-school training sessions, participants were given opportunities to ask questions, practise skills and self-reflect on

practice before and following the training. The skills and theory included in the training were intended to be revisited in three follow-up sessions running throughout the rest of the academic year. However, due to the Covid-19 pandemic, only one follow-up session took place. The researcher was not present during any of the training or follow-up sessions.

Table 8 presents the data collection timeframe and the number of participants within each stage of the research; the numbers in brackets denote the number of participants. Twelve participants took part in total. During the exploratory phase, twelve participants took part in the semi-structured interviews and nine in the observations. Ten members of staff took part in the semi-structured interviews and six in the observations during the explanatory phase of research (post-EC training). Due to the Covid19 Pandemic, a delay to the explanatory phase occurred from the intended six-month time lapse between pre- and post-data collection.

Table 8: Overview of the data collection timescales

	Pre-EC training	g: Exploratory	Training	Post-EC training	g: Explanatory
	Interviews	Observations	(whole school)	Interviews	Observations
Oct 2019			НТ		
Nov 2019	HT (1) T (2) SS (2)	T (1)			
Dec 2019	T (5) SS (2)	T (5) SS (3)	T (all staff) SS (all staff)		
Jan 2020			T (follow-up) SS (follow-up)		
Feb - Aug 2020					
Sep 2020					T (1) SS (1)
Oct 2020				HT (1) T (6) SS (3)	T (2) SS (2)
TOTAL	12	9		10	6

Key: HT = Head Teacher; T = Teachers; SS = Support Staff

5.5. Ethical Reflections

Ethical parameters within the research were approved via the University Research Ethics Committee (UREC) for doctoral students, through the Education Faculty at Oxford Brookes University (Appendix C). Such parameters were clearly defined and remained a priority throughout to protect the psychological and physical welfare of both adults and pupils at the forefront of the research (Bassey, 1999). Research procedures should also allow for rigour and openness of collection, evidence and analysis to instil confidence in others regarding the research at hand (Cohen et al., 2007).

The following sections highlight the ethical principles evident in the research and how these informed decisions and choices regarding methodology and analysis. Although the application to the UREC committee considered such ethical procedures in great depth, it is important to highlight and discuss some key principles below to provide a critique of the choices made throughout the research study.

Positionality: Firstly, it was important to acknowledge the intricacies of the researcher's position. Having worked in a school system for over a decade in the geographical area, the researcher would undoubtedly have a set of principles, values and ideas around pedagogical development within their Microsystem (Bronfenbrenner, 1995). However, it was important to remain acutely aware that these principles would undoubtedly form some decisions and judgements made throughout the research and also may be different to that of the environment in which the research was taking place. Thoughts or 'hunches' from the data were continually questioned through a process of researcher reflexivity and alongside the supervisory team, as well as the tentative and cautionary language used when reporting findings. The researcher remained vigilant that one educational setting is not akin to another, particularly throughout the introduction of a new initiative such as EC.

Secondly, as an experienced teacher in the geographical area in which the research was taking place, attention was paid to the potential influence and interaction that the researcher's position may have upon the play of events (Guba and Lincoln, 2005). Cohen et al. (2007) highlighted the 'halo effect' which may be present in research, whereby participants favour being seen in a positive light and therefore do not give a representative answer of their thoughts and feelings. The 'halo effect' was especially pertinent as the head teacher of the school was happy for the research to take place and was advocating the introduction of EC into the school. To address this, two factors were kept in mind: signs of discomfort from participants taking part and the explicit recognition of staff position. As Opie (2004) highlighted, there was a need to consider participant well-being at all points and to use their willingness to participate both responsibly and ethically. In this respect, any signs that staff were uncomfortable participating must be noted and acted upon (Fine and Sandstrom, 1988). Secondly, it was made explicit that their profession and job role would not be affected either positively or negatively if the staff member chose to participate or withdraw from the research.

This explicit reference was declared before and after every interview, observation or stage of research.

Finally, it was important to acknowledge the delicate balance between the position of the researcher versus the expectations and interests of the school (Thomas, 2016). If any information throughout the process uncovered uncomfortable or concerning information, sensitive action by the researcher was required following the school's whistleblowing and safeguarding policies and procedures (Blaxter, Hughes and Tight, 2006).

Anonymity: When utilising a design frame that results in a specific, unique case, it is particularly important to uphold anonymity for participants (Thomas, 2009), as the research must not bring the school into disrepute through a breach of confidentiality. Moreover, the viewpoints and attitudes expressed by participants must not be attributable to individuals that have participated, particularly if such views are seen as controversial to practice in the school setting or are against the cultural norms of the school. Although the concept of EC was being introduced as a whole school structure by the head teacher, there may have been some hesitation or disagreement with this approach (or other school-wide systems). The content of EC (Appendix B: training content) required participants to consider their own emotions and reactions to events - this may have been challenging for some participants and may not have been akin to their usual working practices. It was therefore important that anonymity was upheld for those participating. As Opie highlighted: "considerable attention has to be paid to the words that are used because of the meanings they carry." (2004:27). It was stressed to all participants that highlighting practice that does not work or that they did not agree with was acceptable and treated confidentially- and that viewpoints would not form judgements or feedback to leadership teams (unless there were safeguarding concerns as highlighted above).

To address anonymity issues, all participants were given the opportunity to debrief – read and review transcripts of both semi-structured interviews and observations to ensure that both accuracy and identifiable details were omitted (Chapter Six). Pseudonyms (where applicable) were used for participants and certain demographics were omitted (such as the specific year group that they worked in). Some phrases in the transcripts were obscured to reduce identifiable information. These protective factors were explained in full to participants at the start of each phase of the research, as well as included in participant information sheets. However, although care was taken to diminish anonymity issues, the small sample size in the research meant that complete anonymity was not guaranteed. This was explained both within the participant information sheets (Appendix D2) and during the semi-structured interview process.

Informed consent: As Fine and Sandstrom (1988) advocated, participants should be provided with as much information as possible to make an informed decision as to whether to take part. It is the responsibility of the researcher to ensure that participants are not affected either positively or negatively as discussed in the anonymity and positionality sections above (Opie, 2004). To acknowledge this, gatekeeper written consent was sought, as well as individual consent of the staff participants (Appendix E1 and E2: consent forms). In the classrooms of the staff participating, consent was sought from the pupils themselves and the parents of pupils to ensure that they understood the audio-recorded element of the study (Appendix E3 and E4).

During the permission-seeking phase, there was a delicate balance between giving too much information regarding the study and informed consent, due to vigilance surrounding the notion of teacher talk in the classroom – too much information in this area may lead to a change in behaviour during the observational recordings, as well as the 'halo effect' as previously mentioned (Ruane, 2005). Consideration with the supervisory team at all stages of the research ensured that informed consent was appropriate. However, all participants were informed about the general aims of the study and what participation would involve.

5.6. Summary: Chapter Five

Chapter Five has provided a rationale for the research design: A Mixed Methods Convergent design within a Pragmatic philosophical framework. The rationale for data collection instruments and the process of school and participant recruitment have been presented. Finally, the ethical reflections considered throughout the research process have been identified. Chapter Six outlines the precise methods of data collection and analysis to provide clarity and transparency of research methods.

5.7. Addendum to Methodology: Covid-19 Reflections (Spring 2023)

The Explanatory phase of the research (post-EC training) took place following the Covid-19 lockdown in March/April 2020 and just before the second national lockdown in January 2021. At this stage, Covid-19 restrictions were still in place (such as social distancing and Covid-19 testing for key workers) and therefore the research guidelines and protocol had to be carefully considered. The researcher followed all procedures and constraints as outlined in the school's Covid-19 procedures document, as well as national guidelines. Three main methodological changes took place in light of the restrictions.

Participant sample sizes were affected. The intention was to have a balance of participants, interviews and observations in both phases of the research as a key assumption of the Mixed Methods Convergent research design was that the data streams would have equal weight (Cameron, 2009). The disparity in the sample sizes between the phases of the research conflicted with the design intention. However, the researcher was grateful to the stakeholders of the school for the opportunity to continue the research during the external pressures of the pandemic. The unequal sample sizes were accepted as a consequence of the pandemic.

Secondly, there was a time adjustment between the intended six months between the phases of research, to a 10 month gap (Sections 9.4. and 10.2.2.). Although the increased time span was accepted by the researcher as a natural amendment to the data collection process, the lack of follow-up training during this time may have impacted the degree of EC embedded practice. Due to the increasing pressures of Covid-19 at the start of 2020, the ability for the Head Teacher to run EC follow-up sessions did not happen. The Head Teacher acknowledged that this was a consideration in the embedding of EC as common practice across the school (Section 8.6.4.4.).

Paying close attention to participants' wellbeing was further highlighted as a result of the pandemic. Although researchers must always ensure that participants are comfortable taking part in the research setting (Opie, 2004), the researcher paid close attention to additional discomfort as a result of adult proximity in the room, ensuring appropriate social distancing. It was also evident that some of the interviews were time-pressured due to external demands of the lack of staffing across the school from Covid-19 related absences.

Chapter Six: Data Collection Methods

6.1. Introduction

The precise methods of data collection and processing for the classroom observations and the semi-structured interviews are outlined throughout Chapter Six, including:

Participant number and demographics

Procedure

Data processing methods

To ensure clarity and transparency of data collection methods, researcher reflexivity and the challenges of the data collection in both the observations and the semi-structured interviews are included throughout this chapter. To ensure integrity of the research, consistent measures such as an interview schedule, observational protocol and data storage methods were in place when conducting the observations and semi-structured interviews.

6.2. Observations: Participants

Table 9 presents an overview of the research participants included in the classroom observations throughout both phases of the research. Participant demographics include the educational role, years of experience, and type of experience. These demographics were considered important in relation to the research questions to determine whether prior roles, training and classroom experiences had an impact on teacher talk practice. To ensure participant anonymity, omitted participant demographics included gender and year group/key stage placement of staff.

Table 9 shows that nine staff members participated in the pre-training observations: six teachers and three support staff. Six members of staff took part in the post-training observations: three teachers and three support staff members. The research school at the time of the study had 34 members of staff: 16 teaching staff and 14 teaching support staff. Therefore, the observational sample approximately represented the school staff proportions during the post-training observations, but had slightly higher teacher representation in the pre-training observations than the school as a whole. Moreover, School Workforce in England (2021) data confirmed that approximately 50% of the workforce are teachers and 30% are educational support staff: the research sample represented the school workforce data in the areas of pre-training for support staff and post-training for teachers only.

Due to the long period between the Exploratory and Explanatory phases of the research, the availability of participants and the complications of data collection during the Covid-19

pandemic, not all participants during the pre-training phase of the research were able to complete the post-training phase. Three participants (numbers 5, 7 and 11) did not participate in the post-training lesson observations: one participant was unavailable at the time of the observation data collection; one member of staff had left employment at the school; one participant did not wish to complete the second observation due to personal circumstances at the time. These missing data sets are explained in more detail in Chapter Seven.

It is also of note that the audio recording device to capture observational data created complications during data transcription: at times, it was challenging to single out specific adult voices in the room for analysis, due to the undoubted complexities of the classroom dynamics. Where more than one adult participant was present in the room, the audio recording device was not consistently sensitive enough to depict changes in voice between adults. For ease of data collection, classroom observations were transcribed as one whole data set, rather than potentially involving two separate participants (where two adults were present in the classroom and interacting with pupils). This complication is denoted in table 9 below using the * symbol.

Table 9: Summary of research participants involved in the classroom observations

Participant	Role	Experience	in role	Classroom o	bservations
number				Pre-EC	Post-EC
1	HT	>5	Υ		
2	Т	3 – 5	N	✓	✓
3	Т	3 – 5	N	✓	✓
4	Т	>5	Υ	✓	✓
5	Т	>5	Υ	✓	
6	SS	3 – 5	Υ	✓	✓
7	Т	>5	Υ	✓	
8	SS	<3	N	✓ *	✓ *
9	SS	3 – 5	N		
10	Т	>5	Υ		
11	Т	3 – 5	N	✓	
12	SS	3 -5	Υ	✓ *	✓ *

KEY:

Role: HT = Head Teacher; T = Qualified Teacher; SS = Educational Support Staff

Experience: <3 = less than 3 yrs in role; 3-5 = three to five yrs in role; >5 = more than five yrs

y = experience working in other schools; n = no experience in other schools

*denotes where SS is merged into T observation records

6.2.1. Observations: Procedure

Classroom observations were audio-recorded using a long-range recording device, either carried by the teacher participant or placed at the front of the classroom to capture teacher-pupil interactions. This strategy was undertaken to reduce the impact of researcher presence on both the teaching staff members and the pupils involved (Robson and McCartan, 2016). In this respect, the classroom environment remained as natural as possible, hoping to reflect everyday practice and reduce prestige bias (or the 'halo effect': Thomas, 2009).

Participants were instructed to audio record snapshots of lessons or sessions within their classroom. They were shown how to use the recording device by their head teacher before leaving the device with them. Due to timetabling and the availability of the head teacher to support classroom setup, lesson snapshots were predominantly in Maths or Literacy in the morning sessions. These were predominantly following a break time. The implications for these types of lessons are discussed further in Chapter Ten. Observations varied in length between 20 to 45 minutes, based on when the class teacher wished (or remembered) to cease the recording.

As part of the ethical parameters of the study, one pupil had not been permitted to participate. During this observation, the pupil was located on the other side of the room within a teaching group with an additional adult. These sections of the lesson were not recorded, nor transcribed. Permission was given by all other pupils and parents of the school community in the classrooms taking part in the research (section 5.5).

Recordings were stored confidentially with a date and a numerical value assigned to them, paired with the relevant semi-structured interviews where needed. This code was only available to the researcher and was stored separately to the data.

6.2.2. Observations: Data Processing

Observations were collated and transcribed into free text using a university-recommended transcriber. An example transcript is included in Appendix F1. Errors and cross-referencing to sources, where applicable, took place for all transcripts by the researcher to ensure the accuracy of presentation. For example, some portions of text were missing and the transcriber could not decipher the context. Alterations to three additional sections of the transcripts (ranging between 6-18 words in length) were made following the audio-recording review, due to errors in meaning within context.

N-Vivo 12 Pro (2018) was used to analyse each observational transcript with reference to both the inductive and deductive coding cycles. Deductive templates (main nodes) for both phases

of research were based on the theoretical principles outlined in the literature review: social versus learning talk and SE talk. Sub-node 1 deductive codes were positive and negative (for learning and social) and dismissing, validating and labelling (for SE talk). To reflect the complexities of defining talk, teacher talk that was ambiguous, difficult to define, or conflicting was also recorded ('ambiguous' code). The number of occurrences for each category was collated.

Four cycles of coding took place in total. The initial coding cycle focussed on the outlined deductive coding as identified from the theoretical and methodological assumptions, deducing the main and the majority of sub-nodes at level one of analysis. Coding cycles two and three allowed for the identification of inductive codes, extending the sub-nodes to an additional level (sub-nodes two). The fourth series of coding took place to check codes and nodes to identify any errors or inconsistencies across the system.

Table 10 provides definitions of the coding terms, both deductive and inductive (inductive denoted by the highlighted text). The coding nodes and sub-node definitions are given for each coding term used in the observations. An extended version of table 10 is provided in Appendix G: transcript examples are included for each code, as well as brief references from key texts from which the deductive codes were derived (where applicable). An observational coding and derived themes overview is included in Section 7.2. of Chapter Seven.

Table 10: Coding levels and definitions (deductive and inductive) from the observational transcripts

Coding Node	Sub Node 1	Sub Node 2	Definition
Learning	Positive	Specificity	Praise, satisfaction or approval towards an academic behaviour with reason
(effort and attainment towards school work,		Non- specificity	Praise, satisfaction or approval towards an academic behaviour without reason
such as reading, maths or answering a		Repetition	Validation of a response by repeating a word/answer from a pupil in a positive tone
learning- based question)	Negative	Specificity	Reprimand, dissatisfaction or disapproval towards academic behaviour with reason and/or correction
,		Non- specificity	Reprimand, dissatisfaction or disapproval towards academic behaviour with no reason
-	Ambiguous		Combination of positive/negative responses or unable to be defined as a response to academic behaviour
Social (Following	Positive	Specificity	Praise, satisfaction or approval towards a social behaviour with reason
class rules and displaying		Non- specificity	Praise, satisfaction or approval towards a social behaviour without reason
appropriate manners towards	Negative	Specificity	Reprimand, dissatisfaction or disapproval towards social behaviour with reason and/or correction
others)		Non- specificity	Reprimand, dissatisfaction or disapproval towards social behaviour with no reason
-	Ambiguous		Combination of positive/negative responses or unable to be defined as a response to social behaviour
Socio- Emotional	Dismissing		Dismissal, argument or invalidation of an emotion displayed in the classroom by a pupil
(Emotion-based talk in the classroom)	Labelling	Positive Emotion	The label assigned (teacher) to a displayed emotion (pupil): Happy, joy, positive excitement
		Negative Emotion	The label assigned (teacher) to a displayed emotion (pupil): sad, worried, anxious
-	Validation	Solution	Acceptance, agreement or acknowledgement of a pupil's emotional state with support to resolve
		Non- Solution	Acceptance, agreement or acknowledgement of a pupil's emotional state with no support
-	<u>Ambiguous</u>		Emotion-based discussion that does not fit into the above SEL categories

6.3. Semi-Structured Interviews: Participants

Table 11 presents an overview of the research participants included in the semi-structured interviews throughout both phases of the research. Educational roles, years of experience

and type of experience are included; gender and year group placement of staff are omitted to ensure participant anonymity.

12 members of staff took part in the pre-EC training interviews: eight teachers and four support staff. Ten members of staff took part in the post-training interviews: seven teachers and three support staff members. The research school at the time of the study had 34 members of staff: 16 qualified teachers and 14 teaching support staff. Therefore, the interview sample had slightly higher proportion of teachers than the school staff proportion as a whole. Moreover, when comparing the interview sample to the School Workforce in England (2021) data, the semi-structured interview sample represented the school workforce data in both pre- and post-semi-structured interviews for support staff (School Workforce data = 30% educational support staff).

Two participants (numbers 5 and 8) did not participate in the post-training, semi-structured interviews: one participant was unavailable at the time of data collection and one member of staff had left employment at the school.

Table 11: Summary of research participants involved in the semi-structured interviews

Participant	Role Experience in role		Semi-Struct	ured Interviews	
number				Pre-EC	Post-EC
P1	HT	>5	Υ	✓	✓
P2	Т	3 – 5	N	✓	✓
P3	Т	3 – 5	N	✓	✓
P4	Т	>5	Υ	✓	✓
P5	Т	>5	Υ	✓	
P6	SS	3 – 5	Υ	✓	✓
P7	Т	>5	Υ	✓	✓
P8	SS	<3	N	✓	
P9	SS	3 – 5	N	✓	✓
P10	Т	>5	Υ	✓	✓
P11	Т	3 – 5	N	✓	✓
P12	SS	3 – 5	Υ	✓	✓

KEY:

Role: HT = Head Teacher; T = Qualified Teacher; SS = Educational Support Staff

Experience: <3 = less than 3 yrs in role; 3 - 5 = three to five yrs in role; >5 = more than five yrs

y = experience working in other schools; n = no experience in other schools

6.3.1. Semi-Structured Interviews: Procedure

Interviews were undertaken at a time convenient to the members of staff and school structure, to cater to the participant's schedule and availability (Yin, 2009). Interviews were held face to face in an office at the research school, where interruptions were minimalised and privacy maximised.

All interviews were audio recorded using a long-range recording device, ranging between 10 to 40 minutes in length. Recordings were stored confidentially with the date and a numerical value assigned to them, paired with the relevant observation transcripts.

The format of the semi-structured interviews was based on Denscombe's (2010) suggested format:

- 1. Introduction and formalities: This part of the interview allowed for testing of the audio equipment and discussing with the participant the purposes of the research to understand how teacher talk was used in classrooms to facilitate relationships. It was stressed at this stage in the process that participants were not obliged to take part and could withdraw at any point up to the point of data analysis; one participant chose not to take part during this stage due to concerns regarding anonymity. Further clarification was required for one participant who did not know the full detail of the study (having missed the research briefing) but subsequently was happy to participate in the interview part of the research only.
- 2. Interview questions: A summary of key themes, questions and probes from both the Exploratory and Explanatory phases of the research can be found in Table 12, including questions focused on prior training experience, teacher talk and communication in the classroom and relationships. The researcher took particular note of key themes and threads throughout to probe particular responses.
- Conclusions: Participants were thanked for their time and contributions and offered transcript copies of the interviews. Two interviewees in the pre- and post-training interviews requested transcripts. Following review, these two participants were happy with their transcripts.

Table 12: Summary of key themes, questions and probes used in the semi-structured interviews

Key Themes	Research phase and Discussion Points / Questions				
	Exploratory	Explanatory			
General introduction/ ice breakers	Class overview: demographics and incidents Typicality of school	Class overview: changes or key events? Why?			
Building relationships in the classroom	Relationship importance How are these developed? Theory and practice agreement?	Relationship viewpoints Any changes in practice?			
Teacher talk in the classroom	Dominant type/s of talk Feedback strategies Equity in feedback/ talk?	Types of talk in the classroom Changes in practice? Academic versus social communication			
Emotion Coaching training	Training expectations What are the advantages/ disadvantages of EC?	Emotion Coaching opinions Met expectations? Pros and cons Strengths and difficulties of practice			
Training experience	Prior experience and training in relationships and communication Which training has been most useful?	How have your thoughts on X changed? Future training needs			

6.3.2. Semi-Structured Interviews: Data Processing

The interview recordings were transcribed verbatim into free text using a university-recommended transcriber. Errors and cross-referencing to original sources, where applicable, took place for all transcripts by the researcher to ensure the accuracy of presentation.

N-Vivo 12 Pro (2018) was used to analyse each semi-structured interview transcript with reference to both the inductive and deductive coding cycles (Fereday and Muir-Cochrane, 2006; section 6.4.). Printed, paper copies were also used by the researcher to analyse, compare and contrast transcripts during the initial and final cycles of coding. An example interview script can be found in Appendix F2.

Multiple cycles of coding took place in total in both phases of the research. Initial coding cycles focussed on the outlined deductive coding as identified from the theoretical and methodological assumptions, deducing the coding nodes and the majority of sub-nodes at level one of analysis. The main nodes consisted of classroom relationships, teacher talk and EC training expectations or experiences, which mirrored the themes within the semi-structured interview schedule (table 10).

Proceeding coding cycles allowed for the identification of inductive codes, extending the subnodes to additional levels (sub-nodes two and three). Final coding cycles took place using NVivo and by hand to check codes and nodes to identify any errors or inconsistencies. Themes in relation to the research questions were identified during these final stages.

Table 13 and 14 presents an overview of the deductive and inductive main nodes and subnodes identified during the pre-EC (Exploratory) and post-EC (Explanatory) coding (inductive codes indicated by highlighted text). The main nodes consist of classroom relationships, teacher talk and EC expectations/experience. These nodes were derived from the literature review as presented in Chapters Two, Three and Four. Sub-nodes 1, 2 and 3 are shown in Tables 13 and 14, including a definition of each sub-node. Extended versions of Table 13 and 14 are also provided in Appendix I1 and I2: transcript examples are included for each code, as well as brief references from key texts in which the deductive codes were derived (where applicable). Interview coding and derived themes overviews are included in Sections 8.2.1. and 8.2.2. of Chapter Eight.

Table 13: Pre-EC training (Exploratory phase) coding nodes, sub-nodes and definitions

Coding Node	Sub Node 1	Sub Node 2	Sub Node 3	Definition
Introduction / Experience (Setting the tone	Experience			Experience of participant: Job role; years of service; age/year groups taught; types of schools worked in
and ensuring participant is comfortable)	Prior Training	Helpful		Key training experiences that have been particularly enjoyable/useful to their role
		Unhelpful		Key training experiences that have been unhelpful, detrimental or against personal values in relation to role
Classroom relationships	Importance	Personal		Reference to the importance of relationships
(participant use, development and value of teacher- pupil relationships)			Critical incidents	Reference to a particular incident where relationships have broken down and the impact of such
			Academic vs relational	Reference to academic intent of schooling over relationships
		School focus	Clarity vs ambiguity	Interpretation of key principles driving relationships in the school and shared vision
	Structure	Own classroom		How relationships are developed in the classroom – strategies
		School structure	Clarity vs ambiguity	How relationships are developed in the school (systems)
Teacher Talk (use and value	Use in classroom	Positive vs negative		Participant perception of 'positive' talk and how this presents in the classroom
of teacher talk in the		Academic vs social		Participant perception of academic versus social talk
classroom and within the	Principles	Why		Participant perception on why they use the types of talk
school as a whole)		Personal experience		Changes to practice in teacher talk or particular notable instances
	Importance			Participant attitude towards adult versus pupil talk
Emotion Coaching	Personal	Classroom practice		Participant perception on how EC training may/may not impact classroom
Training expectation (attitudes and feelings towards upcoming EC training)		How it fits with prior experience		Participant perception on how EC training may/may not fit alongside their prior training or experience
	School	How it fits into school structure		How EC may/may not work alongside pre-existing systems
		Other staff		How EC may/may not impact other staff's practice

Table 14: Post-EC training (Explanatory phase) coding nodes, sub-nodes and definitions

Coding Node	Sub Node 1	Sub Node 2	Definition
Introduction/ Experience (Setting the tone	Experience		Changes in experience of participant since last interview: Job role; age/year groups taught; leadership role/s
and ensuring participant is comfortable in environment)	Training		Key training experiences that have been particularly enjoyable or useful to their job role since last interview
Classroom relationships (participant use, development and value of teacher- pupil relationships)	Importance	Personal	The importance of relationships and changes in attitude or viewpoints since the EC training/last interview
	Structure	Own classroom	Changes in classroom approach to relationships since last interview and/or EC training
		School structure	Changes in school structures/approach to relationships since last interview and/or EC training
Teacher Talk (use and value of talk in the	Importance	Personal	Reference to the importance of teacher talk. Changes in attitude or viewpoints since the EC training/last interview
classroom and within the school as a whole)	Structure	Own classroom	Changes in teacher talk since last interview and/or EC training
		School structure	Changes in school structures/approach to teacher talk since last interview and/or EC training
Emotion Coaching	Experience		Attitudes/memories of EC training
Training (attitudes and feelings towards	Impact/ Benefits	Individual/ personal change	Perceptions of positive aspects of EC training for individual practice
the EC training)		School/ others' practice	Perception of how EC training may impact colleagues or school system
	Challenges	Personal Personal	Perceptions of challenges to implementing EC in classroom/for individual practice
		School practice	Perceptions of challenges of EC for whole school implementation

6.4. Data Coding and Analysis

Due to time, word length constraints and most importantly, relevance to the research questions, it was impossible to report on the entire transcripts of the observations and semi-structured interviews. A careful selection was therefore required. This section presents the process of coding to ensure transparency and rigour of research (Saldana, 2012). The presentation of identified themes and associated results are explored in Chapter Seven (Quantitative results) and Chapter Eight (Qualitative Results).

Data coding for the observations and semi-structured interviews were considered along two trajectories, incorporating the a-priori template (deductive) approach as outlined by Crabtree and Miller (1999) and the data-driven, inductive approach of Boyatzis (1998). The deductive

analysis involves the use of a template or a pre-existing set of ideas before commencing an in-depth analysis of the data (Fereday and Muir-Cochrane, 2006). A template can be created through preliminary scrutiny of transcripts, but may also be developed a-priori based on the theoretical frameworks and research questions. The latter was utilised in this study and codes are outlined further in the observational and interview coding sections (Section 7.2. and 8.2. respectively).

To avoid the research falling foul of conceptual over-determinism, a key disadvantage of deductive approaches (Saldana, 2012), inductive approaches were also adopted, where categories and codes emerged throughout the data analysis process to develop themes and concepts in response to the research questions. Inductive approaches were especially important for the researcher to remain continuously reflexive and adaptive. During the analysis of the observation and interview transcripts, coding attempted to be systematic, rigorous and iterative to yield meaningful and useful results (Attride-Stirling, 2001). Therefore, deductive and inductive analyses were utilised to produce quantitative and qualitative data for the observations and semi-structured interviews. The process taken for all coding reflected the six stages of coding as outlined by Fereday and Muir-Cochrane (2006) in Figure 6.

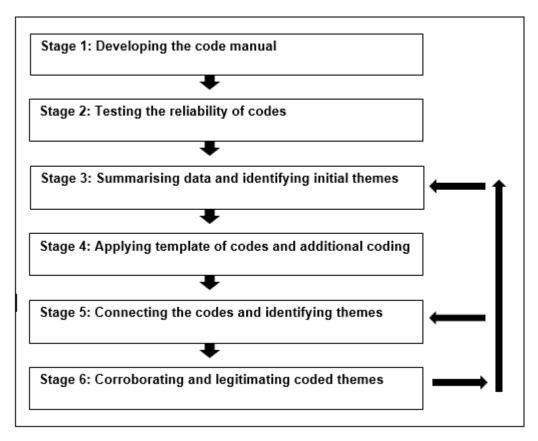


Figure 6: Diagrammatic representation of the stages undertaken to code the data (Fereday and Muir-Cochrane, 2006

The iterative nature of the coding, as well as the multiple coding cycles, allowed for testing the reliability of the codes (Stage 2). Through discussion with the supervisory team, inter-rater reliability (IRR) testing was not deemed appropriate due to the small data sets and the potential impact that these may have had on IRR estimates (Hallgren, 2012)

6.5. Summary: Chapter Six

Having outlined the research design, philosophical underpinnings, reasoning for the methods chosen and ethical considerations of the research through Chapter Five; Chapter Six has presented the observational and semi-structured interview methods of data collection and analysis. The outline of the methods was presented to ensure clarity of process, as well as provide researcher reflexivity.

The Mixed Methods Convergent approach allowed both quantitative and qualitative data to be collected concurrently, analysed separately and then merged to provide evidence for the research questions (Creswell and Plano Clark, 2018). In this respect, concepts from the inductive and deductive analysis of classroom observations and semi-structured interviews were able to be combined to highlight consistencies, conflicts, contradictions and complexities within the data collected. By utilising these outlined principles, it was hoped that the careful selection of data was considered and transparent to the research community, as well as the interpretation of information being seen as valid and consistent within the framework provided.

Chapters Seven and Eight present the quantitative (observation) and qualitative (semistructured interview) research findings respectively in relation to each research question. Results will then be merged and presented to discuss each RQ within Chapter Nine.

Chapter Seven: Quantitative Results

7.1. Introduction

The quantitative results presented in this chapter focus on the data collected through classroom observations. The intention was to gather evidence and analyse the types of teacher talk used within the classroom, linked to the theoretical and methodological assumptions of the research.

Chapter Seven begins with an overview of the quantitative coding categories utilized in the study (pre- and post- EC training) and a statistical exploration of the data, presented alongside the justifications of choices made in the data analysis. Finally, the chapter explores and analyses data in order to gather evidence in relation to research question 1 and sub-question 1a:

RQ1: How is teacher-pupil talk used in the primary classroom to facilitate teacher-pupil relationships?

RQ1a: To what extent does a socio-emotional talk strategy (Emotion Coaching) influence teacher talk within a primary classroom?

7.2. Quantitative Data Coding

Throughout the data processing, multiple coding cycles were used to identify and cross-reference teacher talk categories (Section 6.2.2.). Figure 7 shows the categories (nodes) identified throughout all areas of the observational (quantitative) data analysis using both deductive and inductive coding. Highlighted sections denote the inductive coding that was determined throughout cycles two and three of the transcript analysis. Non-highlighted sections denote the deductive codes.

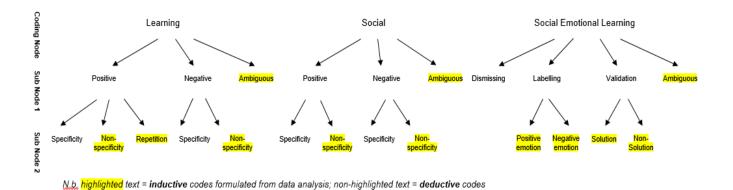


Figure 7: Derived coding levels from the observational transcripts (deductive and inductive coding)

Table 15 provides an overview of the coding terms as outlined in Figure 7 (repeated from Section 6.2.2.) as well as associated research question/s that the code addresses. From the coding nodes (main and sub-nodes), themes in relation to each research question were extrapolated, shown in the final column in Table 15.

Table 15: Coding levels and definitions (deductive and inductive) from the observational transcripts

Coding Node	Sub Node 1	Sub Node 2	RQ addressed	Theme/s derived from code
Learning (effort and	Positive	Specificity Non-	RQ1	Proportion of Teacher Talk
attainment towards school work,		specificity	RQ1a	Learning Talk (Positive and Negative
such as reading,		Repetition		Categories)
maths or answering a	Negative	Specificity	RQ1	Social versus Learning Talk (Positive and Negative Categories)
learning- based question)		Non- specificity	RQ1a	
·	Ambiguous			
Social	Positive	Specificity	RQ1	
(Following class rules and		Non- specificity	RQ1a	Proportion of Teacher Talk
displaying appropriate manners	Negative	Specificity	_ RQ1	Social Talk (Positive and Negative Categories)
towards others)		Non- specificity	RQ1a	Social versus Learning Talk (Positive and Negative Categories)
-	Ambiguous			
Socio- Emotional	Dismissing			
(Emotion-based talk in the	Labelling	Positive Emotion		
classroom)		Negative Emotion	RQ1	Proportion of Teacher Talk
	Validation	Solution	RQ1a	Socio-Emotional (SE) Talk
		Non- Solution		
-	Ambiguous			

7.3. Standardisation of Data

The observational transcripts varied in length within and across the two phases of research, therefore, calculations were conducted in order to create a standardised data set and allow for direct comparisons between data sets (Hinton et al., 2014). The standardisation formula replicated that of previous studies on teacher talk numbers (Harrop and Swinson, 2000; Hayes et al., 2007; Spilt et al., 2016), allowing for comparison to pre-existing literature on teacher talk. Words per minute (WPM) values were calculated for teacher and pupil talk throughout all transcripts using the following formula (raw scores can be found in Appendix H1):

[teacher or pupil] Speaking rate (WPM) = total number of [teacher or pupil] words/ number of minutes of transcript

Table 16 presents the total number and mean number of WPM used by both teachers and pupils, pre- and post-EC training across all transcripts. The total number of words used by teachers (pre = 3414; post = 1671) gave a teacher WPM score of 88.3 and 85.4 respectively. The teacher total number of words was proportionately larger than pupil words (pre = 407; post 302), equating to pupil WPM scores of 16.2 and 15.0. The percentage of classroom talk time by teachers and pupils were also calculated, shown in Table 16. Teacher talk was considerably higher than pupil talk percentage in the pre-EC training phase (teacher = 86.4%; pupil = 13.6%) and the post-EC training (85.6% versus 14.4%). Further analysis of this data in order to address RQ1 and RQ1a are discussed in Sections 7.5. and 7.6.

Table 16: Summary table of mean numbers and percentages of teacher and pupil words across observations

	Teacher words (total)	Pupil words (total)	Percentage teacher talk	Percentage pupil talk	Teacher WPM	Pupil WPM
Pre-training (N = 7)	3414	407	86.4%	13.6%	88.3	16.2
Post-training (N = 4)	1671	302	85.6%	14.4%	85.4	15.0

It is of note that one participant demonstrated a significantly lower number of teacher words pre and post EC training. P6 was therefore an outlier and is considered to have skewed the teacher talk percentage and WPM. Further information on the distribution of scores can be found in Appendix H1.

The number of teacher talk statement categories per minute (SPM) was also calculated. SPM created standardisation and comparison across all participants, regardless of transcript length (similar to WPM scores) and has been used in previous studies (Harrop and Swinson, 2000;

Hayes et al., 2007; Spilt et al., 2016). All talk categories had equal probability of occurrence during each observation. Therefore standardised scores were calculated as follows:

Talk type statements per minute (SPM) = Raw score of talk category / Total time in minutes of transcript

Table 17 presents a summary of the teacher talk categories (Section 7.2.) SPMs pre- and post-EC training (raw scores per participant, per transcript, can be found in Appendix H1). The table shows a higher number of negative social SPM in comparison to positive social SPM in both phases of the research. Conversely, negative learning SPM is lower than positive learning SPM in both phases. Similar levels of SE validating and labelling SPM pre- and post-EC training are presented, with a reduction of SE dismissing SPM post- EC training. The results presented in table 17 are analysed and discussed further in relation to the RQs (Section 7.5. and 7.6.).

Table 17: Number of teacher talk types per minute (SPM), pre- and post-EC training (N = number of participants)

Teacher Talk Type		SPM: Pre-EC traini (N=7)	ing	SPM: Post-EC training (N=4)	
Social	Negative	0.45		0.42	
Behaviour	Specific	C	0.25	O).24
	Non-specific	C	0.16	O).18
	Positive	0.28		0.33	
	Specific	C	0.17	O).12
	Non-specific	C	0.05		0.2
	Ambiguous	0.05		0.12	
Learning Behaviour	Negative	0.22		0.30	
benaviour	Specific	C	0.08		0.1
	Non-specific	C	0.06	C	0.08
	Positive	0.54		0.64	
	Repetition	C	0.09		0.2
	Specific	C	0.17	C).19
	Non-specific	C	0.13		0.1
	Ambiguous	0.11		0.17	
SE Talk	Validating	0.08		0.06	
	Solution	C	0.04	C	0.03
	Non-solution	C	0.04	C	0.02
	Labelling	0.07		0.06	
	Positive emotion	C	0.03	C	0.01
	Negative emotion	C	0.05	C	0.03
	Dismissing	0.04		0	
	Ambiguous	0.05		0.01	

7.4.1. Statistical Considerations and Assumptions

The standardised data (as shown in Tables 12 and 13) was entered into IBM statistical package SPSS, version 27 (2020). An initial exploration of descriptive statistics ascertained information regarding the distribution of the data to consider if the data was normally distributed. Box and Whisker plots allowed for the identification of outliers in the data sets, as well as the range and skew of data. Histograms including distribution fit curves allowed for pictorial representations of skewness, including leptokurtic and platykurtic kurtosis. Graphical exploration for each teacher talk category can be found in Appendix H2, including histograms and tests of normality SPSS outputs for all data variables collated during the research.

Due to the graphical representations of the results as outlined above (Appendix H2), the low sample size and non-probabilistic participant sampling techniques, it was considered that parametric test assumptions would be violated and therefore non-parametric statistical testing would be required in proceeding analysis. Although non-parametric statistical testing requires fewer assumptions to be made about the data and can be seen as more appropriate to smaller sample sizes, this type of testing is also considered less powerful than the parametric counterparts (Hinton et al., 2014).

Shapiro-Wilk tests of normality were conducted on all categories to determine whether the different categories of teacher talk, both pre- and post-EC training, were normally distributed. The small sample sizes meant that non-normality may have been less likely to be detected, however, a Shapiro-Wilk test is considered generally more sensitive in comparison to the Kolmogorov-Smirnov test (Hinton et al., 2014) and therefore results on this type of test are outlined below.

The results of the Shapiro-Wilk tests of normality indicated the p-values to be above the significance level (0.05) for the following categories and indicated that the data was normally distributed:

```
Pre EC training: Positive learning (W = 0.947, p = 0.714), negative learning (W = 0.789, p = 0.470), positive social (W = 0.937, p = 0.615), negative social (W = 0.887, p = 0.261)
```

```
Post EC training: Positive learning (W = 0.937, p = 0.516), negative learning (W = 0.918, p = 0.446), positive social (W = 0.900, p = 0.433), negative social (W = 0.857, p = 0.250)
```

However, for the following categories, the p-values were lower than the significance level (0.05), and therefore these categories indicated non-normality:

```
Pre EC training: SEL validating (W = 0.570, p = 0.000), SEL labelling (W = 0.725, p = 0.007), SEL dismissing (W = 0.824, p = 0.070)
```

Post EC training: SEL validating (W = 0.630, p = 0.001), SEL labelling (W = 0.679, p = 0.006)

Shapiro-Wilk tests of normality were unable to be calculated for the category of post-training, SE dismissing as all data scores equalled 0 (Appendix H1: Raw scores).

The Shapiro-Wilk tests indicated some non-normality of the data and therefore non-parametric statistical testing would be most appropriate in order to answer the research questions.

7.4.2. Statistical Testing

The purpose of non-parametric statistical testing was to ascertain whether there were statistically significant differences between the SPM of particular teacher talk categories. Non-parametric tests are considered less powerful than parametric tests if assumptions have not been violated (Gaciu, 2021; Hinton et al., 2014). However, two types of non-parametric statistical tests were considered appropriate during statistical analysis due to meeting test assumptions:

Mann-Whitney U test: A Mann-Whitney U test is assumed appropriate when there are two independent samples from skewed distributions, and when the data is interval or ratio (Gaciu, 2021). Therefore, the Mann-Whitney U test was used to test for statistically significant differences between two categories of teacher talk SPM *within* a phase of the research, for example, between positive and negative social talk in the Exploratory (Pre-EC) phase. SPMs have a true zero and are therefore considered ratio data.

Wilcoxon Signed Rank test: A Wilcoxon Signed Rank test can be used to test two dependent samples that can be matched or paired together. The test also assumes that the data can be ranked, that the distribution is non-normal and the data is interval or ratio (Gaciu, 2021). Therefore Wilcoxon Signed Rank tests were used to determine statistical significance of SPMs (ratio data) *between* phases of the research, where participants could be matched pre- and post-EC training, for example, to test the difference between negative social SPMs, pre- and post EC.

It is important to note here that the Wilcoxon Signed Rank Tests only included matched data between pre- and post-EC training. As there was missing observational data from three participants post-EC training, three participants' data from pre-EC training observations were unable to be included in the Wilcoxon Signed Rank tests. In this respect, only four matched samples could be included in the statistical tests, increasing the likelihood of a Type II error, highlighting a limitation of the research sample.

Two-tailed testing was considered the most appropriate for all statistical testing as it allowed for the possibility of significant differences of SPM between talk categories in either direction. For example, positive social learning talk may increase or decrease between the two phases of the research.

Having outlined the coding structure and assumptions for statistical testing, this chapter will now consider each research question in turn.

7.5. RQ1: How is teacher talk used in the primary classroom to facilitate teacher-pupil relationships?

7.5.1. Proportion of Teacher Talk

The results of both pre and post EC training observations demonstrated classrooms dominated by teacher talk. Table 18 shows the average percentages of teacher and pupil talk and the standardised WPM of both teachers and pupils. The average percentage of teacher talk remained at around 85% of all talk time, regardless of phase of the research. Post-training showed a negligible 0.8% reduction of teacher talk. Conversely, the percentage of pupil talk time rose by 0.8%.

The WPM of teacher talk was similar in the pre- and post- observation groups (see RQ1a) with only a slight reduction of 2.9 words per minute between pre and post. However, pupil WPM was also quantitatively similar, with a small reduction of 1.2 WPM post EC training.

Table 18: Average teacher talk versus pupil talk in the observations (percentages and WPM)

	Percentage teacher talk	Percentage pupil talk	Teacher WPM	Pupil WPM
Pre training (N = 7)	86.4%	13.6%	88.3	16.2
Post training (N = 4)	85.6%	14.4%	85.4	15.0
Difference	-0.8%	+0.8%	-3.1	-1.2

A Wilcoxon Signed Rank Test indicated that the differences between pre-WPM and post-WPM were not statistically significant (Z = 0.000, p = 0.680). Therefore, the proportion of talk that was used by the teachers in the study did not significantly change (increase or decrease) as a result of the EC training, nor as a result over time between the two phases of the research.

These results raise questions regarding the impact of the training and the degree to which teachers value talk in the classroom (RQ1a and RQ1a) – these questions will be considered in Sections 9.3. and 9.4., where teacher attitudes from the semi-structured interviews will be considered alongside the classroom observation results and pre-existing literature.

7.5.2. Social Talk (Positive and Negative Categories)

Table 19 presents the SPM for the category of social teacher talk. The results show that the number of teacher SPM for *negative* social behaviour (pre = 0.45 SPM; post = 0.42 SPM) was higher than the number of *positive* social statements (pre = 0.28 SPM; post = 0.33 SPM). This is true for both phases of the research.

The number of SPM for negative talk using specificity (pre = 0.25 SPM; post = 0.24 SPM) remained higher than statements made where no specific detail was given to pupils (pre = 0.16 SPM; post = 0.18 SPM). For positive talk using specific versus non-specific statements, the number was higher pre-training for specificity (0.17 SPM) than non-specific statements (0.05 SPM). However, for post-training this result was reversed, where specific statements (0.12 SPM) were lower than non-specific statements (0.20 SPM).

Table 19: Numbers of social teacher talk SPM, pre- and post-EC training

Teacher Talk	Туре		SPM: Pre-EC training (N = 7)		SPM: Post-EC training (N = 4)	
Social	Negative		0.45		0.42	
Behaviour		Specific		0.25		0.24
		Non-specific		0.16		0.18
	Positive		0.28		0.33	
		Specific		0.17		0.12
		Non-specific		0.05		0.20
	Ambiguous		0.05		0.12	

Mann-Whitney U tests indicated that observed differences between positive social statements and negative social statements were not statistically significant *within* the pre-training observations (U = 13.500, p = 0.165), nor *within* the post-training observations (U = 5.500, p = 0.486). Therefore, although differences between the number of positive social and negative social statements were observed, these were not statistically significant as demonstrated in previous studies (White, 1975; Harrop and Swinson, 2000). Differences in results between studies may be due to variations in sample sizes between the current and previous studies. However, it is important to consider the potential effect of the number of negative statements

within the classroom climate, discussed in more detail within Chapter Nine (Sections 9.2.2. and 9.3.4.).

Table 19 demonstrates a slight increase in positive SPM between pre- and post-EC training observations (an increase of 0.05 SPM = predicted additional three statements per hour). A slight decrease in negative social statements is also shown (0.03 SPM = predicted 1.8 statements per hour). This slight change may represent differences in teacher attitude following the EC training and will be unpicked further as part of the qualitative results chapter.

Wilcoxon Signed Rank Test indicated that the number of positive social SPM between the preand post-EC training were not statistically significant (Z = 10.000, p = 0.680). The number of negative social SPM between the pre- and post-EC training were also not statistically significant (Z = 3.000, p = 0.465).

7.5.3. Learning Talk (Positive and Negative Categories)

Table 20 shows the SPM within the category of learning teacher talk. The results show that the number of teacher statements for positive learning behaviour (pre = 0.54 SPM; post = 0.64 SPM) was over double the rate of the number of negative learning statements (pre = 0.22 SPM; post = 0.30 SPM), true for both phases of the research.

For all categories of talk, the number of statements including specificity remained only slightly higher than statements made where no specific detail was given to pupils, or repetition of answers by the teachers.

Table 20: Number of learning teacher talk SPM, pre- and post-EC training

Teacher Talk	Туре		SPM: Pre-EC training (N = 7)		SPM: Post-EC training (N = 4)	
Learning Behaviour	Negative		0.22		0.30	
		Specific		0.08		0.10
		Non-specific		0.06		0.08
	Positive		0.54		0.64	
		Repetition		0.09		0.20
		Specific		0.17		0.19
		Non-specific		0.13		0.10
	Ambiguous		0.11		0.17	

However, despite the results demonstrating more than double the number of positive learning statements to negative learning statements, testing showed no statistical significance. Mann-

Whitney U tests demonstrated that differences between positive learning statements and negative learning statements were not statistically significant *within* the pre-training observations (U = 17.500, p = 0.383), nor *within* the post-training observations (U = 5.500, p = 0.486). Therefore, although differences between the number of positive and negative learning statements were observed, these were not statistically significant as demonstrated in previous studies (White, 1975; Wheldell et al., 1989; Harrop and Swinson, 2000).

Table 20 demonstrates a slight increase in positive learning SPM between pre- and post-EC training observations (an increase of 0.10 SPM = predicted additional six statements per hour). A slight increase in negative learning SPM was also shown (0.08 SPM = predicted an additional 4.8 statements per hour). Wilcoxon Signed Rank Test indicated that the number of positive learning statements between the pre- and post-EC training was not statistically significant (Z = 3.000, P = 1.000). The number of negative learning statements between the pre- and post-EC training was also not statistically significant (Z = 3.000, P = 1.000).

7.5.4. Social versus Learning Talk (Positive and Negative Categories)

The results from the classroom observations indicate that teachers used positive learning statements (rather than negative learning) and negative social statements (rather than positive social statements) most frequently. These results replicate a number of studies that have concluded similar patterns to classroom talk (Hayes et al., 2007; Harrop and Swinson, 2000; White, 1975). However, unlike previous studies, the results within the current research were not statistically significant either between categories or within categories (Appendices H3 and H4: Test statistics within and between all categories). The lack of statistical significance may be due to a number of factors, including test statistic sensitivity, small sample sizes or potential changes in teacher attitude and behaviour over time between research studies. The proceeding qualitative chapter seeks to understand if participant attitudes towards teacher talk categories mirror these results.

7.5.5. Socio-Emotional (SE) Talk

Table 21 shows the SPM within the categories of SE talk. The categories of *labelling* and *validating* have the highest number of SE SPM for both phases of the research, accounting for 0.08 and 0.07 SPM respectively pre-training; and 0.06 SPM for both categories post-training. The number of SE *dismissing* statements was lower at 0.04 SPM pre-training to 0.0 occurrences post-training.

Table 21: Numbers of SE SPM, pre- and post-EC training

Teacher Talk	Туре	SPM: Pre-EC training (N = 7)		SPM: Post-EC training (N = 4)	
Socio-	Validating	0.08		0.06	
Emotional Learning	Solution		0.04		0.03
	Non-solution		0.04		0.02
	Labelling	0.07		0.06	
	Positive emotion		0.03		0.01
	Negative emotion		0.05		0.03
	Dismissing	0.04		0.00	
	Ambiguous	0.05		0.01	

Mann-Whitney U tests concluded no significant difference between the various categories in the two phases of the research (Appendix H3: Mann Whitney-U tests for the variety of combinations of categories). Wilcoxon Signed Rank Tests also indicated that the number of SEL statements between the pre- and post-EC training were not statistically significant for validating SPM (Z = 0.000, p = 0.180), labelling SPM (Z = 0.000, p = 0.180) or dismissing SPM (Z = 0.000, p = 0.109).

However, despite the lack of statistical significance within and between all categories, it is of note that the number of dismissing statements was negligible, particularly post-EC training. The may have been due to the small sample size or bias from the participants towards the research aims (Limitations: Chapter Ten), however the lack of dismissing SPM may also reflect a change in attitude regarding SE use in the classroom and it will be important to discuss this further in Chapters Eight and Nine.

7.5.6. RQ1: Summary

The data collected through classroom observations demonstrated that a variety of teacher talk strategies were utilized in the classroom, however, teacher talk dominates over collaboration and reciprocal discussion with pupils. The degree and type of teacher talk may have an effect on the learning climate (Cadima et al., 2015).

Negative social talk was utilized more frequently than positive social talk. The converse is true for learning talk where positive talk outweighs negative talk. Opportunities for SE talk in the classroom were low in both phases of the research. Examples of joint problem-solving, reciprocity of emotions and empathy were low and should be considered further in relation to pre-existing literature.

Teacher attitudes regarding types of talk, and how talk may or may not facilitate teacher-pupil relationships will be presented in Chapter Eight in order to consider RQ1 in more detail.

7.6. RQ1a: To what extent does a socio-emotional talk strategy (Emotion Coaching) influence teacher talk within a primary classroom?

Research sub-question 1a addresses the extent to which EC may have influenced classroom teacher talk. The tenets of this research question are addressed within RQ1 as above.

Table 22 shows the percentages of teacher and pupil talk, both pre- and post-EC training, the results denote similar levels between the two phases of research. Pre-training percentages for teachers and pupils are 86.4% and 13.6% respectively. Post-training shows a small decrease in teacher talk percentage (0.8%) and a small increase in pupil talk (0.8%).

The number of teacher and pupil WPM are also presented in table 22, with similarly limited variation between the two phases of the research. The rates of teacher talk pre- and post-EC training remain high (88.3 WPM versus 85.4 WPM), with pupil talk being less prevalent in classroom observations (16.2 WPM versus 15.0 WPM).

As outlined within RQ1 results, there was no significant difference between pre and post-training levels of teacher or pupil talk, as demonstrated through the Wilcoxon Signed Rank tests.

Table 22: Summary of mean numbers and percentages of teacher and pupil words across observational transcripts

	Pre EC training	Post EC training	Difference
Percentage teacher talk	86.4%	85.6%	-0.8%
Percentage pupil talk	13.6%	14.4%	+0.8%
Teacher Words Per Minute	88.3	85.4	-3.1
Pupil Words Per Minute	16.2	15.0	-1.2

Table 23 shows the number of SPMs of the various types of talk used in both phases of the research. The results demonstrate similar levels of teacher talk in each category between the pre- and post-EC training phases, none of which were statistically significant between phases of the research.

Learning rates between pre and post-training remained similar, with positive numbers (0.76 SPM and 0.77 SPM) being higher than negative rates (0.42 SPM and 0.48 SPM). RQ1

highlighted that there were no significant differences between pre- and post-training levels in either category.

Social talk rates presented a slight increase between the two phases of the research. Positive social talk rose from 0.28 to 0.40 SPM, an increase of 0.12 SPM. Negative rates rose from 0.41 to 0.50 SPM and ambiguous rates rose from 0.05 to 0.14 SPM. Although these changes were not statistically significant (RQ1), there was a slight increase in social talk as a whole.

However, two categories present a more noticeable change between the phases of the research, both decreasing in number following the EC training:

- 1. SE Validation: Pre = 0.18 SPM; Post = 0.09 SPM
- 2. SE Dismissing: Pre = 0.05 SPM; Post = 0.00 SPM

Wilcoxon Signed Rank tests concluded that these results were not statistically significant for validation (Z = 0.000, p = 0.180) or dismissing (Z = 0.000, p = 0.109). There was no statistically significant change between the two phases of the research.

Table 23: Number of SPM in each category, pre- and post-EC training

Main Node	Sub-Node 1	Mean talk type per	Mean talk type per minute	
		minute (Pre EC training)	(Post EC training)	
Learning	Positive	0.76	0.77	
	Negative	0.42	0.48	
	Ambiguous	0.19	0.23	
Social	Positive	0.28	0.40	
	Negative	0.40	0.51	
	Ambiguous	0.05	0.14	
Socio-Emotional	Dismissing	0.05	0.00	
	Labelling	0.10	0.08	
	Validation	0.18	0.09	
	Ambiguous	0.16	0.02	

7.6.1. **RQ1a**: Summary

The data collected through the classroom observations demonstrate that a variety of teacher talk strategies were utilized in the classroom, however, there was no discernible difference or statistical significance in any talk-type category between the two phases of the research: preand post-EC training. In both phases of the research, positive learning talk was observed

more often than negative learning talk. Negative social talk was more prevalent than positive social talk. Similar numbers of SPM were seen in each category, suggesting that EC training did not influence talk in these areas. However, small differences of SPMs were observed, although not statically significant: there was a rise in social talk levels (positive and negative) between the two phases of research, as well as a reduction in SE validation and dismissal levels.

Both phases of the research highlighted a propensity for classrooms dominated by teacher talk. Again, small changes were seen in this regard, but these were negligible, with teacher talk accounting for over 85% of all talk. These results will be unpicked further in Chapter Eight (qualitative results) to see if teacher attitudes can explicate the meaning of these changes.

7.7. Conclusion of Quantitative Results

Chapter Seven has presented the data collated through classroom observations in order to answer RQ1 and RQ1a. The aim of the classroom observations was to understand the extent to which teacher talk was used to facilitate relationships and whether the introduction of EC would affect the type and degree of teacher talk. Classroom observations of teacher talk was a novel research strategy in the area of EC (rather than relying solely on self-reported strategies) and therefore a clearer understanding of teacher talk was sought through the quantitative data collection.

Categories of teacher talk presented in the classroom were in line with previous research in these areas, where social negative and learning positive numbers were dominant (White, 1975; Harrop and Swinson, 2000), despite the lack of statistical significance. However, the quantitative data from the classroom observations concluded that there was no real effect of the EC training on any category of teacher talk. The results within this study should, however, be treated with caution, as there are limitations regarding the data collection and therefore may not be generalizable or representative (Chapter 10, Section 10.3.).

In order to triangulate data within this Mixed Methods study, the following chapter will present qualitative data in order to address the thoughts and attitudes of the teacher participants towards classroom talk and the introduction of EC. The use of semi-structured interviews allowed for a more thorough examination of the types of talk used by teachers in order to facilitate teacher-pupil relationships (RQ1) and any influences upon teacher talk that may be present as a result of the EC training (RQ1a). The qualitative data will also address the advantages and disadvantages of the introduction of EC as a relational strategy (RQ2).

Chapter Eight: Qualitative Results

8.1. Introduction

The qualitative analysis employed in this research focussed on the data collected through the semi-structured interviews. The intention was to gather evidence and analyse participant attitudes, linked to the theoretical and methodological assumptions of the research at hand. The analysis throughout this chapter is descriptive and interpretive in nature, rather than confirmatory in order to address RQ1 and 2, and sub-question 1a:

RQ1: How is teacher-pupil talk used in the primary classroom to facilitate teacher-pupil relationships?

RQ1a: To what extent does a socio-emotional talk strategy (Emotion Coaching) influence teacher talk within a primary classroom?

RQ2: What are the benefits and challenges of introducing Emotion Coaching as a whole school socio-emotional learning strategy to support pupil-teacher relationships?

Table 24 presents an overview of the semi-structured interviews: the duration and transcription word count (excluding interviewer words). During the pre-EC training phase of the research, there was a total of 4 hours, 19 minutes and 21 seconds of interview time, resulting in an average of 21 minutes and 36 seconds per interview. Post EC training interviews yielded a total interview time of three hours, 18 minutes and seven seconds, with an average of 19 minutes and 49 seconds per interview

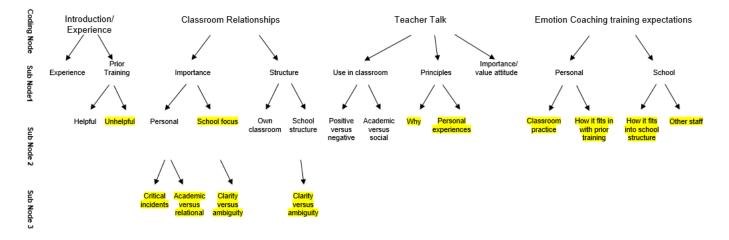
Table 24: Summary of semi-structured interview length and word count in both research phases

	Pre-EC	phase	Post-EC phase		
Participant	Duration	Word count	Duration	Word count	
	(hrs:mins:secs	:)	(hrs:mins:secs)	
P1	00:29:36	5,955	00:30:55	5,939	
P2	00:27:57	3,844	00:10:32	1,318	
P3	00:37:29	5,844	00:26:21	4,117	
P4	00:18:36	2,692	00:22:44	3,201	
P5	00:21:50	2,346	n/a	n/a	
P6	00:30:10	4,040	00:26:28	3,493	
P7	00:19:16	2,578	00:14:01	2,150	
P8	00:16:40	1,884	n/a	n/a	
P9	00:14:23	1,646	00:17:42	1,922	
P10	00:09:23	940	00:18:50	1,961	
P11	00:18:27	2,446	00:14:01	1,760	
P12	00:15:34	2,200	00:16:33	2,424	
Total	04:19:21	36,455	03:18:07	28,285	
Average	00:21:36	3,038	00:19:49	2,829	

8.2. Qualitative Data Coding

8.2.1. Pre-EC Training (Exploratory Phase)

Figure 8 highlights the various nodes identified throughout the qualitative data analysis, pre EC training. The exploratory phase utilized four main coding nodes (introduction/experience, classroom relationships, teacher talk, EC expectations), with three further levels of sub-nodes. Nine categories were identified at sub-node level one, 14 at sub-node two and four at sub-node level three. Highlighted sections in Figure 8 denote the inductive coding that was determined throughout the coding cycles. Non-highlighted sections denote the deductive codes.



N.b. highlighted text = inductive codes formulated from data analysis; non-highlighted text = deductive codes

Figure 8: Derived coding levels from the semi-structured interviews, pre-EC training (deductive and inductive coding)

During the semi-structured interviews, it was important that the inductive coding reflected key codes for both the individual participants' attitudes as well as collective school understanding, both confirmatory and contradictory to each other. The themes uncovered from the interview transcripts were not only to reflect the interactions between pupils and teachers within the child's Microsystem, but also to reflect processes, systems, ethos and principles of the school (Bronfenbrenner, 2005). Moments that defined participants' experiences and interactions regarding teacher-pupil relationships, social-emotional interactions and EC, as well as moments that had led to learning or changes in practice were important to uncover throughout this process. Defining moments were kept in mind during all stages of data interpretation and analysis.

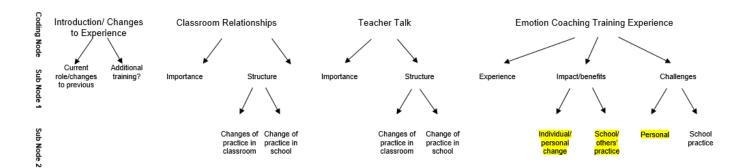
Table 25 provides an overview of the coding terms as outlined in Figure 8 (repeated from Section 6.3.2.) as well as associated research question/s that the code addresses. From the coding nodes (main and sub-nodes), themes in relation to each RQ were extrapolated, shown in the final column in Table 25.

Table 25: Pre-EC training (Exploratory phase) coding nodes, sub-nodes and definitions

Coding Node	Sub Node 1	Sub Node 2	Sub Node 3	RQ addressed	Theme/s derived from code
Introduction / Experience	Experience			n/a	
(Setting the tone and ensuring participant is comfortable)	Prior Training	Helpful		n/a	
		Unhelpful		n/a	
Classroom relationships (participant use, development and value of teacher- pupil	Importance	Personal		n/a	Preface to the RQs
			Critical incidents	RQ1	Theme 2: Getting to know pupils using talk/individual knowledge Theme 3: Talk to create consistency and trust
relationships)			Academic vs relational	RQ1	Theme 5: social versus academic talk
		School focus	Clarity vs ambiguity	n/a	Preface to the RQs
	Structure	Own classroom		RQ1 RQ1a	RQ1 Theme 1: Bi-directionality of talk Theme 2: Getting to know pupils
		School structure	Clarity vs ambiguity		using talk/individual knowledge Theme 3: Talk to create consistency and trust RQ1a Theme 1: Listening/reciprocity Theme 3: Consistency of talk strategies
Teacher Talk (use and value of teacher talk in the classroom and	Use in classroom	Positive vs negative		RQ1	Theme 4: positive versus negative talk
		Academic vs social		RQ1	Theme 5: Social versus academic talk
within the school as a whole)	Principles	Why		RQ1 RQ1a	RQ1 Theme 1: Bi-drectionality of talk
wnoie)	Personal experience		. RQIa	Theme 2: Getting to know pupils using talk/individual knowledge Theme 3: Talk to create	
	Importance				consistency and trust Theme 6: Socio-Emotional (SE) talk RQ1a Theme 2: Listening/reciprocity Theme 3: consistency of talk strategies
Emotion Coaching Training expectation (attitudes and feelings towards upcoming EC training)	Personal	Classroom practice How it fits with prior experience		RQ2	EC Expectations Theme 1: Managing Emotional Incidents (pupils) Theme 2: Emotions in self and others (staff)
	School	How it fits into school structure			
		Other staff			

8.2.2. Post-EC Training (Explanatory Phase)

Figure 9 highlights the various nodes identified throughout the qualitative data analysis, post-EC training. The explanatory phase utilized four coding nodes (introduction/changes to experience, classroom relationships, teacher talk, EC experience), with two further levels of sub-nodes. Nine categories were identified at sub-node level one and 10 at sub-node level two. Highlighted sections in Figure 8 denote the inductive coding that was determined throughout the coding cycles. Non-highlighted sections denote the deductive codes.



N.b. highlighted text = inductive codes formulated from data analysis; non-highlighted text = deductive codes

Figure 9: Derived coding levels from the semi-structured interviews, post EC training (deductive and inductive coding)

Table 26 provides an overview of the coding terms as outlined in Figure 9 (repeated from Section 6.3.2.) as well as associated research question/s that the code addresses. From the coding nodes (main and sub-nodes), themes in relation to each RQ were extrapolated, shown in the final column in Table 26.

Table 26: Post-EC training (Explanatory phase) coding nodes, sub-nodes and definitions

Coding Node	Sub Node 1	Sub Node 2	RQ addressed	Theme/s derived from code	
Introduction/ Experience	Experience		n/a	n/a	
(Setting the tone and ensuring participant is comfortable in environment)	Training		n/a	n/a	
Classroom relationships	Importance	Personal		Preface to the RQs	
(participant use, development and value of teacher- pupil relationships)	Structure	Own classroom School structure	RQ1a RQ2	RQ2 EC benefits Theme 4: Empathy towards pupils Theme 5: Value of teacher-pupil relationships	
				RQ2 EC Challenges Theme 1: Emotions in others (pupils) Theme 2: Teacher emotional understanding (self and others)	
Teacher Talk (use and value of talk in the classroom and within the school as a whole)	Importance	Personal	RQ1 RQ1a	RQ1 Theme 1: Bi-directionality of talk	
	Structure	Own classroom School structure	RQ2	Theme 2: Getting to know pupils using talk/individual knowledge Theme 3: Talk to create consistency and trust Theme 4: Positive versus negative talk Theme 5: Social versus academic talk Theme 6: Socio-Emotional (SE) talk	
		School Structure			
				RQ1a Theme 1: Socio-Emotional (SE) talk Theme 2: Listening/reciprocity Theme 3: consistency of talk strategies	
				RQ2 All benefit and challenge themes below	
Emotion Coaching	Experience		RQ2	All benefit and challenge themes below	
Training (attitudes and feelings towards the EC training)	Impact/ Benefits	Individual/ personal change	RQ2	EC Benefits Theme 1: Whole school talk: consistency Theme 2: Development of a whole	
		School/ others' practice		school, well-being approach Theme 3: Teacher emotional understanding – MEP Theme 4: Empathy towards pupils Theme 5: Value of teacher-pupil relationships	
	Challenges	Personal	RQ2	EC Challenges Theme 1: Emotions in others (pupils)	
		School practice	-	Theme 2: Teacher emotional understanding (self and others) Theme 3: Implementation time Theme 4: Training follow up	

8.3. Preface to the Research Questions

Although the researcher adopted the stance that successful teacher-pupil relationships are fundamental within a primary setting for optimal cognitive, academic and social development (Bergin and Bergin, 2009; Pianta, 2001; Frymier, 2007) and that this could be developed through talk, the researcher did not wish to presume that all participants held this view. Therefore, one of the main (deductive) nodes of discussion was teacher-pupil relationships. 97 participant references were made to the importance of classroom relationships in total, equating to 7.3% of all transcript text. This number of references (and proportion of references) is important to note, suggesting that teacher-pupil relationships were seen as an important discussion point by participants within the interviews. Although relationship importance was a deductive theme, participants referenced this theme independently on a number of occasions, referring back to the theme throughout the interviews (pre and post EC training). The overarching view from all participants (N = 12) was that developing pupil-teacher relationships within the school was important, for example:

P5 But it's, I think the relationship with the children is the key thing, before we can even get the learning going

The importance of relationships is further exemplified below where one (experienced) participant reflects on advice they would give to others to working in a primary school setting to prioritise relationships:

P4 My advice would be, really build that relationship in those first couple of days, because when you've got those relationships - when those children trust you and respect you - the rest is easy from there I think

Moreover, prior to the EC training, the head teacher anchored her desire to undertake EC training from a place of concern regarding teacher-pupil relationships, believing that they were "improving but not there yet" (P1) within the school. The value of relationships expressed by all of the participants was discussed in both pre- and post-EC training interviews and will be discussed further in relation to each research question.

8.4. RQ1: How is teacher-pupil talk used in the primary classroom to facilitate teacher-pupil relationships?

8.4.1. Introduction

The theoretical underpinnings of this research determine that talk is an important tool to facilitate secure-type attachment relationships between teachers and pupils (Bergin and Bergin, 2009). RQ1 considered *how* talk could be used, reflecting on participants' attitudes in both phases of the research. Viewpoints were considered in conjunction with previously recommended strategies (for example, positive talk as per the deductive theme), as well as reflecting on participants' own adopted strategies in practice (developed inductively) as outlined in Chapter Six.

The *how* of classroom talk: importance, types and structure, yielded a large proportion of references and discussion time, producing 490 individual references across the study. Table 27 presents the numbers of references and scripts that included indications towards the importance of talk, the types of talk and the structure of talk within classrooms (where the overall number of references collated = 1,322; the total number of scripts collated = 22). Both categories of types and structure of talk demonstrate a large number of references (438 in total; 33.1% of interview text), with some crossover between the two categories, as denoted by *. For example, some participants mentioned Zones of Regulation (Kuypers, 2011) as a classroom talk strategy – this would be included in both the 'Types of classroom talk' node, as well as the 'Structure' node.

Table 27: Number of references and scripts that include main node categories

Main Node	Number of references	Number of scripts	Percentage of discussion time
Importance of talk	52	16	3.9
Types of classroom talk	134*	21	10.1
Structure of classroom talk	304*	22	23.0

^{*}some references included in both categories

Six main themes transcended from the outlined nodes and sub-nodes for RQ1: *how* talk is used to facilitate teacher-pupil relationships:

- 1. Bi-directionality of talk: Listening and Reciprocity
- 2. Getting to know pupils using talk/ Individual knowledge of pupils
- 3. Talk to create consistency and trust
- 4. Positive versus negative talk

- 5. Social versus learning talk
- 6. Socio-emotional (SE) talk

The proceeding sections present the qualitative data in relation to these six themes.

8.4.2. Theme 1: Bi-directionality of Talk: Listening and Reciprocity

Listening to pupils was considered an important strategy in how teachers can facilitate classroom relationships. Theme 1 was developed from the coding categories within sub-node 1 (Figure 8 and 9): Classroom Relationships: Structure; and Teacher Talk: Use in the classroom, Structure, Principles and Importance.

All twelve participants valued listening (to pupils) as an important strategy in facilitating pupil-teacher relationships. There were 87 references in total: 62 in the pre-EC training phase of the research (11 out of 12 participants), and 25 in the post-EC training phase (7 out of 10 participants). Listening was important to all participants, as exemplified by these two participants from the pre-EC phase of the research:

- P4 I think my thing is, that it's sort of giving children that voice, isn't it? And them knowing that they've got a voice and are heard
- P5 and I think that's always been really big for me, that they need to be heard

Paraphrasing was presented by two participants as an active listening strategy during the Exploratory phase. For example:

P12 so they feel that you have listened because, obviously, I can say back what you've told me

However, poor listening was an area of concern for the head teacher during the pre-EC training interview. Her unease emanated from a pupil questionnaire undertaken at the end of the previous academic year, which highlighted that over 70% of pupils across the school did not feel listened to. She expressed her discomfort, giving examples of perhaps how a pupil might perceive a teacher-pupil relationship:

P1 you're not going to listen anyway, so I'm not going to bother telling you

The questionnaire results were shared across the staff team during the in-service training at the start of the academic year (pre-EC training), and subsequently, three participants referenced the questionnaire results and their associated feelings during the interviews, as exemplified by two excerpts:

P9 we did a survey with the children and it came back that they didn't think adults within the school were listening to them and taking on board, which was really upsetting

P12 there was a survey... and it came back that, I think it was that adults weren't listening very well

The high number of references attributed to listening during the pre-training interviews (N = 62) may be attributed to these questionnaire results alongside a school focus on trying to make a change: the head teacher's desire to improve on these questionnaire results resonated as a key driver for implementing an SE strategy such as EC.

For some participants, it was also necessary to have an element of reciprocity in classroom talk. Participants in the pre-EC training phase noted the importance of everyone having a turn in the classroom (N = 7) in order to develop successful relationships and develop a team ethos (N = 2), as exemplified in the following example:

P10 it's all about being sure that everybody gets their voice heard and everybody has their turn

Two participants felt strongly that mutual respect was a key feature in reciprocal talk:

- P3 I think some of them [pupils] had got so kind of focused on how they were feeling and how they didn't feel respected, that they forgot that it's a two-way stream
- P12 and when it's my [teacher] turn to talk I do, and I say, I listened to you [pupil] but you need to listen to me now, please

The high number of participant references to listening and reciprocity of talk (N = 87), demonstrates the participants' desire to establish clear, two-way communication systems.

8.4.3. Theme 2: Getting to Know Pupils using Talk/Individual Knowledge of Pupils

Eight of the twelve participants in the pre-EC training phase referenced using talk to get to know pupils personally in order to support classroom relationships. As P1 summarised:

P1 we need a bit of background, you need to know that I'm human and that we [teachers and pupils] can chat about normal things

The eight participants felt that getting to know pupils' individual interests outside of school was valuable as a talk strategy, as demonstrated by a participant:

P9 I can chat to them and find out things about their life and what they're doing at the weekend, and that really helps

Getting to know pupils was particularly pertinent for some participants (N = 5) at the start of the academic year, perhaps indicating participants felt it would contribute to building a rapport-intensive environment (Frisby and Martin, 2010). There was specific value to understanding pupils in more depth in order to facilitate relationships and, as shown by these two participants, the conscious effort required:

- P2 making that real conscious effort at the start of term to, yes, to get to know them as individuals
- P4 having a new class, has made me realise just how much that, those first months and those getting to know them, how valuable that is

It is of note that all of the semi-structured interviews were conducted during the Autumn terms of the new academic year, where getting to know pupils individually may have been specifically important to both teachers and pupils in order to build classroom rapport. It is unknown if this level of focus on individual pupil knowledge would be similar at other times of the academic year.

Two participants valued getting to know talk as a precursor to learning, as without knowing the pupils individually, learning in the classroom may be more challenging. For example:

P8 getting to know what their strengths are and their weaknesses, like just in terms of which subjects they're stronger in and where they might need more support. Their likes and dislikes, just generally

It is interesting to note that the three other participants who discussed getting to know pupils did not explicitly reference learning. The omission of learning reference could suggest that they valued knowing pupils directly on a pastoral and emotional level, rather than solely in relation to learning contexts.

Seven participants reflected on prior experiences (both individually or through the observation of colleagues) where they had witnessed the negative effects of not getting to know pupils

individually. Weaker relationships were considered a result of poor individual knowledge of specific pupils. For example, one participant (P7) reflected that getting to know pupils was fundamental for her previous teaching role:

P7 if I didn't have that [knowing pupils individually] in that school, I wouldn't have been able to teach

These examples appeared as important consideration points for participants' own practice in developing relationships in the future:

P2 I think I've got better every year [building relationships] and I think I'll continue to get better every year, yes

P7 even after years and years of teaching, there are still children that you think, well that worked on every other child but it didn't work on you. OK, we'll try something else

8.4.4. Theme 3: Talk to Create Consistency and Trust

Consistency, predictability and trust were extrapolated themes from both phases of the research. Five participants discussed their own desire to be consistent in approach during the pre-EC interviews, as exemplified by these two extracts:

P7 for me, very firm boundaries and firm routines

P11 I always found, using direct language but being consistent and clear, really worked

Three participants felt that consistency was particularly important in resolving incidents and following through with action. The following extract from P4 highlights the value associated with follow-up discussions between pupils and teachers:

P4 a lot of the time I'll sort of say to them, just to let you know, I did speak to that person or I did do this, you know, just to sort of reassure them that I have done what I said I was going to do... I think it's really important to let them know that if I've said I'm going to do something, that I have done it

Two other participants felt that where consistency in talk and therefore trust between pupils and teachers were present, productivity, enjoyment and motivation in the classroom increased. Where trust was lacking, motivation and engagement may decrease, as demonstrated by P3:

P3 I've had children that still didn't trust me and hadn't quite got to that point... they think you don't really care and it's just, you're rubbish

However, although five participants discussed teacher-talk predictability during the pre-EC interviews, this view was not explicit from all 12 participants. Prior to EC training, the head teacher felt that some relationships in the school were not predicated by feelings of predictability or safety, nor active listening from the adults. Moreover, other members of staff also considered that colleagues did not demonstrate consistency:

- P2 I wouldn't say that that's consistent amongst everybody, because I think that's maybe a little bit of the way [teachers] are with the children
- P1 there are still a couple of members of staff who, how would I describe it? Although they recognise that relationships are important... they haven't properly made that connection with the adult role modelling

The vision of consistency in language predicated the head teacher's desire to undertake EC training, as demonstrated in the following extract:

P1 it is just, with children, I think it's predictability, encouragement and allowing them to have that voice...

I think, of language, but what we haven't done yet, and I'm really, that's why I'm excited about the Emotion Coaching

Although five participants expressed the view that safety, consistency and trust were valued components of classroom life during the pre-EC training interviews, consistency was discussed in more detail during the post-interviews (N = 9), suggesting that the EC training may have impacted upon the value of these ideas (see research sub-question 1a).

8.4.5. Theme 4: Positive versus Negative Talk

Participant attitudes towards using positive and negative talk were deductive themes during both phases of the research. Five participants expressed a strong desire to focus on positive, rather than negative talk. The following examples demonstrate the participants' desire for positive talk:

P7 but a lot of the stuff is just based on positive praise and reinforcement

P4 a lot of my teaching is very positive and lots of praise... I try and make sure that any verbal feedback I give to the children, is really focused and really specific and really positive

However, two additional participants expressed concern regarding the overuse of praise (positivity) in the classroom, citing a potential to be viewed as disingenuous or inconsistent between pupils:

- P7 I don't like the fact, you know, if you're over-praising, because the children know that, actually, it's not genuine...just using those words very frequently but also, genuinely
- P3 but I try and keep it as sort of balanced as possible. Just because I remember, when I was at school, being really put out that children who were naughtier than me, were getting more recognition than I was

Two participants presented the need for genuine and consistent praise alongside knowing the pupils (Theme 2), suggesting that teachers must know how pupils will react effectively in order for positive language to be successful, as exemplified by P12:

P12 some kids don't like the praise in front of people and we just have to be sly. They like to have praise but they don't want people knowing they've got praise

Although five participants were explicit in their desire to demonstrate continual positive talk in the classroom, two additional participants expressed that they were unable to always be consistently positive. These references may reflect the reality of the teaching profession as it is unlikely that teaching staff are able to remain consistently positive in every lesson:

- P2 after a while, you can really feel yourself, you're losing your patience, you're not using, you know, positive ways of dealing with it
- P5 I know we all have days and sometimes I'll go, oh god, I'm being so negative...I can hear myself

Finally, nine participants (52 references in total) discussed the school system of Dojo points as a classroom strategy in order to keep the environment and talk positive. All nine of these participants felt this was imperative, reflecting on a school-wide system in order to strengthen pupil-teacher relationships and heighten motivation in students:

P7 so we use that [Dojos] as really positive reinforcement and they really love, they really love the Dojos

The Class Dojo system (Chaudhary and Don, 2011) allows pupils to receive points for learning or social behaviours. The points are displayed on the class interactive whiteboard, with a 'ping' sound when they are added. When pupils reach a number of points, they are able to exchange points for a tangible reward (such as stationary or extended playtime). The results indicated that nine participants felt that the Class Dojo system was a useful and positive classroom strategy.

8.4.6. Theme 5: Social versus Learning Talk

Attitudes towards social versus learning teacher talk were extrapolated from the interviews, predominantly during the pre-EC training phase of the research. This deductive theme centred on previous research (Harrop and Swinson, 2000; White, 1975). When asked whether academic or social talk dominated in the classroom, 50% of participants (N = 6) felt that social talk was more prevalent. These results may support prior research, which bases social relationships and feedback as a precursor to effective learning. However, five out of the 12 participants felt that there was an equitable balance between learning and social talk in their classrooms, with one member of staff considering that although social talk was important, learning was the focus of talk in the classroom:

P2 I think it is important, at the beginning, to build those relationships. But also, to try and keep, try and maintain that focus on, we are in school, we're here to learn

This participant may have felt that a focus on social talk may improve teacher-pupil relationships as a precursor to academic achievement. Moreover, a third of participants (N = 4) recognised that pupils required social feedback in order to be ready to learn, as exemplified in these two extracts:

- P3 it's that sort of being ready to learn. It's the sort of, that step before the learning, if that makes sense
- P10 sort of those social boundaries are there and then it grows outwards from that

As the interviews were conducted in the first terms of the academic year, establishing rules and routines in the classroom may have been a focus to develop social relationships as a precursor to academic achievement. Two participants identified the need to know pupils specifically (Theme 2) in order to provide successful academic feedback to pupils, for

example:

P7 [I know] where it needs to be more pastoral and where it needs to be more academic pushing. And then once you've got those relationships, that's when you know where you can just push them [academically]

Three participants highlighted tensions between a pastoral and academic focus for talk in the classroom. Whilst discussing the motives for the introduction of EC into the school setting, the head teacher specifically referred to the pressures of obtaining outcomes for the school, including data-driven targets and results:

P1 how they respond to children and manage children effectively, if we don't do that, we're actually, not going to achieve the outcomes that we want to achieve, if that's the bottom line

8.4.7. Theme 6: Socio-Emotional (SE) talk

Although various types of classroom talk were identified as deductive themes, the researcher did not explicitly question SE talk as a separate theme during pre-EC interviews. The aim was to ensure participants discussed classroom talk without the interviewer's influence regarding SE talk. SE talk, therefore, arose through participant-led discussion.

The degree of SE talk references varied between both phases of the research. Pre-EC interviews referenced pupil emotions on only two occasions (two participants). Pupils' emotions were referenced more explicitly and frequently during the post-interviews (N = 8; RQ1a).

However, the emotionality of talk during the Exploratory phase may have been discussed implicitly through themes as previously discussed: listening to pupils (Theme 1) and feelings of trust and consistency (Theme 3). Through active listening and consistent approaches, pupils may feel emotional warmth, trust and support from teachers.

Two participants explicitly referenced their own emotions and the importance of modelling SE talk and problem solving during the pre-EC training phase. For these participants, their understanding of their own emotions and the potential impact of emotions on others was important. This may reflect an understanding of their own meta-emotional philosophy (MEP) prior to the EC training (Gottman et al., 1997). For example:

P3 you just have to be really honest with them and just go, actually, I'm feeling a bit grumpy and I need you to help me to feel not grumpy

P4 I try and let them know that I am human as well... I do make mistakes. If I make a mistake I'll say sorry and I'll try and fix it

Two participants referenced an adopted school strategy of Zones of Regulation in the Exploratory phase of the research as an explicit classroom talk strategy for discussing emotions. Zones of Regulation (Kuypers, 2011) is a strategy to allow pupils to describe themselves within a coloured zone, with four different colours representing different states of emotions. However, the school also adopted *learning zones* in the school, where pupils and adults assigned pupils a colour based on how 'learning ready' they felt. These two colour systems created some confusion among staff (N = 4), who were unsure, particularly during the Exploratory phase of the research, how they worked effectively together in the classroom, as exemplified in these excerpts:

- P2 I don't think that [zones] has as much impact in my class maybe as some other teachers, and that might be down to me not doing as well as I could be
- P3 we'd stopped using the zones of regulation with those children who'd been doing it before, because there was that confusion of blue zone being really amazing, but also, very slow

In comparison, seven participants referenced Zones as a structure for discussing emotions during the Explanatory phase of the research. The increase in references may indicate a shift in attitude regarding the importance, clarity and frequency of SE talk between the phases of the research, or may reflect additional practice/embedding of Zones into the school culture – see RQ1a.

During the pre-EC training phase, four participants referenced the emotional "power of words and how they are communicated" (P2). In this respect, the 'what is said' by teachers could be argued to be less important than 'how it is said', as associated feelings and emotions may be strongly coupled with the latter. One participant cited an example of a colleague reacting to an incident and personally reflected on their own use of words:

P11 it was another member of staff and it was the body language, so the coming up with the hands on the hips... So, initially, a child's going to shut down as soon as they see that... I've definitely developed... not the language, but my tone

This extract reflects views expressed by four participants that although language can be powerful, the way in which talk is presented can have an emotional effect on the receiver (Theme 4):

P3 when something exciting's happened, you know, using that really excited voice. When you're wanting to be firm, using that, you know, this is not acceptable, tone of voice, rather than the words that I use

8.4.8. RQ1: Summary

Six themes were derived from the semi-structured interviews with regard to *how* teacher-pupil relationships can be facilitated through talk. The most prevalent of which was the concept of listening and reciprocity between teachers and pupils, yielding a total of 87 references in both phases of the research. However, further five strategies of using talk to develop relationships were discussed with varying degrees of acknowledgement.

In Chapter Nine, these qualitative results will be compared and contrasted with the quantitative results to ascertain a thorough understanding of *how* talk is used in the classroom to facilitate pupil-teacher relationships.

8.5. Research sub-question 1a: To what extent does a socio-emotional talk strategy (Emotion Coaching) influence teacher talk within a primary classroom?

8.5.1. Introduction

Research question 1a considered the extent to which EC training *influenced* teacher talk between the pre- (Exploratory) and post-training (Explanatory) phases of the research.

The semi-structured interviews yielded 146 references from all 10 participants on the impact of the training (positive, negative and neutral attitudes) on own and school practice. These references were examined alongside the Teacher Talk 'Use' and 'Structure' coding nodes (Tables 25 and 26) in both phases of the research. Three main themes transcended from the coding cycles:

- 1. Socio-Emotional (SE) talk
- 2. Listening and reciprocity
- 3. Consistency of talk strategies

As per RQ1, these themes will be explored and presented in further detail.

8.5.2. Theme 1: Socio-Emotional (SE) talk

Post-EC training, eight of the ten participants referenced emotions as a talk strategy, with only two referencing emotions directly in the pre-EC phase. These eight participants felt labelling emotions and allowing pupils to feel heard when expressing themselves were important, perhaps representing a shift in attitude towards SE talk as a result of the EC training. The following two extracts demonstrate the participants' changing attitudes towards ensuring that emotions are given appropriate attention:

P3 their emotions and their relationships need to come first, before any kind of academic learning's going to happen

P9 so, I have now embedded into every conversation I have with the children, that their emotions are, every emotion's OK

Despite the increase in recognising SE talk post-EC training, there was a disparity between participants' attitudes as to *how* emotional talk should be used, and the frequency in which this took place. For some participants (N = 3), SE talk was embedded into daily discussions as a way of checking pupils' comfort and levels of engagement in learning, for example:

P3 emotional check-ins, rather than responding to an incident, is probably how I'm using it more

However, many of the participants felt that EC was a useful talk strategy when faced with a particular incident or when pupils felt emotionally heightened, rather than ongoing implementation, as demonstrated by P4:

P4 I think, my class teaching, you probably wouldn't hear as much, I think, probably. But I would say, as a class teacher, I probably use it less in the classroom because it's, I don't know, it just, maybe I'm not quite there yet in my training

The varied use of SE talk may reflect participants' desire to rely on varying talk strategies, for a number of reasons. For some participants, SE may not feel relevant or warranted for the pupils that they teach, perhaps reflecting a desire to focus on an academic or social focus as a priority (see RQ1). However, varying attitudes may also reflect an inconsistent understanding of the EC approach by those having undertaken the training.

Moreover, there were inconsistencies in the value expressed towards labelling emotions as they arose (step four of the EC training) as demonstrated in these two opposing extracts. The first extract suggests that recognising emotions is of value, whereby the second suggests that labelling and identifying emotions is less important:

- P2 I hear a lot more often, that initial step of recognising the emotion
- P4 as long as we're talking about emotions, it's more important that we talk about emotions than labelling and identifying them

For many of the participants, listening and empathising with emotions - rather than labelling and resolving – was more important. Four participants referenced listening to the emotion and displaying empathy, consistent with step three of the EC training (Gus et al., 2017). Although listening was a construct that was discussed by all of the participants during the Exploratory phase, *listening and understanding emotions* became a more specific focus during the Explanatory phase, perhaps representing a shift towards emotional understanding and recognition following training:

- P2 just for example, the showing understanding of what they're feeling, what they're explaining or what they're struggling with, they start to learn that that's your response, you know, regularly, I understand how you're feeling
- P7 and it just means they want to have that chat about how they're feeling. And I think in a few years past, I wouldn't have done that, and I think that's new for me

The increased SE talk referenced by eight participants post-EC training may suggest that the EC training had an impact on teacher-talk attitudes.

8.5.3. Theme 2: Listening and Reciprocity

Listening to pupils and reciprocity of talk was an important construct during both phases. During the post-EC interviews, seven out of ten participants considered listening to what pupils were trying to say in everyday interactions and figuratively through emotions (see Theme 1) as important, for example:

P10 everybody's been really giving a push on talking to the children about how they're feeling and giving them space to talk

During the pre-EC training interviews, 11 out of 12 participants valued listening to pupils as important also, however, there appeared to be a changeable shift for three participants towards hearing what pupils were saying and not needing to jump in to resolve an incident, as exemplified by these two extracts:

- P1 it's nice to have, whether it's an argument that they've had or a disagreement with yourself, the best thing to do is the silence and listen
- P10 oh, I'm pretty powerless in this [resolving all issues as they arise], but I have got the ability to give them the space

These nuanced changes to the reciprocity of pupil-teacher talk may have resulted from the training focus on empathy and listening skills during training (step three; Gus et al., 2017). However, there remains a disparity between the participants' viewpoints on listening and reciprocity of talk as demonstrated through the semi-structured interviews and the observed practice in the classrooms.

8.5.4. Theme 3: Consistency of Talk Strategies

A deductive theme from the semi-structured interviews was *how* teachers used talk. During the pre-EC training phase, the participants alluded to a number of strategies, including positive versus negative statements, social versus academic talk, Zones of Regulation, Learning zones and Dojo points. Although the participants in the Explanatory phase alluded to some of these strategies, there appeared more consistency between participants on the types of structures used.

As per the pre-EC training phase, all participants explicitly referenced using positive talk strategies (versus negative or coercion strategies) within the classroom. This is unsurprising given the results from the exploratory phase, as well as positive strategies being seen as more favourable in classroom research (as per the halo effect, Cohen et al., 2007). The following two extracts from participants 4 and 7, however, suggest that a personal shift in positive classroom talk may have taken place, despite both of these participants alluding to their own positive practice pre-EC training:

- P4 trying to make a big deal out of anything positive I see.
 I tend to stick to our class rewards and using the praise, and I use that a lot
- P7 so, it's all positive with the Dojo and just, just for stuff that you notice, that you perhaps wouldn't have said anything in the past, you know

These changes may have resulted from heightened personal reflection following the MEP section of the training, from a wider societal focus on a positive mind-set and collective responsibility during the pandemic, or from other changes to their own practice not discussed during the interviews (see Chapter Nine).

Nine participants referenced the use of Dojo points (see RQ1) as a positive strategy in both phases of the research, indicating that the use of Dojo is an embedded strategy for supporting classroom structures and relationships, based on behaviourist principles (rather than an SE, talk-based approach). However, during the second interview, the head teacher reflected on the use of emotional talk alongside positive talk, expressing that the two go hand in hand:

P1 so, it kind of feels like, you're talking about positive behaviours, you're labelling emotions that go with it

It is also of note that Zones of Regulation as an SE talk strategy was referenced more often during the post-EC training interviews. This may mean that this particular strategy had been strengthened as an SE talk strategy within the research school.

Seven participants expressed that EC was useful as a script when addressing heightened emotions or incidents that had occurred. In this respect, participants expressed that they felt more confident in dealing with situations as they arose, due to a talk script that had been introduced through the EC training, as exemplified by these two participants:

- P3 if you're in a bit of a heated moment, where a child's feeling, you know, having something quite scripted to have in your head to say, often really helps to defuse the situation
- P2 and it just gives you confidence, I think, because you know, almost you know, referring to that script in your head, that step by step process

The use of a script is discussed in further detail during RQ2 as a benefit to the EC training.

8.5.5. RQ1a: Summary

Sub-question 1a aimed to understand any potential influence that the EC training may have had upon teacher talk. Three main topics were derived. EC training may have impacted on the degree to which teachers discussed, recognised and listened to emotions consistently and reciprocally. However, some inconsistencies have been shown between the types of SE talk that were used, as well as the associated importance in varying situations.

8.6. RQ2: What are the benefits and challenges of introducing Emotion Coaching as a whole school, socio-emotional talk strategy to support teacher-pupil relationships?

8.6.1. Introduction

Research question two considered the effects of introducing EC - the benefits and the challenges for both individuals and the school – on pupil-teacher relationships. The expectations of the training, the benefits and the challenges yielded a large proportion of references in the post-EC training interviews, and produced 250 individual references, from all interviewees (N = 10). Table 28 presents the number of references and scripts that included indications towards EC training expectations, benefits and challenges. The table shows that the benefits of the EC training yielded the greatest number of references across all 10 scripts during the post-EC training interviews, with 83 references in total. The main coding themes of EC training expectations, benefits and challenges are included in the table, with two themes identified for training expectations, five main themes for the benefits and four themes for the challenges.

Table 28: Number of references and scripts that reference EC training expectations, benefits and challenges

Main Node	Phase of research	Number of references	Number of scripts	Key themes derived from coding cycles
EC Expectations	1	42	9	 Managing emotional incidents (pupils) Emotions in self and others (staff)
EC Benefits	2	83	10	 Whole school talk - consistency Development of a whole school, wellbeing approach Teacher emotional understanding – MEP Empathy towards pupils Value of teacher-pupil relationships
EC Challenges	2	64	10	 Emotions in others (pupils) Teacher emotional understanding (self and others) Implementation time Training follow up

RQ2 presents the EC training expectations held by the participants prior to the EC training in order to ascertain whether the introduction of EC met participant expectations. The benefits and challenges of EC are then explored.

8.6.2. Expectations of EC Training

Nine out of twelve participants discussed their expectations pre-EC training, with three participants unsure of training expectations, and providing no further comment.

The head teacher expressed that she was the key driver of implementing EC, setting out her rationale:

P1 [aiming for] a more structured approach to the language...and make that connection with what we're all doing, how it links to our behaviour management

The head teacher believed EC would have a positive, favourable impact on the staff and school community. However, the researcher wished to understand if other members of staff considered their expectations of EC training to be favourable, a challenge or held a neutral standpoint. Two key themes of EC training expectations were derived from the interview analysis.

8.6.2.1. Theme 1: Managing Emotional Incidents (Pupils)

For six participants, the main expectation of the training was the ability to successfully support pupil incidents involving heightened emotions. Managing emotional incidents accounted for over half of all expectation references. The head teacher expressed concerns about the mismanagement of emotional incidents as a pivotal point for undertaking EC:

P1 but we still do see times, when I've seen people jump in to a [pupil emotional] situation and not properly take time to investigate and, you know, manage it in a calmer way

Three participants suggested that EC may allow for greater confidence in dealing with emotional incidents when they felt unsure of the next steps or resolution strategies, as exemplified by this participant:

P4 and I do find myself a bit lost sometimes, as to how best to support [pupils] and build their confidence and help them to not be quite so anxious

For these participants, it may have been that EC was predicted to be a resolution strategy for emotional and behavioural incidents, rather than a whole school philosophy or approach to emotions (Gus et al., 2015). However, for the head teacher, the expectation and desire to undertake EC was based on supporting **all** pupils' emotions through talk:

P1 to have a staff team, where everyone felt empowered to support every child, regardless of, if that child's having a difficult day with very heightened emotions, then I think that, to me, would be a success

8.6.2.2. Theme 2: Emotions in self and others (staff)

Although managing emotional pupil incidents was the most prevalent training expectation, four participants alluded to emotional identification (in self and colleagues) and an increase in emotional discussion between colleagues as a training expectation, as exemplified by two participants:

- P3 [I hope to] support them [pupils] with their emotional literacy... in the classroom and using it as a tool to support them socially with their friendships, as much as for themselves
- P1 I know it will upskill myself to be in a position where I can better support colleagues... just do a quick sharing of, you know, thinking and stuff

For the head teacher, the hope for emotional discussion was rooted in the desire to have a collective approach whereby strategies, incidents and problem-solving could be disseminated among colleagues. In this respect, the head teacher felt that a shared approach would be beneficial. Furthermore, the head teacher hoped the training would ensure consistency and successful development for staff. The extract below demonstrates the head teacher's unease at previous training undertaken by members of staff, which was felt to have little impact on the school community in terms of developing pupil-teacher relationships:

P1 the whole school approach thing just didn't seem to be the priority. the list of courses that people attended was ridiculous... And yet, there's no, the impact wasn't there, or very little, that's unfair to say

It was clear that the head teacher had positive expectations of the EC training with regard to pupil support, staff knowledge and consistency across the school. However, other participant expectations were less positive and focused, with some participants unsure of what to expect or indicating the training would only support the management of emotional incidents.

However, no participant in the study indicated negative feelings towards the training, which may have been due to a lack of clarity on what to expect from the training, or that they did not wish to express negative feelings publically. However, some participants were more cautious in their response, as demonstrated by this participant's cautious tone:

8.6.3. EC Training Benefits

All ten participants discussed the benefits of EC during the post-EC training phase of the research. This section addresses the five key themes (as outlined in table 24) that emerged from the semi-structured interviews, accounting for 97% of all EC benefit references.

8.6.3.1. Theme 1: Whole School Talk - Consistency

26 references (31% of all benefits references) were attributed to a whole school, consistent approach to teacher talk, as referenced by eight participants. For these participants, the benefits of whole school talk were presented along two trajectories: adult consistency of language and the impact on pupils.

All eight participants discussed the shift towards a more consistent staff approach of speaking to pupils as a clear benefit. The following extracts demonstrate two participants' positive feelings towards a collaborative language approach, with the latter quote highlighting the power of any adult being able to approach pupils in a consistent way:

- P6 everybody's going to be saying the same thing, and also, the expectations are the same. The language we're using with them is so much easier and it's shining through
- P3 but, I think, because it's something that as a whole school we're doing and sort of it's semi-scripted, that, theoretically, any adult could be sort of swapped in

During the pre-EC training phase, six participants indicated that EC may support incidents of pupil emotional dysregulation. Five participants felt that the EC training had met those expectations. Moreover, nine references were attributed to increased staff confidence through language consistency during incidents:

P7 I think having a script helps with lots of teachers because I think that's definitely your starting point, because then it gives you confidence to be able to try it

Language consistency can be argued to be a clear benefit of the EC approach and demonstrates a shift since pre-EC training. As adults approached pupils with more consistent language, some participants felt that pupils would also benefit across the school:

- P2 whereas, I think now, more and more of the children are knowing that they, and feeling comfortable going to anyone ... and I think for the children, knowing that whoever adult's speaking to them, it's going to be broadly the same thing, is helpful for them as well
- P4 so, no matter what adult the child goes to, they sort of know the same vibe they're going to get

A more consistent approach in language, where pupils are able to predict responses from adults may lead to heightened feelings of security and trust from pupils towards adults:

P3 because they just had no trust that we were going to listen and cared. And I think that's a real shift as a school culture

However, despite all participants presenting language consistency as a benefit to EC training, some talk inconsistencies were presented as challenges to the training (Section 8.6.4.1.).

8.6.3.2. Theme 2: Development of a Whole-School, Well-Being Approach

Four participants discussed whole school well-being as a key benefit: EC may have allowed practitioners to re-evaluate the importance of well-being, MEP and empathy towards others. For these four participants, it was important to explain the changes in the school towards a collaborative well-being approach. The following two extracts from experienced participants demonstrate how EC had been embedded into practice and a well-being ethos:

- P1 we resurrected the well-being committee again straightaway. So, I think, when I said to you before, this sat, so the building on Emotion Coaching and the training for staff development, sort of sits within our, yes, well-being group
- P4 the fact that people readily went away and saw the importance of it [EC training] and were happy to... there was quite a lot of overlap with some of the themes

The head teacher also felt that there was a raised profile for well-being, citing that well-being champions in the school had emerged over the course of the training, perhaps indicating a more collaborative, whole-school approach. Furthermore, two participants explored well-being collaboration with parents during the interviews. The following extract demonstrates that parental collaboration towards the school's ethos on well-being was important:

P6 we [parents and staff] started working alongside with mental health and having a little group. We'd meet up with some

parents... If you've got parents on side, it makes it so much easier... I think everybody's really on that same page

Although all participants had believed that relationships and well-being were important prior to the training, their focus on others' relationships and collaborative well-being during their post-training interviews highlight possible personal reflections in response to the training, the pandemic or their increased experience in their educational role. EC may have played a role in developing the focus on whole-school, well-being and collaboration.

8.6.3.3. Theme 3: Teacher Emotional Understanding - MEP

For seven participants, the EC training developed their sense of MEP, becoming more aware of their own feelings, reactions and approaches to emotions. The following extracts demonstrate self-reflections towards emotional incidents in the classroom, leading to a potential change in approach for these two participants:

- P8 and that mindfulness of being aware of like, oh this is making me, I'm getting really frustrated here or angry, but I need to just try and keep calm...giving myself a time out and thinking, no, I'm going to handle this later when I feel, you know, able to deal with it better
- P2 I've [previously] made a response due to my emotions... so I've been able to sort of re-evaluate bits as well

Approaching situations with increased MEP from adults may have benefitted the participants in the study by allowing for a more calm and considerate approach in the classroom. Furthermore, the EC training may have allowed for increased empathy towards other colleagues, as well as self-reflection on day-to-day emotional regulation. For some participants, the ability to recognise ones own emotional difficulties lead to an increased understanding and change in approach, as exemplified in these two extracts:

- P12 what things cause you stress, how do we know you're stressed, what's the sign you're stressed? Who can we talk to, that sort of thing
- P6 we realise, we come in with baggage too

8.6.3.4. Theme 4: Empathy Towards Pupils

Empathy, understanding and listening to pupils remained a theme throughout the post-EC training interviews, as addressed in further detail in RQ1 and 1a. For some participants (N =

5) empathy towards pupils was explicitly referenced as a benefit. The following extract highlights the benefits of the EC approach in understanding pupils' emotions:

P3 it [EC] helps you to put yourself in the child's mind a little bit more and just to show that understanding from day one.

...there are certain children who it really does [benefit], you can just see their face change. It might be those who don't receive it at home at all, don't receive that recognition of emotion at home

The head teacher agreed, stating that prior to the EC training, empathy towards self and others "was getting lost" (P1). In this respect, the training met the expectations as outlined in theme 2 (Section 8.6.2.2.)

For one participant, the EC training may have allowed them to reflect, empathise and support emotional incidents, rather than invalidate or dismiss emotions. In this respect, the EC training may have allowed for a more supportive, empathetic teacher-pupil relationship:

P2 if they're then more aware of how they're feeling and what's appropriate and what's not appropriate when they're feeling that way, the pay-off is that they then don't have the over-the-top reaction further down the line

8.6.3.5. Theme 5: Value of Teacher-Pupil Relationships

Although the majority of the participants elucidated views on the importance of teacher-pupil relationships prior to the introduction of EC, some research participants chose to reflect on the importance of these relationships during the post-training interviews. One participant chose to re-establish her standpoint, indicating that her viewpoint had not changed from her previous position:

P7 I mean, I've always felt that building a relationship with any child is the most important thing

However, three participants felt that, since the EC training, their stance towards teacher-pupil relationships had strengthened, as exemplified by this participant:

P11 [the training has] made me more aware of how to support children in building relationships

These reflections may indicate a shift in viewpoint for a number of reasons, for example,

increased MEP as a result of the training. However, the shift may reflect a societal shift during the pandemic, as demonstrated in this extract:

P6 in the pandemic... anxieties and social settings have all changed. But we're working really hard on the mental health side anyway, which is quite nice

8.6.4. EC Training Challenges

The challenges of implementing EC as a whole-school approach were identified during the Explanatory phase as a deductive theme, yielding 64 references in total across all interview transcripts. This section addresses the four key themes (as outlined in Table 24) that emerged from the semi-structured interviews, accounting for 100% of all EC challenge references.

8.6.4.1. Theme 1: Emotions in Others (Pupils)

Although the ability to recognise and empathise with others' emotions was seen as a benefit to the EC training (Section 8.6.3.4.), there was some caution (N = 4) expressed to the applicability in all situations for pupils. For example, P2 expressed that the EC script was not always effective:

P2 because there are some times, where you can say a whole script and you're still faced with the same situation at the end of it, you know... and I don't feel, even to this day, that it's applicable in every single scenario

A further three participants expressed that the specific naming of emotions was not always relevant for pupils, and may create challenges itself, particularly for pupils lower down in the school, as exemplified in these two extracts:

- P10 I think there are times that sometimes children just feel things and actually, there is no reason. So, it's really hard for them to voice that
- P11 so, it's making them aware of their own emotions, which I found, especially lower down, they find it really difficult, especially if it's, if it's not that obvious happy, sad, cross those are the ones that come out

Emotional labelling and discussion may not always be deemed relevant in every situation. This may be for a number of reasons. Firstly, participants may feel that the full EC strategy is not appropriate in the presented situation. Participants may feel that other strategies (such as listening only, see RQ1) might be more useful when faced with pupil emotions, which might

be particularly relevant where participants have secure-type relationships with pupils, or have got to know the pupil well, and therefore they have a clearer understanding of what works for that pupil in the moment. P10 expressed caution towards being too hasty, as seen in this extract:

P10 yes, I think there were times when I felt like, I think we're going to too quickly jump into that, because it's a bit of a quick fix, because, as teachers, we need quick fixes

8.6.4.2. Theme 2: Teacher Emotional Understanding (Self and Others)

For seven participants, the EC training was a benefit due to heightened awareness of their own and/or others' emotional understanding (Section 8.6.3.3.). However, four participants (all experienced in other schools with over three years of experience) stated that the MEP component of EC required self-reflection of practice. These four participants considered that self-reflection and MEP understanding might be challenging for some colleagues, as exemplified by the head teacher:

P1 people were quite scared by that phrase [MEP], as you can imagine...but I still think, with some colleagues, it's a much bigger ask of them to focus on their own [emotions]

In this respect, some staff members had been observed to be "deviating off the script" (P1) and not holding fidelity to the EC approach:

- P2 I don't think it's been fully implemented [EC], due to circumstances, across the school, with every member of staff to follow each step, even myself, you know
- P3 I think it's not as clear for everybody [the EC approach]

Due to time constraints, it was difficult to ascertain further reasoning for why some participants were reported to not follow the approach consistently. However, the proposed challenge of having time to implement and embed EC as an approach provides some further clarity (Section 8.6.4.3.). It may be that staff require further support and training or it may be that the MEP expectations were particularly challenging for some.

One reason for the varied use of EC may be that there was a lack of SE strategy synthesis and understanding across the school. Eight participants highlighted Zones of Regulation (Kuypers, 2011) as a strategy that they were using post-EC training, alongside tenets of EC.

The head teacher also suggested that there were inconsistencies in which approach to use most frequently (Class Dojo, restorative practice, Zones of Regulation or EC):

P1 and that, we haven't resolved that yet. And we all agreed that right now, it's not our biggest [problem], as long as we're talking about emotions

8.6.4.3. Theme 3: Implementation Time

Nine participants (12 references in total) acknowledged the time to implement EC was challenging during the school day. The head teacher also acknowledged these difficulties for staff:

P1 the overriding fact with all of it, is the time, and I don't disagree with colleagues... they said, we would love to do more of this, we would very much like to have these individual conversations, but it's when

Four participants felt that, due to their role in the school, opportunities for EC were minimized as they were not on the playground. EC was considered more useful on the playground in moments where emotional incidents occurred (Theme 2):

P3 but I think, because often, sort of day to day, there isn't always that much [time to practise EC], because I'm not out on the playground

In this respect, it appears EC may have been viewed as a strategy to use 'in the moment' for critical incidents, rather than a wider approach across the school:

P4 my Emotional Coaching I've used more sort of lunchtimes and breaktimes, when there's been a bit of an issue with somebody, or some of the really vulnerable children in my class that are maybe having a moment in the lesson

Six participants did feel that their role allowed for opportunities for EC to be implemented, however still considered that time pressures in school were challenging and therefore they were not always able to follow EC principles in full, referring to being "snowed under" (P2). As discussed in Section 8.6.4.1., for some, the time to apply EC was considered lengthy with not always an appropriate outcome:

P3 this is taking longer than if I just went, no, up, come on. Is this really worth this longer conversation?

From the challenges presented by the participants during the post-EC interviews, time to implement EC appeared as the most prevalent challenge for the majority of participants. This is not surprising given that schools are complex, busy environments with teachers having a number of strategies that they need to consider throughout the school day (such as learning content, lesson planning, pastoral support and marking). Time as a factor also raises questions as to whether participants felt that EC was entirely beneficial. These attitudes were difficult to ascertain, given the time constraints of the interview processes and the potential for participants to not appear too negative towards the EC approach given the nature of the research study.

8.6.4.4. Theme 4: Training Follow Up

All ten participants post-training felt that further practise, training or observations of EC practice would be useful in order to embed training, both for themselves and for their colleagues.

Three colleagues (including the head teacher) referred to the training structure as being potentially fragmented. The head teacher reflected on this:

P1 in an ideal world, I'd have more time with teachers and TAs together... It got very bitty and that's the bit that I'd certainly change if I could have done

In order to resolve potentially fragmented training, as well as to improve knowledge and understanding, nine participants felt that further follow-up training would be useful. In this respect, colleagues would be able to discuss further the challenges of EC implementation as a whole-staff group, as exemplified by these two participants:

- P7 I know that [head teacher] would like to do some more of the emotion coaching, and I think that's a sensible idea
- P9 I think top-ups, you know, whether it's, I don't know, just a short thing on an inset day, just to keep the whole school approach going, just for the consistency

Both the head teacher and one other participant referenced the pandemic in respect of training follow-up, considering that societal needs reflected the importance of further work on SE understanding. Moreover, seven participants considered that working with others, discussing strategies in practice and observing others in EC implementation would be a useful strategy in order to develop EC skills and to address the gaps in EC knowledge and training follow up:

- P4 giving it, you know, giving it time to embed in my mind, really practising it
- P1 I think some role-playing practise, you know, opportunities to deal with a problem that's escalating
- P2 I think I'd really like to sort of have the opportunity to continue to embed my understanding of emotional coaching, and opportunities to see it in action

8.6.5. RQ2: Summary

The Explanatory phase of the research aimed to determine the benefits and challenges from the implementation of EC across the school. Ten participants identified five key benefits of the EC training: consistency in talk, a whole school wellbeing approach, teacher MEP, empathy towards pupils and the value of teacher-pupil relationships. All participants also identified four key challenges of EC training implementation across the school: emotional understanding of pupils, emotional understanding of self and colleagues, implementation time and training follow up. Two challenge themes mirrored the benefit themes proposed: emotions in self and colleagues, and understanding pupils' emotions. Interesting, these two categories were presented as the key expectation themes during the pre-EC training interviews also. Implementation time for EC and opportunities for follow up were the most prevalent challenges offered by participants.

8.7. Chapter Eight: Summary

Chapter Eight has considered and presented the results obtained from the semi-structured interviews – the collection of qualitative data. In this respect, additional themes and insights have been extrapolated which would not have been gained from the quantitative data alone.

In the following chapter, both quantitative and qualitative results will be considered simultaneously in order to discuss the findings for each research question in relation to the research literature. Through combining and comparing results, convergence or disparity between the observations and participant thoughts, feelings and attitudes will be considered to create a more complete picture within this Mixed Methods study.

Chapter Nine: Discussion

9.1. Introduction

Chapter Nine combines the results from the observations and semi-structured interviews to address the research questions, as presented in the Mixed Methods Convergent design (Section 5.2.; Figure 5). Each question will be addressed in relation to the literature as outlined throughout Chapters Two to Four, in order to evaluate and synthesise, confirm or disconfirm

findings presented in the research.

9.2. RQ1: How is teacher talk used in the primary classroom to facilitate teacher-pupil

relationships?

The *how* of teacher talk yielded varied, and at times, contradictory results from the Mixed Methods adopted in this study. The results yielded four main themes, addressed throughout this section in relation to the research literature:

• The proportion of teacher talk

• Positive, negative, social and academic talk

Socio-emotional (SE) talk

Talk used to get to know pupils and provide consistency

9.2.1. The Proportion of Teacher Talk

The degree of teacher and pupil talk time during the observations demonstrated that, on average, over 85% of lesson time was dominated by teacher talk. If the researcher were to generate a prediction from this data, this percentage would equate to approximately 51 minutes of teacher talk within a one-hour lesson. Although extreme caution must be given to these types of predictions due to the variability between lessons, the numbers present a potentially stark picture of classrooms dominated by teacher talk, where collaboration and discussion with pupils are potentially minimal.

Previous literature has demonstrated that levels of engagement and motivation may be increased where a balanced ratio of talk between pupils and teachers exists (Frisby and Myers, 2008). Bronfenbrenner (1995) may have argued that this reciprocity would lead to strengthened, secure-type relationships. The large percentage of teacher talk time in this study suggests that pupils are not getting enough opportunities to converse with either their peers or teachers. Collaborative learning was rarely demonstrated during the lesson observations and was not as prevalent as previous literature suggests would be optimal

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(Frisby and Myers, 2008; Spilt et al., 2016). There appeared a reliance on one-directional talk which may impact the quality of teacher-pupil relationships.

As previous researchers have suggested (Dewey, 1958; Bronfenbrenner, 2005), reciprocal (and balanced), high-quality, social interactions between teachers and pupils are critical to creating new frames of reference, and for the cognitive development of pupils. A successful classroom is predicated on the joint creation of knowledge and an established pupil-teacher communication system (Mercer and Hodgekinson, 2008; Cazden, 2001). The results from the observations (the high proportion of teacher talk) did not indicate teachers enabled reciprocity in the same way.

However, through the semi-structured interviews, teachers indicated attitudes that were contradictory to the observation results. 87 references were yielded in total regarding the bi-directionality and reciprocity of talk, demonstrating the participants' desire to establish clear, two-way communication systems, stressed by all but one participant. 62 of these references regarded listening to others as a key relationship-developing construct, with seven participants specifically referencing the need for everyone in the classroom to have a turn.

The overall results regarding talk, therefore, indicate that although pupil talk is valued by practitioners, teacher talk predominantly dominates classrooms. These results may indicate tensions between ideal collaborative learning as presented in teaching documentation, CPD and policy (for example, Bennett, 2017; Hattie 2012), and aspects of teaching in the classroom which are interpreted as requiring teacher-led content. However, the findings may also be a result of the methodological choices of the study – lesson observations were predominantly recorded during morning lessons of English or Maths, where learning content may have required more teacher input (Chapter Ten, Section 10.3.3.). However, the disparity between teacher attitudes, wishes and classroom talk does indicate that theory and practice did not align and therefore recommendations and further research may extrapolate further themes regarding the levels of classroom talk reciprocity between pupils and teachers.

9.2.2. Positive versus Negative Talk, Social versus Learning Talk

Positive versus negative talk

Previous research focussed on the division between positive and negative talk categories (Wheldell et al., 1989; Harrop and Swinson, 2000; Apter et al., 2010). Although the distinctions between positive and negative talk definitions present limitations, with caution raised within the formulation of the research project (section 10.3.3.), the definitions of previous researchers

were adopted for this study (Wheldell et al., 1989; Harrop and Swinson, 2000), allowing for direct comparisons to be made to previous research.

During the interviews, all participants had a clear understanding and idea of the definitions between positive and negative talk, with only one participant seeking clarification regarding statements that could be defined as both (for example: "thank you so much for sharing that answer but you need to rethink that word"). The participants' overall clarity around these terms was an interesting note for the researcher, indicating that these terms were commonplace within the research school participants, perhaps wider within educational practitioners in general. Participants' clarity on the terms may be due to government and school policy adoption of terms such as positive climates (Payne, 2015; Bennett, 2017; DfE, 2018) and/or the desire to establish these types of talk in their classrooms.

Five participants explicitly expressed a strong desire to focus on positive talk in their classrooms, stating that this was important for all to create a positive classroom climate. These attitudes reflect the views of previous researchers who regard positive talk to be both fundamental and powerful (Hayes et al., 2007; Cadima et al., 2015). Although five participants were explicit in their desire to demonstrate abundant positive talk, two (additional) participants expressed that they were unable to always be consistently positive and that negative talk may also be present in their classrooms. These references may reflect the reality of the teaching profession, where personal attitudes and feelings from staff may affect the classroom environment (Baker, 2006) and therefore potentially desirable behaviours (for example, positive talk) may not always be possible. It is unlikely that teaching staff can remain consistently positive in every lesson and perhaps represent a more realistic position expressed by these participants. Poulou and Norwich (2000) found that teachers reported self-use of punishments and 'control' strategies in the classroom, despite reporting that they wished to use a plethora of positive, proactive strategies. This study may echo the thoughts and feelings of the two participants in the current study who felt that they used negative talk. Other participants may have felt that it was not appropriate to talk of negative strategies, wanting to be seen in a positive light or simply did not use (or believe that they used) negative talk strategies in their classrooms.

Classroom observational results demonstrated that there was an almost equal balance of positive versus negative teacher talk SPM (0.82 versus 0.77 respectively, pre-EC training). There was a slight increase in positive to negative SPM post-training (0.97 versus 0.72 respectively), although the increase and differences between SPM were not statistically significant (RQ1a for further detail). Although some participants expressed the desire to use predominantly positive strategies, and reflected that some negative strategies were also

present, the observational results do not present a devastating picture of classroom relationships. In previous studies, where classrooms have been seen to have predominantly negative talk, pupils demonstrated off-task behaviours and were less engaged in all areas of classroom life (Beaman et al., 2007; Leff et al., 2011, Cadima et al., 2015). However, there is a balanced number of positive to negative statements and therefore the hope would be that classrooms do not reflect pupils who are disengaged and off-task. All participants spoke fondly of their classes and the pupils that they worked with, indicating participants felt connected to their classes with secure-type relationships present.

The balance of positive to negative statements demonstrates that teachers are using both strategies in the classroom, reflecting the position presented by Poulou and Norwich (2000). The accurate reflection of a small number of participants that they use both strategies in their classroom, reflects Clunies-Ross et al.'s (2008) study that demonstrated a correlation between teachers' self-reported use and actual use of statements in the classroom. Although Clunies-Ross et al. (2008) found that classrooms were significantly more positive than previous studies and this study have concluded, the correlation between the self-reported and actual use of statements remains interesting to the researcher. The current study also demonstrates that levels of positive statements are higher than in historical studies in this area (for example, Wheldell et al., 1989; Harrop and Swinson, 2000) as well as participants' desire to use positive statements. These results perhaps support the suggestion (Apter et al, 2010) that increased focus and recommendations through educational literature have led to an increased understanding and confidence in positive strategies used in classrooms by practitioners. The desire of participants to focus on positive strategies may be attributed to this increased focus on educational research and recommendations.

During the interviews and classroom observations, direct references were made to the use of ClassDojo (Chaudhary and Don, 2011) pre- and post-EC training. ClassDojo allows points to be given by teachers for individuals displaying behaviours (academic or social) that are seen as positive. In this respect, the Dojo system employed in the school can be argued to be based on behaviourist principles as referenced by the literature (DfE, 2018; Bennett 2017). Teachers used Dojo as a positive feedback and talk strategy, relying in part on external motivation, rather than internal, extrinsic motivation (Ryan and Deci, 2000). The Dojo system appeared to feature in the participants' repertoires for creating *positive* classroom climates.

Social versus learning talk

When considering social versus academic classroom talk, half of the participants expressed that social talk was the predominant focus, nearly half considered an equal balance and one

participant felt that academic talk was the predominant focus. Similarly to positive versus negative talk, the observation results indicated a balance between social and academic talk SPM (0.73 and 0.76 respectively, pre-EC training), although a slight increase was seen in academic SPM post-EC training (Section 9.3. for further discussion). The balance of social to learning talk indicates a disparity between actual and reported practice as seen in the previous section.

A third of participants recognised that pupils require social feedback to be ready to learn. This recognition may reflect the time at which the interviews took place - interviews were at the start of the academic year and therefore participants may have felt that a focus on rules and routines was more prevalent in the set-up of the classroom structures. A focus on social talk at that time of the academic year may improve teacher-pupil relationships as a precursor to academic achievement (Osterman, 2000; Rocca, 2008). Teachers may have concluded that a social focus was particularly important to set the climate of the classroom before learning foci, ensuring that relationships formed the basis of academic discussion (Ubha and Cahill, 2014).

Previous research regarding positive and negative, social and learning statements indicates that negative social statements outweigh positive social statements. Conversely, positive learning statements outweigh negative learning statements (Wheldell et al., 1989; Harrop and Swinson, 2000, Hayes et al., 2007). Results from this study concur with these previous researchers, with negative social statements and positive learning statements being the predominant approach. However, questions are raised as to the effect of the number of negative social statements within the classroom climate. For example, if a prediction was to be made from the data of the number of social statements over the course of a school day (five hours of classroom lessons), the ratio of negative to positive social statements would be 135:84 (pre-EC training) and 126:99 (post). Therefore, the large number of negative statements may affect the classroom climate (Bergin and Bergin, 2009). However, caution must be expressed on these type of predictions. It appears that social behaviour is more likely to be addressed through negative talk, perhaps suggesting that teachers focus on corrective behaviour to create a controlled and consistent environment (Schreeve et al., 2002).

When participants were questioned regarding these categories, most felt that there was an equal balance between social positive and social negative, for example. The disparity between reported and actual behaviours reflects the position that classrooms are relying on a variety of strategies and not just positive strategies as recommended in academic and government literature (Payne, 2015; Bennett, 2017; DfE, 2018). This disparity may be due to participant demand characteristics: wishing to align with the research focus (classroom

relationships) and therefore trying to pre-empt researcher feelings by suggesting that social (relational) and positive talk is more important and prevalent than learning or negative talk.

Finally, the results may truly reflect the complexities of attempting to define talk into the categories of positive, negative, social and academic. These categories, although useful for the parameters of the research study, deny individual agency and interpretation. For example, a social positive statement ("that's really lovely sitting and showing me that you're ready") may be interpreted by the receiver as positive feedback or a negative interaction (through public attention around others). The interpretation of negative and positive statements by the receiver is predicated on their IWMs of prior classroom relationships, interactions and feedback (Bowlby, 1969). It, therefore, appears that practitioners must be relying on other talk strategies to support relationships, other than these closely defined categories (Infantino and Little, 2005).

Specificity

Specificity as a talk strategy was highlighted both in the literature review and recorded as part of the observations within social and learning talk categories. Although talk specificity was only referenced by one participant during the interviews, the classroom observations show that specificity levels were slightly higher (although not statistically significant) for all but one category - learning negative statements. The lack of participant specificity discussion is a notable finding, as previous literature on teacher talk specificity suggests that clear corrective, learning feedback can be powerful in the classroom with an effect size of up to 0.75 (Fisher et al., 2016; Hattie, 2012). Coupled with the higher level of positive learning statements in comparison to negative, it appears that teachers may not have a large enough focus on learning corrective feedback in the classroom. Learning corrective feedback is a recommended classroom element in previous educational studies and has been shown to have strong effect sizes.

However, the slightly raised levels of specificity for the other categories may have allowed pupils to feel trust, security and support from teachers, due to the increased clarity and openness of feedback. Conversely, statements that are ambiguous or lack specificity may lead to pupils' feelings of insecurity (Colley and Cooper, 2017; Bomber 2015). During the interviews, it was challenging to question specificity in great detail due to content and time constraints. The degree of specificity to support classroom relationships would benefit from further focus and attention in future research (Chapter Ten).

9.2.3. Socio-Emotional (SE) Talk

The low numbers of SE statements observed in general across the classroom observations demonstrate that, in comparison to both learning and social statements in the classroom, there are fewer occurrences - SE talk may not have enough of a focus within primary classrooms (Banerjee et al., 2014). The overarching domination of teacher talk (as previously discussed in this chapter) may mean a lack of opportunity for reciprocity and SE discussion. Moreover, the lack of SE talk may reflect practitioner tension between a focus on classroom relationships and the need for academic progress (O'Toole and Soan, 2021). Such tensions may have been particularly pertinent in the lessons in which the observations took place, which were mostly Maths or English lessons (Chapter Ten, Section 10.3.). SE may be more prevalent at other times of the day or in alternative lessons. Limited opportunities for SE talk in the classroom were mentioned as a limitation of embedding EC (RQ2: Section 9.4.).

9.2.4. Talk to Get to Know Pupils and Provide Consistency

Tenets of SE talk were formulated as inductive themes throughout the interviews, presented as talk strategies to build teacher-pupil emotional understanding: talk for pupils and teachers to get to know each other, and consistency in language approach. As these themes were inductively formulated, these were not directly observed during the classroom observations and were difficult to extrapolate post-observations (Chapter Ten, Section 10.3.2.).

During the interviews, getting to know pupils personally was considered a key talk strategy to support relationships. Participants valued knowing pupils on a pastoral and emotional level, rather than solely in learning contexts, which may be consistent with Frymier's (2007) view that schools cannot focus on academia alone - it is likely that how teachers respond to, direct and qualify talk towards pupils may be predicated on individual knowledge of pupils. For example, some teachers may have used private, specific, social and positive, feedback during the observations, as they were aware that a particular pupil responded favourably to this type of talk in a classroom environment.

Participant reflections on getting to know pupils imply agreement for the importance of individual teacher-pupil knowledge, and also support previous research that suggested that where weaker relationships existed, poor classroom behaviour increased and levels of teacher stress heightened (Garner and Waajid, 2008; Clunies-Ross et al., 2008). However, participant reflections were derived from experienced teachers (three years+ in their career), indicating that the use of teacher talk in getting to know pupils may develop over time. Getting to know pupils as a talk strategy to develop pupil-teacher relationships may develop through experience and reflection.

Finally, language consistency was presented as a talk construct to support teacher-pupil relationships. Participants felt that where classroom adults were consistent and predictable in their language and systems, relationships were stronger and learning was more effective. These viewpoints were particularly prevalent post-EC training (RQ1a). As pupils enter the classroom, consistent and predictable talk (and thus the environment) may allow pupils to feel safe and able to take risks without fear of failure or reprisal (Bergin and Bergin, 2009). McNeeley et al. (2002) argued that motivation, resilience and risk-taking were more prevalent in the classroom where secure-type attachment relationships were present and consistency in language may help to aid these types of relationships. The desire for language consistency may also reflect why some teachers demonstrated a need for positive learning feedback across the observations, and negative social feedback – ensuring that pupils understood the rules, routines and expectations of the classroom. However, these views are researcher reflexivity and therefore further studies in this area may unpick information in further detail.

9.2.5. RQ1 Summary: How is teacher talk used to facilitate pupil-teacher, secure-type relationships?

Research question one sought to address *how* teacher talk was used to support secure-type attachment relationships in primary classrooms. Previous literature highlighted some key strategies that may or may not impact pupil's IWMs of teachers as supportive, helpful, approachable and warm, thus developing tenets of secure-type relationships between pupils and teachers (Englund et al., 2004; Bowlby, 1969; Bergin and Bergin, 2009; Bomber 2015). RQ1 sought to explicate which talk strategies were used and considered more favourable in primary classrooms.

Data collected and analysed during the research found that examples of joint problem-solving (SE talk) and reciprocity of emotional talk in classrooms were low. SE strategies should be considered further alongside research that argues that these opportunities are fundamental for knowledge creation and cognitive development (Mercer and Hodgekinson, 2008; Bronfenbrenner, 2005). Although direct examples of SE practice remained low, interviews indicated that tenets of SE learning were being fostered and considered important in the classroom. Implicit forms of SE classroom talk included getting to know pupils, reciprocity and language consistency.

Participants felt that talk to get to know pupils was particularly important to support relationships in the classroom and therefore talking beyond the scope of classroom learning was imperative. In this respect, recommendations could be argued to support the tenets of SE understanding: teacher-pupil empathy, discovery and understanding (Bergin and Bergin,

2009). These results would reflect previous results and recommendations in SE talk studies, which report improved adult understanding and empathy (for example, Rose et al., 2019). Although almost all participants expressed that listening to pupils developed relationships and connections, the degree of teacher-talk dominance in the classroom did not reflect these viewpoints. More work is required to unpick this disparity between teacher attitudes and reciprocity in practice.

Participants expressed that they strived for, and wished to develop, consistent language within their classrooms. This theme appeared to develop further post-EC training (e.g. reference numbers in general to consistency and use of Zones and/or Dojo references), indicating that consistency of talk is a factor in developing and maintaining relationships. The EC training may have supported the development of understanding of the power of language consistency and thus affect the IWMs of pupils as predictable and responsive (Englund et al., 2004).

Previous research literature highlighted categories of positive, negative, social and academic classroom talk to support or weaken classroom relationships. Where frequent praise (positive) statements may allow for a predictable, safe environment, where social interactions are encouraged (Wilson et al., 2007); negative teacher talk may deny self-control, motivation and self-regulation (McCaslin and Good, 1992; Maag, 2001). Some of the results in this study replicated previous findings. For example, higher levels of social talk were deemed negative, whereas academic talk was more often positive. The consistency with previous research in this area (Schreeve, 2002) highlights that some teachers may still be reliant on negative talk (Poulou and Norwich, 2000) and less reliant on positive statements (praise). Praise has been previously argued to create more successful relationships and learning climates in primary schools (Wilson et al., 2007).

Although educational and government literature makes recommendations regarding a focus on positive talk and classroom climates, the results show a balanced picture between positive and negative statements, and social and learning feedback. These results mirror previous results in these areas, with a slightly raised number of positive statements than historical studies in this area. The inclusion of both negative and positive statements is not surprising given that teachers have emotions that also range throughout the school day – it is unlikely that all teachers can remain positive all of the time. More work could be extrapolated regarding talk specificity, particularly given the large effects that have been previously shown in corrective learning feedback to support learning. Finally, the results from the interviews indicated a slight preference towards social talk. This, coupled with the views on getting to know pupils, may reflect the time of year that the interviews and observations were undertaken - participants may have felt this was particularly important at the start of the academic year

with new classes. It would be interesting to see if learning, social, positive and negative rates were similar at other times of the academic year.

The disparity in some areas between observed behaviours and behaviour attitudes indicates that more work is needed to fully understand how talk is utilised to support teacher-pupil relationships. Training and self-reflective practice may be useful for teachers to hone teacher talk skills in classroom environments.

9.3. RQ1a: To what extent does a socio-emotional talk strategy (Emotion Coaching) influence teacher talk within a primary classroom?

Research sub-question 1a considered the extent to which EC training influenced teacher talk in the research school. The following themes were extrapolated:

- Language consistency
- Listening to pupils
- SE Talk
- Positive, negative, social, learning talk

9.3.1. Language Consistency

Although five participants expressed the view that safety, consistency and trust were valued components of classroom life during the pre-EC training interviews (RQ1), consistency of language was discussed in more detail during the post-EC interviews (N = 9), suggesting that the EC training may have influenced the value of these ideas. EC training influence was also reflected in the increase of post-EC references to classroom strategies, such as ClassDojo, in providing consistent messages and feedback on social and learning behaviours.

The increased references to language consistency may reflect an increased understanding and awareness of the impact of these strategies. The EC training may have supported understanding in this area over time, allowing practitioners to reflect on their classroom consistency of language through MEP (Gottman et al., 1997). This idea appears plausible in relation to previous literature in this area, which also found practitioners to report improved consistency and predictability in classroom language following EC training (Rose et al., 2016, Sebba et al., 2015).

Post-EC interviews not only highlighted consistency in language, but also demonstrated a consensus towards applicability across the school by all practitioners. Participants highlighted that EC had allowed teachers to approach pupils in a language-consistent way, using the

typical, scripted formula in approaching emotional dysregulation and incidents (SE Talk, Section 9.3.3.). In this respect, EC could be argued to have influenced the school's Microsystem, adapting approaches to support relationships (Bronfenbrenner, 1995) through EC talk. Consistent approaches in language from all adults towards pupils are likely to support pupils' IWMs of adults as consistent, predictable and supportive in response (Wilson et al., 2007). Thus supporting tenets of developing secure-type attachment relationships between pupils and teachers.

Consistency in a whole-school approach has been attempted in previous EC studies which have concluded similar results on teacher confidence in talk strategies (Sebba, et al. 2015, Rose et al., 2017; Gus et al., 2015). These studies predicted that consistency across a school environment may support relationships and therefore improve cognitive, social and emotional development (i.e. within the Microsystem, Bronfenbrenner, 1995). However, issues regarding practitioner consistency in using EC were discussed as a part of the challenges to EC introduction (Section 9.4.2.).

Language consistency as a theme was derived from inductive processes during the interview data analysis, therefore this theme was not directly observed as a process during the classroom observations. Language consistency would be challenging to observe without a complex repeated measures design over time, which was outside of the scope of this research at this time. However, language consistency pre- and post-EC training would provide an interesting direction for further research (Chapter Ten; Section 10.4.).

9.3.2. Listening to Pupils

During the post-EC interviews, seven out of ten participants considered listening to what pupils were trying to say in everyday interactions and figuratively through emotions as important (SE Talk, Section 9.3.3.). Post-EC training saw a shift for three participants towards 'really hearing' what pupils were saying and not needing to 'jump in' to resolve an incident as quickly. Reflections from the EC training initiated this viewpoint for participants. These reflections show a delicate balance between using talk to support pupils in SE understanding and allowing pupils to problem-solve, resolve and process emotions with minimal adult talk intervention (Gilbert et al., 2021). Participant references to listening indicate that the participants were self-aware of the need to show active listening to pupils. These results mirrored Havighurst et al. (2010) who indicated that EC-trained teachers report increased empathy, understanding and patience towards listening to pupils. Moreover, the participants may have increased their understanding that listening as a strategy may aid pupil representations (IWMs) of others as responsive, caring and taking time to listen (Baumeister and Leary, 1995)

However, the classroom observations determined that classroom talk was still dominated by teacher talk. There were no significant changes between teacher talk percentage pre- and post-EC training and therefore a disparity between the self-reported impact of EC and teacher talk in practice was noted. The disparity also highlights the importance of the Mixed Methods study in this respect to compare and contrast results from methodological approaches (Creswell and Plano Clark, 2011). It might be that, although participants recognised the value of listening to pupils, more work is required concerning embedding practice within the classroom, demonstrating the theory/practice divide.

9.3.3. SE Talk

During the interviews, SE talk was only referenced by two participants pre-EC training, with eight post-EC training. The increase in SE talk references suggests that a change in participant focus may have occurred during the period between the two phases of research. The number of references post EC training may represent an increased understanding of the need for SE talk in educational settings (Banerjee et al., 2014), and increased knowledge of MEP or requirements of SE talk in the classroom post training. This may be a direct result of MEP reflection (Gottman et al., 1997) as part of the EC training or general reflection and focus during the Covid-19 pandemic on mental health and emotional discussion.

Seven participants referenced Zones of Regulation (Kuypers, 2011) as a structure for discussing emotions during the Explanatory phase of the research, which may indicate a shift in attitude regarding the importance, clarity and frequency of emotional talk in the classroom between the phases of the research, or may reflect additional practice and embedding of Zones of Regulation into the school culture. The classroom observations (as discussed in RQ1) showed limited numbers of SE in practice. However, there were slight (but not statistically significant) increases in labelling negative emotions post-EC training and a small reduction in dismissing emotions. These results, coupled with participants' discussions during the interviews, suggests that participants may have felt more comfortable in supporting, being aware of or discussing negative emotions (such as anger or sadness).

Discussing and supporting negative or challenging emotions was presented as a key theme when discussing the benefits of EC. Six participants discussed the use of EC tenets when supporting incidents with pupils. In this respect, there appeared to be a self-reported increase in SE talk. Incident-based, increased SE talk, mirrors that of previous EC research such as Gus et al. (2015), who found teachers reported greater self-regulation and self-confidence in supporting stressful situations with pupils.

Although three participants reported an increase in SE talk for checking in with pupils, the rest referenced SE talk in relation to emotional incidents and dysregulation. However, varying attitudes may also reflect an inconsistent understanding of the EC approach by those having undertaken the training: some trainees may choose to embed EC as a generic approach to classroom talk; some may believe EC to be used in emotional incidents only as per previous research (Rose, et al., 2019). More work is needed to establish the frequency and types of SE talk that are used. Due to the lack of observations during the study, it is considered that further work in this area may explicate SE talk further.

9.3.4. Positive, negative, social, learning talk

The degree of positive to negative SPM changed between pre- (0.82 versus 0.77 SPM) and post-EC training (0.97 versus 0.72 SPM), with positive statements increasing slightly in relation to negative statements. Although the Wilcoxon Signed Rank tests were not statistically significant, the results demonstrated a small shift in practice. This practice shift, coupled with participants' desire to use positive language in the classroom (RQ1), demonstrates that EC may have allowed participants to reflect on their classroom practices.

Where previous intervention studies have looked to increase the number of positive statements through training and intervention (Chalk and Bizo 2004; Spilt et al., 2016), there has shown to be a significant increase through practitioner understanding and reflection. Although EC is not a direct training intervention to increase positive talk, the training content reflects practitioner positivity, collaboration and reciprocity, suggesting that EC training may have increased the degree of positivity in the classroom. However, an increase in positive statements may also be attributed to an increased focus on mental health throughout the Covid-19 pandemic and the desirability for teachers to ensure that pupils feel supported and cared for. The rates may also reflect participants' awareness of the research aims during the second phase of observations, having discussed positive talk during the pre-EC training phase.

Learning statements increased post-EC training. Although the change between pre- and post-EC training was not statistically significant, the slight raise may indicate that teachers were choosing to focus on the academic content of lessons post-EC. It could be predicted that teachers established strategies such as classroom rules and routines, consistency and getting to know pupils quicker post-EC training, allowing for a greater focus on learning talk rather than social talk. The classroom climate may have been able to be established quicker or teacher confidence in establishing positive climates may have increased. If classroom structures already provided consistency, support and predictability, pupils may have already felt comfortable to take risks, be more independent in their learning and thus be more

responsive and receptive to learning feedback, rather than a focus on social feedback (Hattie, 2012).

9.3.5. RQ1a Summary: To what extent does a socio-emotional talk strategy (Emotion Coaching) influence teacher talk within a primary classroom?

RQ1a attempted to establish if the EC training influenced teacher talk, post-training. Some shifts in practice were identified during the semi-structured interviews: Consistency, listening and SE talk (particularly around negative emotions) were all referenced. These changes may allow pupils to feel that teachers are listening to, responding to, and supportive of pupils, leading to developing IWMs (Englund et al., 2004) of adults as supportive and responsive and thus improving relationships between teachers and pupils. These changes in attitudes may have resulted directly from the EC training, where MEP was a strong focus – the ability to reflect on one's own emotions and resulting interactions with pupils.

Although the results from the classrooms were not statistically significant, small changes were seen regarding learning statements and positive statements following the training. These changes would reflect previous research in this field that suggested supportive, specific, positive and consistent approaches were seen following EC training (Gus et al., 2017; Rose et al., 2019).

9.4. RQ2: What are the benefits and challenges of introducing Emotion Coaching as a whole school, socio-emotional talk strategy to support teacher-pupil relationships?

Question two addressed the benefits and challenges of attempting to embed a new, SE strategy to support relationships, as a whole school approach. Data on the benefits and challenges were collated as part of the semi-structured interviews. All participants (N = 10) discussed both the benefits and challenges of the EC training, yielding a total of 147 references throughout the post-EC training phase of the research. Although a larger number of these references were attributed to the benefits of EC (N = 83), this does not necessarily mean that the benefits outweighed the challenges. The researcher considered that an overall judgement on the EC training would not be helpful to explicate but merely to discuss the benefits and challenges in greater depth. It is of note that the majority of benefits and challenges were matched, i.e. a proposed benefit was also considered a challenge. Three themes will be presented throughout this section:

- Practitioner SE Understanding: Meta-Emotional Philosophy (MEP) and Empathy
- Whole school approach and consistency
- Training and EC implementation

It is of note here that within the Explanatory phase of the research, the semi-structured interviews were conducted approximately ten months after the EC training. This period is in direct contrast to previous EC studies, which have looked at the impact of training up to three months after the training (Gus et al. 2017; Rose et al., 2016). Although the global pandemic meant that the semi-structured interviews could not be conducted earlier than the ten-month time gap, there were benefits to this approach. Firstly, the larger time span meant that concepts of EC may have been specifically remembered or forgotten by practitioners. The time gap allowed practitioners to determine whether the EC approach was successful or not in their classrooms, and to critique the approach in relation to other classroom strategies.

Secondly, the enlarged time span meant that a whole-school impact could be explored further concerning the Microsystem (Bronfenbrenner, 2005) and the PPCT model of viewing Microsystem interactions (Bronfenbrenner and Evans, 2000). Practitioners (person) would have longer to practice the talk types (proximal processes) in a variety of situations (context), or embed differing approaches across the school if it was felt to be more applicable (over time). In this respect, the semi-structured interviews would allow for a more critical and balanced consideration of EC within the theoretical framework. The time span was particularly important in getting a true sense of EC impact, benefits and challenges within the study and potentially increased the validity of results.

9.4.1. Practitioner SE Understanding: Meta-Emotional Philosophy (MEP) and Empathy

For seven participants, the EC training developed an understanding of MEP (Gottman et al., 1997) – a key component of EC. MEP refers to the ability to reflect on one's own emotions and the associated impact on the environment and people around them. Participants reported better awareness of their feelings, reactions and approaches to classroom talk and how this may impact their relationships with pupils. MEP as a benefit is consistent with previous EC research where participants reported they were more calm and able to approach situations with pupils with increased SE understanding (Rose et al., 2016; Sebba et al., 2015).

Approaching situations with increased MEP from adults may have benefitted participants by allowing for a more calm and considerate approach in the classroom. This approach may affect the classroom climate, as previous research has suggested that where increased adult MEP exists, positive classroom climates increase based on mutual respect and strong

teacher-pupil relationships (Cuicci et al., 2015). EC training that improves teacher MEP could support emotional classroom climates and thus teacher-pupil relationships (Gottman, 1997; Clearly and Katz, 2008; Blandon et al., 2010).

Five participants stated their degree of empathy towards pupils had increased, reflecting previous research that demonstrated that EC training increased empathy and positivity towards other pupils (Havighurst et al., 2010; Rose et al., 2016). For eight participants, the EC training benefitted them through increased empathy and the ability to share emotional experiences with colleagues, as well as listen and validate others. In this respect, the EC training may have had macro-relational implications across the school (Bariola et al., 2011). EC may have helped to support the socio-emotional functioning of teachers and pupils in the classroom, previously felt by researchers to be under-represented in schools (Banerjee et al., 2014; Murray-Harvey, 2010). For some participants, the EC training may have allowed them to reflect, empathise and support emotional incidents (Section 9.4.2.), rather than invalidate or dismiss emotions with the potential to lead to maladaptation (Zimmer-Gembeck et al., 2017). In this respect, the EC training may have allowed for a more supportive, empathetic teacher-pupil relationship, rooted in a secure-type attachment (Westby, 2020).

EC training may have also supported an emotional, Social Learning aspect in classrooms (Bandura, 1997). Two participants reflected on the need to talk to pupils about their own emotions when they are having a 'bad day'. As children look to adults within their Microsystem for guidance and support (Bronfenbrenner, 2005), teachers may provide models of how to express, regulate, react and accept emotions in self and others (Clearly and Katz, 2008). EC training may have benefitted social learning aspects through practitioner MEP modelling.

However, despite the self-reported benefits of MEP, there remained caution regarding the consistency of MEP reflection by some practitioners across the school (N=4). MEP acknowledgement and acceptance may be more challenging for some practitioners (Gottman and DeClaire, 1997). Concerns were raised that not all colleagues were able to reflect on their behaviours and emotions as considered appropriate and useful in the EC training. For some participants, the notion of self-reflection on emotions was considered a particular challenge, and at times uncomfortable.

The ability to reflect upon and acknowledge one's own emotions could be predicted to be related to practitioners' IWMs (Bowlby, 1969) as teachers bring to the classroom their IWMs of emotional regulation and relationships. Adult IWMs may or may not be related to adults' attachment styles with others and indicates that further understanding and reflection on their attachment styles may be beneficial. The interaction between teachers' and pupils' IWMs and

attachment styles is discussed in further detail in Chapter Ten (Section 10.3.1.) as a theoretical limitation.

The reflections on increased MEP and empathy may indicate a shift in viewpoint for several reasons. MEP may have increased as part of the EC training, thus leading to participants reflecting on their relationships and approach towards pupils. However, the reflection on pupilteacher relationships may be partly attributed to the changes in society during the Covid-19 pandemic: with a focus on mental health through the pandemic, there appears a greater shift in societal need of looking after each other and collective responsibility (Grigoryan and Krylov, 2020). Reflections during the post-EC training interviews may indicate a societal shift in viewing the importance of relationships, particularly in schools where policies and procedures have had to shift extensively to keep each other safe (DfE, 2020). It may be that EC training (or the pandemic) had increased an SE focus in general, rather than specifically one strategy over another. As Banerjee et al., (2014) acknowledged, not enough attention is paid to SE learning and therefore EC training may have improved focus in this area in general. Questions are therefore raised as to whether EC is the best approach to SE talk, or whether increased SE talk, in general, is beneficial to increase attention towards SE learning and regulation (Baneriee et al., 2014; Prewett et al., 2019). There appears to be further resolution required for the school in strategic focus of SEL.

9.4.2. Whole-School Approach and Consistency of Talk across Staff

Talk consistency was predicted to be a benefit of EC (N = 6) and was presented as such in the post-EC training interviews (N = 8). Not only do participant attitudes reflect previous research regarding these EC benefits (Gus et al., 2015, 2017) but these views also support an integrated, universal approach to language (Jones and Bouffard, 2012) and a whole school, systemic approach to relationships (Bronfenbrenner, 2015). A more consistent approach in language, where pupils can predict responses from adults, may lead to heightened feelings of security and trust from pupils towards adults. Increased teacher-pupil interaction consistency may allow pupils to seek support more regularly (Ubha and Cahill, 2014) and become more resilient (Howes and Richie, 1999), leading to strengthened teacher-pupil relationships.

Language consistency and a focus on well-being may be due to possible personal reflections in response to the training, the pandemic or their increased experience in their educational role. EC may have played a role in developing the focus on whole-school, well-being and collaboration. Regardless of the cause, participant attitudes to well-being may highlight the importance of a systemic approach, where all stakeholders are consistent and supportive towards pupils (Bronfenbrenner, 2005; Aubrey and Riley, 2018).

However, despite many participants expressing beneficial attitudes towards talk consistency and a greater focus on well-being, some participants remained cautious of EC. The caution was specifically with reference to adults 'jumping in' to label and discuss emotions, (negative emotions), when it was not always useful, appropriate or relevant (N = 4). In this respect, participant attitudes may have been consistent with literature that highlighted an interventional approach to emotional talk – the categorization of expressions of emotions and potential therapeutic gaze on language (Furedi, 2014; Ecclestone and Brunila, 2015). For five participants, it may have been that EC was regarded as a resolution strategy for emotional and behavioural incidents, rather than a school philosophy or ethos of emotions for the school (Gus et al., 2015). In this respect, EC may have been seen as an interventional strategy, reactive rather than proactive and targeted for specific outcomes (Ecclestone, 2017; Humphrey et al., 2013). The results reflect Rose et al. (2019), suggesting further research is needed to address issues in EC distribution and philosophical approach, as well as SE relational strategies as a whole.

9.4.3. Implementation Time and Training Follow-up

Two key challenges of EC were presented during the post-EC interviews. Firstly, EC implementation time was noted by nine participants as a difficulty. With time pressures in a busy environment, the EC script was not always followed, was not always relevant and could not be implemented with all pupils. Although six participants felt that EC was able to be implemented, they acknowledged that it was challenging in a complex school environment. Furthermore, four participants referred to their job role, citing that EC was harder to implement as they were rarely supporting pupils on the playground during social time. In this respect, participants referenced a strategy to use 'in the moment' (Section 9.4.2.) when incidents of emotional dysregulation occurred during social time. It may also be that EC may be more useful for particular members of staff (e.g. mentors or playtime support staff) or at particular times of the day, rather than a whole-school focus.

Participant references to implementation time were the largest presented challenge to the whole school's EC implementation. These challenges may reflect tensions in the primary education teaching profession as a whole: tensions between maintaining an academic focus versus pastoral care for pupils (O'Toole and Soan, 2021). Moreover, time challenges of implementing SE were presented alongside challenges to determine which strategy to focus on at which point. For example, the head teacher stated that staff had not yet reconciled the differing approaches used in the school regarding SE talk (for example, Zones of Regulation, restorative practices and EC). However, this may reflect her desire to improve SE talk in general – placing value on SE talk - rather than specifically EC as a strategy, reflecting Prewett

et al's (2019) position that SE talk impacts pupils' perceptions of relationships and schooling in general.

These tensions highlight the challenges in general for teaching practitioners: the reconciliation and execution of several different relational strategies from multiple perspectives such as Behaviourist, SE and Humanist approaches (Prewett et al., 2019; Parker et al., 2016). It could be suggested that *getting to know* pupils (RQ1, Section 9.2.4.) allows teachers to draw on appropriate talk strategies from their repertoire to address the individual pupils' needs. One size fits all is not applicable and therefore a delicate balance of practitioner skills is required.

The difficulties of ongoing training needs and review for whole school strategies as outlined by Murray-Harvey (2010) were also highlighted in this research as a challenge. Nine participants felt that training follow-up would be useful, and this would allow for additional support between colleagues. These challenges were coupled with the challenges of having time to implement and review strategies as a whole across the school. The revision of techniques as an iterative process would mean that practitioners were able to review and reflect on their strengths and next steps. The head teacher identified that this would be a useful strategy for all staff, with other participants echoing these thoughts. Moreover, consideration was given by seven practitioners who felt that a joined-up approach to EC through observations of practice, discussion and role-playing, would be more beneficial than the training thus far. Regularly revisiting content and collaborative training would support educational research that suggests that these types of training are most effective for teachers (Desimone and Garet, 2015).

9.4.4. RQ2 Summary: What are the benefits and challenges of introducing Emotion Coaching as a whole school, socio-emotional talk strategy to support teacher-pupil relationships?

As previously noted within EC research, practicalities for whole school buy-in, training support and implementation time and review were noted in this study (Murray-Harvey, 2010). Although the increased attention on emotions and well-being was seen as a benefit to the training, inconsistencies were also highlighted between staff members concerning their understanding of MEP, self-regulation or the training as a whole. Variations in understanding, particularly adult MEP, may reflect the need to understand further the impact of practitioners' attachment styles and Microsystems on their views and abilities to undertake training in attachment theory and MEP. However, similarly to previous research (Havighurst et al., 2010; Gus et al., 2015), this study utilized self-reported benefits and challenges to address RQ2. These measures raise questions about the reliability and accuracy of self-reported EC benefits.

9.5. Chapter Nine: Summary

Chapter Nine has drawn together the Mixed Method datasets in order to address the research questions. For each RQ, the results from the observations and semi-structured interviews have been combined, presented alongside relevance and comparison to pre-existing literature in the areas of teacher-pupil relationships, teacher talk and EC as a SE talk strategy.

Educational research in schools plays a crucial role in shaping and understanding effective teaching strategies. However, dissonance between findings in Mixed Methods research from different data sets poses challenges to the process of developing evidence-based interventions and informing teacher practice (Creswell and Plano Clark, 2018). This research highlighted some contradictory results between the data collected through the classroom observations and the data collected in the semi-structured interviews. For example, participants in the semi-structured interviews reported that they had increased their own listening and empathetic skills in response to the training, allowing pupils to talk more in lessons. However, the large proportion of teacher talk remained approximately similar preand post-EC training (classroom observations). These type of contradictions highlight the complexities and intricacies of conducting research within dynamic classroom environments and the inherent challenges of studying human behaviour.

Dissonance between the two data sets may have arisen due to lack of opportunity to show case the various talk strategies used in the classroom observations; social desirability of the participants (King and Bruner, 2000) or participants wanting to align to the researcher's aims and objectives during the semi-structured interviews. Additional unknown confounding variables may have also existed within the wider context of the school at the time of research. Teacher talk is unlikely to be consistent across all lessons and days - teachers understandably draw on a variety of strategies to suit the lesson, pupil and context, reflecting the reality and complexities of the teaching profession (Baker, 2006).

The variance in the data from the observations and the interviews has therefore highlighted two key issues for teachers' training and development in supporting teacher-pupil relationships in classrooms through effective talk strategies. Firstly, it is evident that a one-size-fits-all approach to relationships and talk will not suffice. Participants referenced a number of different positive talk strategies to support relationships, depending on classroom dynamics; the classroom observations showed that teachers were using a balance of positive and negative teacher talk, specificity and lower number of SE talk than purported in the interviews – a variety of strategies were in use.

It would therefore seem sensible to suggest that teachers must be equipped with a diverse toolkit of talk strategies to cater to the dynamic needs of the classroom, pupils and school environment as a whole. Teacher-pupil relationship training should emphasise the importance of adapting talk interventions and strategies, fostering reflective practices that enables educators to critically assess the applicability of strategies in their own classroom. Although EC was considered to have benefits both personally (for example, their own emotional understanding) and as a whole school (for example, consistency in language), these benefits do not mean that other strategies to support relationships and positive feedback will be superseded (for example, the Class Dojo system, Chaudhary and Don, 2011). A multifaceted approach is therefore necessary, with teachers being encouraged to draw upon their professional expertise, and adapt and experiment with interventions and strategies to suit the needs of the classroom.

Secondly, the dissonance highlights the importance of open and collaborative profession dialogue, where school environments have a culture of continuous improvement. Teachers should feel empowered to review and reflect on their own practice iteratively and in real time with colleagues or a mentor, perhaps through lesson observations (audio or video; Section 10.2.3.). One-off training sessions are unlikely to foster ongoing change, but revisiting, reviewing and adapting strategies alongside colleagues are likely to be of more benefit. These iterative processes may help to reduce the gap between reported strategies and actual classroom practice (as demonstrated in some areas in this research). Ongoing critical reflection relies on school cultures that are supportive and collaborative, fostering feelings of secure-type relationships within and between colleagues (Section 10.3.1.)

Chapter Ten provides a summary of the research, discussing the research contributions, limitations and ideas for future research.

Chapter Ten: Research Reflections and Conclusions

10.1. Introduction

This study has considered how talk is used to support teacher-pupil relationships. EC was introduced into the school as one such relational talk strategy. The results and discussion in Chapters Seven, Eight and Nine provide unique insights into the complexities of classroom talk, school structures and the contributions and practicalities of these through the EC introduction.

Chapter Ten provides an overview of the research reflection, including the contributions to theoretical and educational practice, the research limitations and ideas for further research. Finally, the chapter provides a conclusion to the research.

10.2. Research Contributions

The contributions of this research may impact the research community in which this study took place, and for primary, mainstream state schools as a whole within a UK-based educational system. The study also adds to the growing literature within the EC community. Three main areas of contribution are considered:

- School relational contributions
- EC contributions
- Reflective practice implications

10.2.1. School Relational Contributions

Teacher-pupil relationships are considered to be transient and may be manipulated through talk. All participants believed that they had the power to influence relationships in their classrooms and expressed a desire to create optimal learning environments through successful relationships. School relationships, therefore, are not believed to be static. The lack of permanence holds hope for all teacher-pupil relationships that can be improved through specific techniques. The potential for improvement is particularly relevant for practitioners and school leaders who have identified weaker classroom relationships in their settings, and therefore hope to employ talk-based strategies to support pupil engagement, motivation, resilience and feelings of security. Previous research in this area attempts to extrapolate specific relational techniques from one or two theoretical perspectives. However, this study highlights several talk strategies and how they may work in collaboration in classrooms.

This study has particularly highlighted (through the interview data) the desire for practitioners to strengthen relationships in their classrooms. However, the two data streams demonstrated, at times, dissonant strategies used to build such relationships through talk. In the interviews, the reported strategies of predominantly positive language and listening to pupils contrasted with the balance of positive to negative statements understood in the classroom observations. Variance between the data sets has highlighted the importance of using a Mixed Methods design, with alternative methods, in order to extrapolate nuanced attitudes versus classroom practice. It has been shown that teachers use a variety of talk strategies and theoretical approaches, balancing use, content, frequency and applicability over the course of the school day. By investing in the relational strategy literature (including this research), practitioners could be armed with a variety of techniques to implement in classrooms and it is hoped that they will have the confidence and knowledge to review, reflect and adapt relational strategies depending on the classroom context.

It is also sensible to suggest that wider systemic structures, such as whole school behavioural and/or relational strategies and policies should be iteratively reviewed alongside educational literature. Through this auditing process, discussion, reflection and implementation will be both more appropriate and useful for school relational structures. Behaviour and relationships policies can start to adopt the awareness and power of understanding, reflecting on and discussing emotions as part of schools' repertoires of support. The researcher would therefore urge teachers at any stage of their career to invest time in reading literature on pupil-teacher relationships and employ criticality towards their school structures and their own classroom practice.

Implications for the use of SE strategies in school have also been considered through this research, previously shown to have varied results and/or be small in number (Kennedy and Kennedy, 2004; Prewett et al., 2019). SE functioning may have implications for school-based relationships, and therefore this thesis helps support the small but growing SE school research. SE functioning for both teachers and pupils may be particularly relevant both in the UK and globally, given the increased focus on well-being, emotional support and care through the Covid-19 pandemic. Although low numbers of SE talk were observed in the classroom observations, the participant attitudes in this study highlight the potential importance of investing time in SE talk strategies to support teacher-pupil relationships. Although it cannot be expected that one relational strategy will work for all practitioners, this research can function as a guide and note for reflection within a growing number of research studies.

10.2.2. Emotion Coaching Contributions

Throughout the researchers' doctoral journey, research into school-based EC has grown (for example, Gilbert et al., 2021). This particular study adds contributions to the EC literature in three ways. Firstly, this research has extrapolated the complexities of introducing EC as a school-wide strategy, aiming to highlight the benefits and challenges of EC. Tension was noted between EC as an incident-based strategy for emotional dysregulation, and whether EC is an overarching emotional-based approach for all pupils. This research addressed and explicated teacher attitudes towards this tension.

Secondly, prior to this research, there was a distinct lack of EC observations of practice. This study, therefore, addressed the gaps in this area, conducting lesson observations to demonstrate and analyse the type, frequency and typicality of EC. The development of an observational schedule combined various types of talk from different perspectives - including positive, negative, SE and specificity. Although the observation schedule was rudimentary, it did provide a starting point to allow nuanced language patterns to be observed and analysed to discover classroom talk structures.

Finally, several school-based EC studies have utilized self-reporting over a relatively short period (approximately three months) between EC training sessions and accumulating feedback. However, this study employed a longitudinal approach to collating feedback, with a ten-month period between EC training events and the post-EC training interviews. This time span allowed for more extensive participant reflections on the benefits and challenges of EC, as well as longer for EC structures to be embedded, forgotten or dismissed. This research may add to the body of research that is attempting to establish the longer-term and ongoing effects of EC in schools (for example, Gus et al., 2015; 2017)

10.2.3. Reflective Practice Contributions

The methods employed in this research may support practitioner reflection and further training opportunities for teacher talk strategies. Reflections using semi-structured interviews may allow teachers to gain a greater understanding of their interpersonal behaviours and to develop relational power (Lewin et al., 2005). Teacher reflection and discussions of practice may be particularly useful for educational practitioners at the start of their careers as they develop their classroom skills, as well as throughout their teaching career.

The use of audio recordings in this study without the researcher's presence meant that additional adults in the room did not influence either teacher behaviours or pupil behaviours. Audio recordings were useful as they allowed a naturalistic environment to be observed. Observations of practice using audio recordings (or video recordings) would allow educational

practitioners to replay elements from their lessons, either independently or with a coach, mentor or leader in the school. This method of lesson observation would provide instant feedback and reflective practice on their classroom climate, pupil engagement and talk strategies being employed. Developments in practice can therefore be extrapolated from employing this method. Moreover, the observational schedule may also provide practitioners with a way to monitor types of talk in the classroom, allowing teachers to reflect and modify their use of talk types.

Finally, the questions employed within the semi-structured interviews could be used for leaders to gain an understanding of their employees' attitudes and ethos towards structures in the school, through utilisation during staff meetings, INSET or questionnaire implementation. Useful, strategic feedback could be gathered on school systems, such as CPD training session feedback, and school relationships for the use of policy development or auditing purposes.

10.3. Limitations of the Study

This section discusses some of the limitations of the study. Through reflection, it is hoped that further areas for study and clarity will be exposed and research reflexivity demonstrated. The limitations are addressed in three areas:

- Theoretical limitations
- Research design limitations
- Data collection methods limitations

10.3.1. Theoretical Limitations

The theoretical foundation of the study was attachment theory (Bowlby, 1969) situated alongside the Microsystem of the Bio-Ecological Systems Theory (Bronfenbrenner, 1995, 2005). The study aimed to strive for secure-type, teacher-pupil relationships, demonstrated as optimal for pupil school success. A potential limitation of attachment theory is that the school environment surrounding the relationships may not be acknowledged and the relationship may only be seen in isolation (Section 2.5.). To address this limitation, the Microsystem (Bronfenbrenner, 1995, 2005) was applied to the research model so that the school environment was taken into account. Context was believed to be particularly important, given the complex nature of a classroom and school. Although the tenets of Pragmatism allow for choosing "methods and procedures that work best for answering research questions" (Johnson and Onwuegbuzie, 2004: 17), this combination of concepts is not without limitation.

Firstly, Bronfenbrenner's full systemic theory (1995; 2005) provides a careful balance of interacting systems within child development, including, for example, societal rules and laws (Macrosystem) and developments over time (Chronosystem) - see Appendix A for further detail. Other areas of the systemic model were not utilised and therefore other influences that are potentially pertinent to the child and teacher relationship were not extrapolated nor addressed in the study. However, to address all of the concepts within the Bio-Ecological Systems Theory would mean the complexity of the research study would be too great. Selective use of the model was therefore chosen for time and research scope economy. Secondly, the Microsystem's true definition includes environments and stakeholders closest to the child, including the interactions within. However, this study focussed on the interactions and environment in the school context only. Parental influences were not included due to ethical considerations. However, this would provide an interesting angle for future research into talk to support relationships.

Finally, the research model did not account for teachers' Microsystems or attachment styles. The research model included the pupil Microsystem but did not include the Microsystem of the participants (teachers) – these are undoubtedly complex and involve theoretically different interactions between system parts. A more appropriate model of the interaction between pupils and teachers would reflect a teacher's Microsystem also – presented in Figure 10. This omission is also true of teacher attachment styles, which may or may have not developed as secure throughout their development and within their environment. Teacher attachment styles may impact classroom environments also (Section 2.4.) and vice versa.

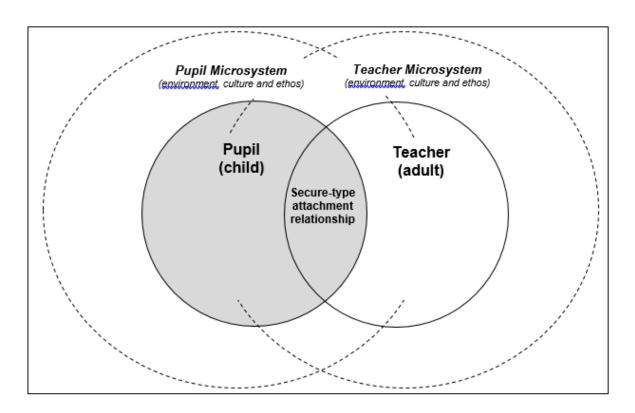


Figure 10: A proposed representation of the interaction between pupil and teacher attachment and Microsystems

10.3.2. Research Design Limitations

Contradictory results are presented as a potential challenge to Mixed Methods research (Creswell and Plano Clark, 2018) and this was demonstrated within this study. At times, the disparity between teacher attitudes (from the semi-structured interviews) and actual practice in the classroom (from the observations) created challenges. For example, teachers' desire for reciprocity of talk and listening to pupils was not demonstrated in the observations, where approximately 85% of classroom talk was dominated by teachers. Although the study highlighted these contradictions, the results do provide further scope for future research to address and reduce these gaps.

The research approach gave equal weight to qualitative and quantitative data in the Mixed Methods Convergent design. However, the complexities of data collection throughout the Covid-19 pandemic meant that the number of observations collected in both phases of the research was not as predicted or hoped. The aim was to balance the number of observations and interviews in both phases of the research – i.e. at least 12 for each – this was not achieved. The qualitative data, therefore, held more weight due to the number of interviews, time taken and rigour. The quality of the observations was weaker due to the low number and times of day that they were collected (Section 10.3.3.).

Finally, results were collated and interpreted simultaneously (as per the Convergent design). Where some themes were extrapolated throughout the interviews and observations (inductive processes), it meant that some themes were unable to be tested, explored and investigated in further detail using the other method in the design. For example, the semi-structured interviews highlighted the theme of teacher *getting to know* pupils. However, this theme was unable to be observed during the observations as *getting to know* had not been identified until after the interview analysis.

10.3.3. Data Collection Method Limitations

Purposive sampling was used to find the research school: a mainstream, primary, average-sized school. Although the generalisability of results was not presumed, careful consideration was given in choosing the school to represent an average school primary of pupil and staff numbers, KS1/KS2 exam results and demographics. Sampling of the school was therefore not random and generalisability was not achievable.

Participants were recruited using convenience sampling and therefore the sample represented those that were happy to take part, highlighting challenges in the sample: the head teacher initiated contact with the researcher to express interest in taking part in the study. This indicated a favourable bias towards the EC approach. Other participants identified this bias from the outset and understood that the purpose of the study was to evaluate EC as a talk strategy. Therefore, issues of social desirability (King and Bruner, 2000), the halo effect (Thomas, 2009) and demand characteristics from members of staff were considered potential threats to validity. Participants may have wished to be seen in a favourable light, to appease and agree with their head teacher on the desire to embed EC as a school strategy.

To address sample limitations bias, careful consideration was given to recruitment and method processes. It was stressed that the researcher held a neutral view of EC as a strategy, that interviews were confidential and that honesty in response was sought throughout the participant overviews of the study (Appendix D), interview introductions and content review. Through triangulating the semi-structured interviews with classroom observations, issues of self-reporting and therefore the potential of self-enhancement (Fiske and Taylor, 1991) and social desirability effects were minimized. RQ2 also attempted to balance these concerns of social desirability, requiring participants to consider the limitations of EC and therefore opportunities to state undesirable consequences were welcomed.

The sample size was small for both methods employed (N = 12 pre-EC training; N = 10 post-EC training) and therefore created challenges in analysis and drawing conclusions, particularly in the statistical analysis from the quantitative results. Non-parametric tests were used in the

analysis, but these are considered less powerful than their parametric counterparts (Hinton et al., 2014).

It is also important to critique the method of EC dissemination in the research school. The EC training from EmotionCoachingUK was delivered to the head teacher, who then became an EC champion, disseminating the training to other members of staff in the school. This method of training presents challenges towards the fidelity and quality of the training - the head teacher highlighted during the interview process that some elements of the training were given more time and attention than others. Although training was tailored to the school staff, it does raise questions about training bias and selective content.

The limitations of using observations and semi-structured interviews were also considered. The observational schedule reflected previous research on classroom observations of talk, for example, Wheldell et al. (1989) and Harrop and Swinson (2000). However, acknowledgement is given to the complexities of categorizing talk than the relatively simple schedule utilized in this study. The coding represented the 'best fit' to the schedule, but at times it was challenging to unpick talk categories when talk statements may have been interpreted in multiple ways. Moreover, the period between the two phases of research meant that consistency in category application was less likely to be standardised. Multiple coding cycles attempted to address this limitation at both stages of the research. Moreover, inter-rater reliability was not utilized in this study – this method may have reduced categorization inconsistencies.

An acknowledgement must also be given to the complexities of conducting semi-structured interviews effectively. These require a high level of interpersonal skill (Kvale, 2006) and therefore flaws were highlighted concerning the novice interviewer. Throughout all of the interviews, the researcher was concerned they did not confirm or disagree with participant viewpoints, which may have impacted on, or biased, further content. In practice, remaining neutral in response was challenging to do whilst maintaining a comfortable environment, maintaining eye contact and paraphrasing responses to ensure clarity. Reflexivity during the coding and analysis phases of research attempted to address concerns of bias or confirmatory responses. However, interviewer skill was demonstrated to be far more complex than predicted (Potter and Hepburn, 2005).

Time constraints were also a limitation of the interviews. At times, the interviews felt rushed due to lesson cover challenges throughout the school. It was also clear that some of the participants were distracted by school factors (such as the next lesson content or an upcoming playground duty) and therefore the environment for the interviews was not as relaxed and comfortable as hoped. Other limitations include trying to pack in too many questions into the timeframe, taking too long for particular stages of the interviews (for example the introduction)

and allowing participants to take too long in one section of the interview, thus reducing time for other questions. These time limitations impacted the depth and quality of responses in some areas. Finally, the head teacher was able to offer increased interview sessions and thus provided more in-depth answers and longer transcripts – this is represented with a slightly larger number of quotes from P1 within the qualitative results chapter (Chapter Eight).

10.4. Areas for Further Research

Given the potential of teacher-talk to support classroom relationships, further research regarding a variety of talk strategies, as well as EC, would be useful to practitioners. Four areas of further research are presented in section 10.4:

- Classroom observational research
- Sample variation research
- Further research using the theoretical framework
- EC implementation research

10.4.1. Classroom Observational Research

A clear strength of this study was the implementation of a classroom observational schedule to understand teacher talk and EC in practice. Observations of EC have been thus far lacking in number, where previous studies have relied on self-reported use (Havighurst et al., 2010; Gus et al., 2015). However, the classroom observations gave further understanding into the proportions of talk types that were used in practice. Given the small number of observations that took place in this study due to the Covid-19 pandemic, further work utilising the observation schedule on a larger scale would provide an interesting focus. A wider use of the schedule could include multiple uses within one setting (repeated measures) or across a number of different settings to establish a wider data set of teacher-talk use.

The potential to develop and refine the schedule on a wider scale has implications twofold. Firstly, researchers may be able to use the observational tool to gain a clearer understanding of classroom practice, relationships and teacher talk. Secondly, the schedule has the potential to provide practitioners (both classroom based and school leaders) with a tangible observation schedule to be used for CPD in classroom relationships.

10.4.2. Sample Variation Research

The use of a Mixed Methods Convergent design felt appropriate in this study, allowing for equal weight to be given to the quantitative (classroom observations) and qualitative data (semi-structured interviews). However, given the limitations of the unequal sample sizes between the data sets and the low number of classroom observations, further work utilizing a Mixed Methods approach would be useful in the area of EC practice. A wider data set would allow for greater confidence in conclusions, noting patterns and consistencies across practitioners. Moreover, further work in multiple settings would also allow for patterns to be ascertained with regard to different teacher-talk types.

The findings from the interviews and the observations concluded some disparity between practitioner attitudes and practice, particularly with regard to the amount of teacher talk versus listening, as well as the degree of teacher talk categories. For example, participants reported an extensive use of positive talk in their classrooms during the interviews, although the observations demonstrated a near-equal balance of positive to negative talk. Repeated studies in these areas would allow for disparity to be further explored and reconciled.

10.3.3. Further Research using the Theoretical Framework

In order to consider teacher-pupil attachments in context, the Microsystem (Bronfenbrenner, 1995) was adopted alongside attachment theory as the theoretical framework - the Microsystem provides a context of interacting systems, people and the environment. However, due to research scope, the behaviours and attitudes of teachers only were investigated. Further research may look at the other aspects within the system, such as parental views on teacher-pupil relationships or pupil voice. For example, it would be useful to understand how pupils view teacher talk strategies and which types are considered the most effective in developing feelings of security, safety and warmth in classrooms. Although previous pupil voice studies have utilized middle school or secondary school pupils (for example Ellis, 2004; Apter et al., 2000), there is little research utilizing primary pupil voices in developing teacher talk strategies and EC.

Moreover, the research presumed that secure-type, teacher-pupil relationships would allow for optimal outcomes. No attention was paid to teacher attachments styles and whether these impacted teacher talk strategies, EC implementation or attitudes towards teacher-pupils relationships. Teacher attachment styles would provide a further, important area of research.

10.3.4. EC Implementation Research

Given the results regarding EC implementation in the focus school, further studies utilizing a Mixed Methods approach would be useful in order to understand uses of EC. Where some participants felt that EC represented a school ethos and universal philosophy, the majority of participants felt that EC was most useful within critical moments, where pupils were emotionally dysregulated. In this respect, there was variation in participant use and approach versus the intention of EC within schools (Gus et al., 2015). Further work is needed to understand practitioners' viewpoints as to whether EC is most useful as a universal approach, or whether targeted work is more useful for pupils. For example, EC might be used as a targeted (intervention) focus for specific pupils, mirroring the targeted approach that was used with parents in the origins of EC (Gottman et al., 1996).

Finally, given the work on EC within families and the developing work of EC in schools, it is considered important to understand whether EC has impact in other areas of society. If EC is useful in moments of emotional dysregulation, practitioners who interact regularly with dysregulated populations may benefit from EC approaches. Further research of EC in practice with public sector workers such as police, social care and medical staff would be fruitful.

10.5. Research Summary and Conclusion

Teacher-pupil relationships are posited to be fundamental within a school setting (Kennedy and Kennedy, 2004; Prewett et al., 2019). A successful teacher-pupil relationship is defined as supportive and affectionate, with open communication (Baker, 2013; White 2013) and has been linked to increased motivation, school success and supportive mental health practices (Howes and Richie, 1999; Osterman, 2000, McNeely et al., 2002; Prior and Glaser, 2006). Conversely, where weaker teacher-pupil relationships are evident, noted effects include reduced pupil engagement, motivation and learning outcomes (Garner and Waajid, 2008), as well as increased teacher stress and burnout (Clunies-Ross et al., 2008; Hastings and Bham, 2003). In this respect, it is considered imperative for teachers and educational researchers to understand how teachers can foster and support teacher-pupil relationships (Bergin and Bergin, 2003).

In this thesis, the ways in which teacher talk is used to support and foster secure-type, teacherpupil relationships was examined, prior to and following the introduction of EC (an SE talk strategy). Teacher talk strategies were observed and discussed with participants throughout the study. The study sought to understand the process of EC introduction throughout the research school: the potential impact on classroom talk practice and the practicalities of introducing EC into the school setting.

The theoretical framework for the research was provided (Chapter 2), using attachment theory as a basis for the research (Bowlby, 1969). Bronfenbrenner's Microsystem (1995) was synthesised alongside attachment theory to ensure that teacher-pupil relationships were considered in context within the school environment, acknowledging the systemic influences on classroom practices and relationships.

The consideration and reflections of varying teacher-talk strategies to support teacher-pupil relationships were identified throughout the literature review (Chapters Three and Four). Proposed talk strategies varied in effectiveness and the ability to be synthesised within classroom structures, providing a conceptual gap for the research aims. If a clearer understanding of talk strategies could be sought through this research, practitioners may be supported more effectively to develop classroom relationships. The literature review, including the identification of EC as a SE talk strategy, informed the methodological choices of the research.

Chapters Five and Six discussed the methodological considerations of the research, choosing a Mixed Methods, Convergent design as the most appropriate approach within a Pragmatic philosophical position. Semi-structured interviews and classroom observations as the instruments of data collection were chosen. Semi-structured interviews were considered imperative in understanding teachers' attitudes and viewpoints towards classroom relationships, having been used within previous EC research (for example, Gus et al., 2015). The study had the additional benefit of employing classroom observations in order to further explore teacher talk, providing insights that would not otherwise have been possible. The observation schedule was particularly useful, given the plethora of talk strategies identified from different psychological approaches (for example, behaviourist or SE approaches). Observations of EC practice were also considered novel and a valuable contribution to EC research.

The quantitative (classroom observation) and qualitative (semi-structured interview) results were presented in Chapters Seven and Eight respectively. These results were combined and compared to understand convergence or divergence of results in order to answer the research questions in turn (Chapter Nine). A discussion of the limitations, contributions and direction for further research have been presented in this chapter.

As anticipated, there was a variety of talk strategies discussed and observed in the study when addressing how talk was used by practitioners (RQ1). Participants were definitive in their desire to use positive talk strategies, with specificity of language in order to provide pupils with clear feedback. Some participants were honest in their evaluation of negative talk strategies, suggesting that these were used in part, depending on the pressures of the participant at the time or personal implications. However, classroom observations provided some disparity between quantitative and qualitative data, with higher proportions of negative talk utilized for pupil social behaviours than positive talk. Conversely, positive talk was more frequently used for learning behaviours (rather than negative talk). These results mirrored that of previous teacher talk studies (Harrop and Swinson, 2000; Wheldell et al., 1989). However, this study provided an additional layer to these previous classroom talk results regarding the use of SE talk and specificity of teacher talk. During the interviews, the former was considered an important construct to support pupils, with varying strategies used within the SE realm. These included Zones of Regulation (Kuypers, 2011), restorative justice and validation techniques. However, SE in practice was low in number during the observations. Although results from this research study should be treated with caution given the sample sizes and focus in one school only, the observations and discussions raise important questions to the types of talk that are best utilized by practitioners and that a variety of talk strategies are used and considered important in combination to support relationships.

The introduction of EC into the school provided the potential for an additional, tangible teacher talk strategy to support relationships. However, varying degrees of EC impact on teacher talk were noted in the study (RQ1a). Examples of SE talk were low in the observations in both phases of the research. However, SE talk was considered by the participants to be, on the whole, a useful talk construct (information obtained through the semi-structured interviews). Additionally, implicit SE constructs were noted during the interviews as strategies to support relationships in the classroom. These included the ability to balance teacher and pupil talk (through listening and sharing ideas); teacher talk to get to know more about a pupil personally (their likes, dislikes, hobbies and family); and consistency in language (when dealing with emotional dysregulation). Consistency in adult language was considered a benefit of the training, which also presents as helping in supporting teacher-pupil relationships. If teachers approach pupil emotional dysregulation with consistent language, pupils may view teachers (via pupils' IWMs) as supportive, responsive and helpful. However, due to the societal increase in mental health and wellbeing focus during the Covid-19 pandemic (reference), it was difficult to ascertain whether participants' favourable learning and reflection towards SE strategies were a result of the EC introduction or of a wider societal shift. Additional research is required to understand the true impact of EC over a longer time period in a variety of mainstream educational settings.

Finally, the practicalities of EC introduction across the whole school were considered (RQ2). The main benefits of the SE talk strategy mirrored the main challenges: Practitioner understanding of MEP, empathy and staff consistency. Where the EC implementation had allowed for further reflection on participants' own emotional understanding and use of language in addressing pupil incidents, some participants reflected that these were also challenges. Participants highlighted that colleagues found these constructs more challenging to reflect and act upon, citing that further training and top-up sessions would allow for more embedded practice.

This doctoral thesis has noted that a variety of talk strategies are used in primary classrooms to support pupils (and thus teacher-pupil relationships). These are often drawn from various theoretical positions and previous training and experiences of the practitioners. In this study, SE talk strategies to support pupils were seen as both useful and desired by practitioners, supporting growing evidence that SE dynamics and strategies are imperative in classrooms (for example, Friedman-Krauss et al., 2014; Prewett et al., 2019). However, further work is needed in this area to reconcile some of the challenges presented in disseminating a whole-school, SE approach (Buckholdt et al., 2016). Furthermore, a variation between self-reported and actual practice in talk strategies was determined, indicating that further work is also needed to reconcile the theory/practice divide.

All participants concluded that relationships were imperative, indicating ways in which talk could be used to support relationships in their classrooms. From the results of the study, it is clear that understanding *how* teacher-pupil relationships can be developed and maintained using talk is important:

"To feel securely connected to others is a basic human need... Ideally, this need is met at school as well as at home" (Bergin and Bergin, 2009: 158)

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APPENDICES

<u>Appendix A:</u> Bronfenbrenner's (2005) Bio-Ecological Systems Theory: Visual Representation with Explanation of each Layer of the System

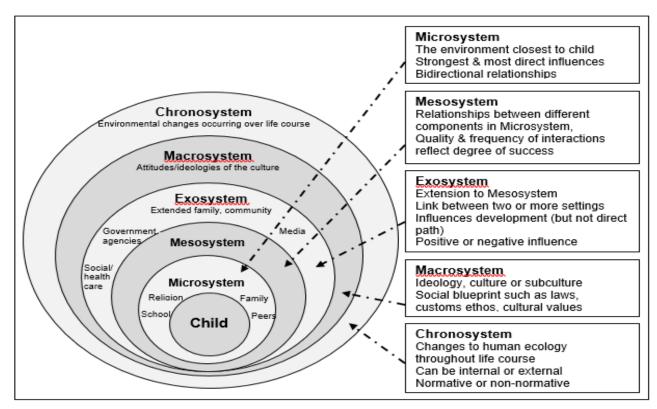


Figure A1: Diagrammatical representation of Bronfenbrenner's Bio-Ecological Systems Theory (2005)

Appendix B: Emotion Coaching Training Material





Emotion Coaching: Training aims

- · Raise awareness of the physiological basis of Emotion Coaching (EC)
- Raise awareness of the theoretical basis for EC
- Develop understanding of different emotional styles relevant to EC
- Understand the techniques involved in EC

Why do Emotion Coaching?

Emotion Coaching is an Evidence-based strategy based upon the work of John Gottman

Emotion Coached children are better able to:

- control their impulses
 delay gratification
 self soothe when upset
- · pay attention



- As a result emotion colacine dichildi

 Active more academically in school

 Are more popular

 Have fewer behavioural problems

 Have fewer infectious illnesses

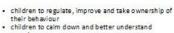
 Are more emotionally stable

 Are more resilient

(Gottman, et al 1996)

Why do Emotion Coaching?

Research at in the UK has echoed findings from parental work in educational and community settings. The findings demonstrate that Emotion Coaching helps:



- emotions
- practitioners to be more sensitive to children's need create more consistent responses to children's
- behaviour
 practitioners to feel more 'in control' during
- incidents

 promotes positive relationships between adults & children through promoting trust

 academic attainment accelerates

5

Physical and mental health and wellbeing is an 'ongoing balancing act' between 2 systems

Stress Regulation System

- · Ability to regulate stress
- · Ability to regulate social
- Ability to regulate positive and toxic stress



Social Engagement System

- Ability to interact with others
- · Ability to understand others
- · Ability to make sense of social relationships
- · Ability to enjoy social relationships

From birth children are learning to recognise and regulate their emotions, particularly negative or difficult ones, and to interact with others

6

Why do we need Emotion Coaching?











Surprise

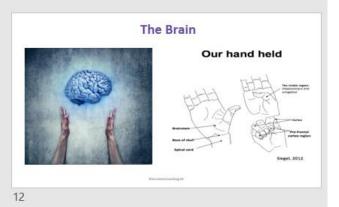
We ALL have EMOTIONS and they are HARDWIRED for SURVIVAL





9





'Safe and Social' versus 'Stress and Survival' Porges Poly Vagal Theory (2011)

- We constantly look at others for cues about whether we are safe or not
- Safety cues emerge from reciprocal interactions motivating us to develop social relationships to enable effective co-regulation and down-regulation
- In safe environments the more primitive SNS (controlling fight-flight and immobilization) is inhibited and the Social Engagement System (SES) is activated (PNS, ventral vagal, myelinated). This is the dominant and preferred system - it is bidirectional and needs to be stimulated with safety cues
- Neuroception Constant sensory information (largely unconscious) from environment and viscera used to evaluate risk, combining biological movements, tonal quality of voice, facial expression, movements of head and hands, touch, internal bodily states. It supports the brain to distinguish safe from dangerous contexts.



13



Polyvagal Theory: How the brain tries to keeps us safe and alive (Porges, 2011) NEWEST SYSTEM FOR SURVIVAL OLDEST SYSTEM FOR SURVIVAL

14



How is Vagal Tone Activated?

- · Initially via soothing, compassion and physical comfort (e.g. cuddling, rhythmic movement etc.)
- · By experiencing and also practising empathy 'coregulation'
- We learn to self- soothe and self- regulate from our ongoing relationships with parents and significant
- · Attachment responses are social-learning processes
- · Vagal tone is important in development and maintenance of social relationships (temperament also plays a role).





Attachment and Relationships

essential for mental health is that an infant and young child should experience a warm. intimate, and continuous relationship with his mother (or permanent mother substitute) in which both find satisfaction and enjoyment."

(Bowlby, 1953)



Attachment is about first relationships and how these affect a child's development and also their relationships in adulthood

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Attachment and Attunement

- · Attachment is made possible by attunement
- · Attunement refers to the ways in which internal emotional and bodily states are the focus of attention and 'seen' by the adult within the child-caregiver relationship (Siegel,2012)
- · Attunement promotes a sense of felt security in the child and enables the development of 'internal working models'. These guide thoughts, feelings and behaviour, teaching the child appropriate strategies to use to cope when distressed.

ies of day to day Internal Working Mode

69QkqY The still face experiment (1.49min)

19

Safe Haven Secure Base Co- regulation Relative dependence Interdependence Independence

20

Secure, nurturing environments and stimulating, engaging experiences support the development of neuronal networks, helping to build brains

The 4 S's of Attachment (Singel, 2013)

Sense of Being Soothed



22

Meta-emotion philosophy

- The beliefs we hold about emotions and their expression
- · A person's meta-emotion philosophy is often the result of early experiences with motions in their family of origin as well as further experiences throughout life.
- A person's meta-emotion philosophy will influence how they react and respond to

emotions in others Stereotyping - What messages did you receive about emotions from your parents/ carers/ grandparents/ siblings/ extended family/ friends?



What about practitioner's self-regulation?

The more brain pathways are used, the more established they become, the

· Our minds are continually shaped by emotions, experiences, relationships,

easier they are to use and the more they become the chosen routes

opportunities, attitudes, values and beliefs, knowledge and genes . There is an instinctive priority of attachment over the brain's exploratory system: Feeling Safe and Secure is more important than Learning

"Put on the oxygen mask first before putting it on the child "

Self-regulation before co-regulation

- How do you feel about feelings?
- . How do you react to others' emotions?
- How does children's behaviour make
- How do you self-regulate?

23

21



https://www.youtube.com/watch?v=QT6FdhKriB8

Inside Out - Joy and Sadness Identify the emotion coach

- What do you notice about the two different responses?

What this means in practice

Step 1 Recognising the child's feelings and empathising with them Step 2 Validating the feelings and labelling them Step 3

Setting limits on behaviour (if needed) Step 4

Problem-solve with the child



25

Emotion Coaching involves:

- Teaching children about the world of emotion in the moment'
- Giving children strategies to deal with ups and down
- Accepting negative emotions as
- moments of negative our as **opportunities for**
- Building trusting and respectful relationships with children



Emotion Coaching is a relational approach which develops internal regulation





Emotion Coaching

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Styles of dealing with emotions

- · Emotion Coaching
- · Emotion Dismissing
- · Emotion Disapproving
- · Laissez-faire/Permissive

https://www.youtube.com/watch?v=foOHvyv9CVI



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Disapproving Style

- Disapproves of negative emotions as a sign of weakness, lack of unconstructive
- · Lacks empathy, noticeably critical and intolerant
- Tries to get rid of negative emotions via discipline, reprimand, punishment
- Focuses on the behaviour rather than the emotions generating
- More likely to view negative emotional displays as a form of manipulation, lack of obedience, sign of bad character
- Often motivated by need to control and regain power and/or to 'toughen up' child

Dismissing Style

- Despite good intentions (wants to make child feel better) is uncomfortable, fearful, anxious, hurt, annoyed or overwhelmed with negative emotions
- Wants negative emotions to go away quickly
- · Considers paying attention to such emotions will make them worse, prolong
- Tries to stop negative emotions by reducing/ minimising/ making light of their importance/significance
 - e.g. it's no big deal, don't worry about it, be a big girl, that's life, you'll be fine
- Often motivated by need to rescue and make things better, fix the problem e.g. 'have a biscuit', 'l'Il buy a new one', 'you need to do this'
- Focuses on getting rid of the emotion with logic or distraction rather than understanding the feelings

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Effects of dismissing and disapproving styles of dealing with emotions upon children

- · Child learns 'what I am feeling is not right, my assessment of the problem is wrong, I must not feel this way
- Child does not learn to trust own feelings affecting decisionmaking
- · Not given opportunities to experience emotions and deal with
- them effectively so grow up unprepared for life's challenges Not given opportunities to self-regulate or problem-solve
- · Can lead to suppression of natural emotions, less or lack of selfregulation, reliance on distraction to get rid of emotion
- Generates more negative feelings resentment, guilt, shame, anger

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Emotion Coaching Styles

Emotion Coaching Disapproving High empathy Low empathy High guidance High guidance

Laissez Faire High empathy

Low guidance

Dismissive Low empathy

Low guidance

· Show Playground examples

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Building a Power Base

"Proposing solutions before empathising is like trying to build the frame of a house before you lay a firm foundation" (Gottman)

- · Emotional first aid is needed first
- Emotion Coaching builds a power base that is an emotional bond this creates a safe haven, a place of trust, a place of respect, a place of acceptance, a sense of self etc.
- · This in turn leads to children and young people giving back respect, acceptance of boundaries, etc.

CONNECT BEFORE RE-DIRECT (Siegel, 2013) RAPPORT BEFORE REASON (Riley, ,2009)

Helping emotional behavioural regulation

- By 'containing' sharing, supporting and 'carrying' the child's emotional state by tuning-in/empathising –

 1 understand how you feel, you're not alone'
- Helping the child to cope with and come to terms with boundaries 'We can't always get what we want'
- Working with the child to resolve the problem until they can self-resolve and self-repair 'We can sort this out'
- This ensures affect (emotional) develops in tune with cognitive (thinking) i.e. cognitive and affective meaning of experiences

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Instead of denying the feeling ...



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Empathise, validate, label...



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Step 1: Recognise and empathise

- Recognise all emotions as being natural and normal and not always a matter of choice
- Recognise behaviour as communication (Relational vs Behavioural Model)
- Look for physical and verbal signs of the emotion being felt
- Take-on the child's perspective (Mentalising/ Mindmindedness)
- Affirm and empathise, allowing to calm down

Exploring empathy

Feel empathic but words don't reflect what you what to convey or they feel: example of the angry boys 'don't say those words' when parent said 'don't worry dad still loves you'

Confusing empathy with feeling that you are agreeing with poor behaviour – example of disruption in classroom

*Empathy vs sympathy (Brene Brown clip)

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Step 2: Validate and Label

- Validate the emotion and acknowledge its existence
- · Use words to reflect back child's emotion
- · Help child/ young person to label emotion
- · Provide a narrative/translation for the emotional experience (creating cognitive links)

Step 3: Setting limits (If needed)

- Safety first
- · State the boundary limits of acceptable behaviour
- · Make it clear certain behaviours cannot be accepted
- But retain the child's self-dignity (Crucial for responsive behaviour and well-being)

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Step 4: Problem-solving with the child

When the child is calm and in a relaxed, rational state:

- Explore the feelings that give rise to the behavior/problem/incident
- Scaffold alternative ideas and actions that could lead to more appropriate and productive outcomes
- Empower the child to believe s/he can overcome difficulties and manage feelings/behaviour

inotionCoachings

Activity: What's going on here?

'M was playing at break time and when trying to dodge another child tripped over her untied laces. She hurt her hand and scuffed her new trainers. When she heard the others laughing she jumped up and started pushing them, calling them names and shouting. I went straight over and said 'Hey M, what do you think you're doing? You may feel a bit silly having tripped yourself up, but you can't go throwing your weight around in my playground. To stop it happening again, make sure you do your laces up properly and look where you're going- Ok?! M did not look or talk to me but went off to the toilet block whilst the others returned to playing and calm returned.

I reported to her class teacher that I was pleased that I had used EC to stop M fighting at break time'.

What suggests to you that the adult is trying to use EC What suggests to you this is not EC? What steps do you think are missing? What could have been said / done instead?

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41

Examples and script writing activity

Activity: Applying Emotion Coaching in your practice

Reflect and Share with your group:

What aspects of EC do you think you already apply in your practice?

Cap you see how EC might be applied in your.

Can you see how EC might be applied in your practice?

Can you think of an incident that has occurred when

EC could have been used?
•Can you see any possible challenges?

..

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Training – Part 2

Emotion Coaching

What can you remember about the human brain?



What this means in practice

STEP:

Recognising, empathising, so othing to calm STEP 2

Validating the feelings and labelling STEP 3 (If needed)

Setting limits on behaviour STEP 4

Problem-solving with the child/young person

Building a Power Base
"Proposing solutions before empathising is like trying to build the frame of a
house before you lay a firm foundation" (Gottman)

- · Emotional first aid is needed first
- Emotion Coaching builds a power base that is an emotional bond this
 creates a safe haven, a place of trust, a place of respect, a place of
 acceptance, a sense of self etc.
- This in turn leads to children and young people giving back respect,
 acceptance of boundaries, etc.

CONNECT BEFORE RE-DIRECT (Siegel, 2013) RAPPORT BEFORE REASON (Riley, ,2009)

https://www.youtube.com/watch?v=4EDhdAHrO

EmotionCoachingU

Helping emotional behavioural regulation

- By 'containing' sharing, supporting and 'carrying' the child's emotional state by tuning-in/empathising – 1 understand how you feel, you're not alone'
- Helping the child to cope with and come to terms with boundaries 'We con't always get what we want'
- Working with the child to resolve the problem until they can self-resolve and self-repair – 'We can sort this out'
- This ensures affect (emotional) develops in tune with cognitive (thinking) –
 i.e. cognitive and affective meaning of experiences

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Co-regulation

- 1. 'I understand how you feel, you're not
- 2. 'This is what is happening, this is what you're feeling'
- 3. 'We can't always get what we want'
- 4. 'We can sort this out'



Things we can do to co-regulate a child has 'flipped their lid'

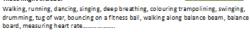
The lowest part of the brain needs to be regulated first:

Way to do this is through rhythm: Patterned, repetitive rhythmic activities or somatosensory activities:

Fight impulse:

pushing, deep touch pressure activities Flight impulse:

running, jumping, proprioreceptive activities These might include:



(Step 1 & 2 of Emotion Coaching - recognizing a child's emotion, empathizing with them, labelling and validating the emotion)

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Things we can do to co-regulate a child who has 'flipped their lid'

Grounding and calming strategies

Grounding helps keep someone in the present. It works by focussing outward on the external world. You can think of it as distraction, centering, a safe place or looking outward.

Strategies include:

Counting breaths in and out, watching clouds, counting backwards from 20 $\,$

Counting how many steps they can walk with a beanbag on their

Placing a cool d oth to their face
Playing 54321 game

Let child know they are safe and secure (think about the 45s of attachment)
"I can see you and I'm going to stay near you to make sure you stay safe".

Appendix C: Ethics Approval Form from the University Research Ethics Committee



Dr Nicoleta Gaciu Director of Studies School of Education Faculty of Humanities and Social Sciences Oxford Brookes University

11th November 2019

Dear Dr Gaciu.

UREC Registration No: 191304

An evaluative investigation into the relationship between Emotion Coaching training and teachers' verbal feedback to pupils

Thank you for your email of 11th November 2019 outlining your response to the points raised in my previous conditional approval letter about the PhD study of your research student, Katharine Dew, and attaching the revised documents. I am pleased to inform you that, on this basis, UREC is happy to grant full approval for this study. However, all external facing documentation should be thoroughly proof-read for spelling and grammatical errors prior to release, as there were several noticeable errors in the papers supplied.

The UREC approval period for the data collection phase of the study is two years from the date of this letter, so until 11th November 2021. If you need the approval to be extended please do contact me nearer the time of expiry.

Should the recruitment, methodology or data storage change from your original plans, or should any study participants experience adverse physical, psychological, social, legal or economic effects from the research, please inform me with full details as soon as possible.

Yours sincerely

Dr Sarah Quinton

Chair of the University Research Ethics Committee

cc Dr Carol Brown, Supervisory Team Katharine Dew, Research Student Dr James Percival, Research Ethics Officer Jill Organ, Research Degrees Team

Appendix D: Information Sheets

Appendix D1: Information Sheet for Gatekeeper/Head teacher



Head Teacher Information Sheet

Researcher: Kate Dew

Contact details: <u>15097140@brookes.ac.uk</u>

An investigation into Emotion Coaching and Teacher Talk in the Primary Classroom

Your school and teaching staff are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully

What is the purpose of the study?

This study involves evaluating and understanding how and if Emotion Coaching* influences primary classroom practice, particularly teacher talk: the way in which teaching staff verbally respond to pupils' academic and social behaviour. By using classroom observations and interviews with teachers, it is hoped that a deeper understanding of teacher talk in primary classrooms will be understood, as well as the potential effects of Emotion Coaching training on the classroom community.

The study will aim to run over the course of the Autumn term (September – December 2019)

* Emotion Coaching is an organization that delivers training as part of continual professional development (CPD). It is not a recruitment agency, nor will they benefit directly from any results of the research.

The researcher is independent of the Emotion Coaching UK network, not affiliated to or positively promoting the philosophy

Why has my school been invited to participate?

You have been invited to participate in this study as a member of your staff has signed up for the Emotion Coaching training in Oxfordshire, delivered by Dr. Licette Gus from EmotionCoachingUK.

Emotion Coaching is based on the principle that nurturing and supportive relationships provide the foundations for positive outcomes and emotional development in children and young people.

Emotion Coaching UK has been set up to promote Emotion Coaching as a way of supporting and sustaining emotional and behavioural wellbeing. Emotion Coaching UK provides training to those working with children and young people.

Do we have to take part?

It is up to you to decide whether or not the school takes part in this research study. If you do decide to take part you will be given this information sheet along with a privacy notice that will explain how data will be collected and used, and be asked to give your consent via email or letter. Teachers involved in the study will be asked to give their consent and the parents and pupils in classes that are used for observation purposes will also be asked to give their consent.

If you decide to take part you are still free to withdraw at any time up until the point of analysis and without giving a reason.

What will happen if we take part?

If you choose to take part, there will be two stages to the research: Stage 1(Pre-training):

- ➤ This will involve collecting 3x20 minute audio snapshots of classroom lessons of the teachers who have signed up for Emotion Coaching training (Maths or Literacy). This is at a time convenient to the school. There will be no judgements made on the lessons and these will not be shared with any other party, except the researcher. Verbal responses by teachers towards pupils will be recorded and transcribed.
- A semi-structured interview (lasting approximately 30 minutes) with the teacher, at a time convenient to all. This will be audio recorded.

Stage 2 (Post- training):

- > 3x20 minutes audio snapshots of classroom lessons, as outlined above
- > A semi-structured interview, as outlined above

What are the possible disadvantages and risks of taking part?

There are no disadvantages to taking part in this study, except the time the teachers give for participating in the interviews.

What are the possible benefits of taking part?

Taking part in this study will add to the body of growing research around Emotion Coaching, as well as attachment research in schools. It will help others to understand primary classroom practice in teacher talk and provide avenues for future studies in this area.

Will what we say in this study be kept confidential?

All information collected from the observations and the interviews will remain strictly confidential (subject to safeguarding and legal limitations) by the researcher. If there are safeguarding concerns, these will be discussed with the designated member of staff in your school and/or the Oxfordshire Safeguarding Children's Board (OSCB).

Any defining information given during either stage of the research will be either omitted or given pseudonym information so that your school, your staff or pupils are not identifiable.

Data collected will be kept secure at all times by the researcher. Data files will be encrypted and electronic devices will be password protected so that any information collected cannot be accessed by anyone other than the researcher.

Data generated in the course of the research will be kept securely in electronic form for a period of ten years after the completion of the research project. Brookes University owns all data collected by the researcher in the study.

What should we do if we want to take part?

If you decide to take part in this study you will be asked to sign a head teacher consent form. Your teacher/s will also be asked to sign for consent.

The parents of any pupils in classes will also be asked to sign for consent as the snapshot audio recordings will be taken.

What will happen to the results of the research study?

The results of the study will be used in a thesis for a Doctorate of Education (EdD). It may be that the results may be used from here in presentations or publications for further reference. A summary of the findings will be offered to each participant/school on completion.

Who is organising and funding the research?

I am conducting this research as a student of Oxford Brookes University, through the School of Education at the Faculty of Humanities and Social Sciences

Who has reviewed the study?

This study has been approved by the University Research Ethics Committee, Oxford Brookes University.

Contact for Further Information

For further information regarding the study, please contact me at 15097140@brookes.ac.uk Or my Director of Studies at Ngaciu@brookes.ac.uk For more information on Emotion Coaching, please visit www.emotioncoachinguk.com For Emotion Coaching UK's Code of Conduct Declaration, please visit https://docs.wixstatic.com/ugd/623336_a10c47e0047e4a37855259f91547a354.pdf

If you have any concerns about the way in which the study has been conducted, please contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk.

Thank you for your time in reading this information

Appendix D2: Information Sheet for Participants



Teacher Information Sheet

Researcher: Kate Dew

Contact details: <u>15097140@brookes.ac.uk</u>

An investigation into Emotion Coaching and Teacher Talk in the Primary Classroom

You are being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully

What is the purpose of the study?

This study involves evaluating and understanding how and if Emotion Coaching* impacts on primary classroom practice, particularly teacher talk: the way in which teaching staff verbally respond to pupils' academic and social behaviour. By using classroom observations and interviews with teachers, it is hoped that a deeper understanding of teacher talk in primary classrooms will be understood, as well as the potential effects of Emotion Coaching training on the classroom community.

The study will aim to run over the course of the Autumn term (September – December 2019)

The researcher is independent of the Emotion Coaching UK network, not affiliated to or positively promoting the philosophy

Why have I been invited to participate?

You have been invited to participate in this study as you have signed up for the Emotion Coaching training in Oxfordshire, delivered by Licette Gus from EmotionCoachingUK.

Do I have to take part?

It is up to you to decide whether or not to take part in this research study. If you do decide to take part you will be given this information sheet along with a privacy notice that will explain how your data will be collected and used, and be asked to give your consent. If you decide to take part you are still free to withdraw at any time up until the point of data analysis by the researcher and without giving a reason.

Your decision to participate will not have any impact on your current or future employment, or any impact on your training with EmotionCoachingUK or associated companies.

What will happen to me if I take part?

If you choose to take part, there will be two stages to the research: Stage 1(Pre-training):

- This will involve collecting 3x20 minute audio snapshots of classroom lessons (Maths or Literacy) at a time convenient to you. There will be no judgements made on your lessons and these will not be shared with any other party, except the researcher. Your discussions and responses towards pupils will be recorded and transcribed.
- A semi-structured interview (lasting approximately 30 minutes) at a time convenient to you. This will be audio recorded.

Stage 2 (Post-training):

^{*} Emotion Coaching is an organization that delivers training as part of continual professional development (CPD). It is not a recruitment agency, nor will they benefit directly from any results of the research.

- > 3x20 minutes audio snapshots of classroom lessons, as outlined above
- > A semi-structured interview, as outlined above

What are the possible disadvantages and risks of taking part?

There are no disadvantages to taking part in this study, only your time!

What are the possible benefits of taking part?

Taking part in this study will add to the body of growing research around Emotion Coaching, as well as attachment research in schools. It will help others to understand primary classroom practice in teacher talk and provide avenues for future studies in this area.

Will what I say in this study be kept confidential?

All information collected from the observations and the interviews will remain strictly confidential (subject to safeguarding and legal limitations). If there are safeguarding concerns, these will be discussed with the designated member of staff in your school and/or the Oxfordshire Safeguarding Children's Board (OSCB).

Any defining information given during either stage of the research will be either omitted or given pseudonym information so that you, your school or pupils are not identifiable.

You will have the opportunity to review any transcribes from the lesson snapshots or interviews prior to inclusion in the study so that you have the opportunity to ensure anonymity.

Data collected will be kept secure at all times. Data files will be encrypted and electronic devices will be password protected so that any information collected cannot be accessed by anyone other than the researcher.

Data generated in the course of the research will be kept securely in electronic form for a period of ten years after the completion of the research project. Brookes University owns all data collected by the researcher in the study.

What should I do if I want to take part?

If you decide to take part in this study you will be asked to sign a participant consent form. Your head teacher (or equivalent member of staff) will also be asked to sign for consent.

The parents of any pupils in your class will also be asked to sign for consent as the snapshot audio recordings will be taken.

What will happen to the results of the research study?

The results of the study will be used in a thesis for a Doctorate of Education (EdD). It may be that the results may be used from here in presentations or publications for further reference. A summary of the findings will be offered to each participant on completion.

Who is organising and funding the research?

I am conducting this research as a student of Oxford Brookes University, through the School of Education at the Faculty of Humanities and Social Sciences

Who has reviewed the study?

This study has been approved by the University Research Ethics Committee, Oxford Brookes University.

Contact for Further Information

For further information, please contact me at 15097140@brookes.ac.uk

Or my Director of Studies at Ngaciu@brookes.ac.uk
For more information on Emotion Coaching, please visit www.emotioncoachinguk.com
For Emotion Coaching UK's Code of Conduct Declaration, please visit https://docs.wixstatic.com/ugd/623336_a10c47e0047e4a37855259f91547a354.pdf

If you have any concerns about the way in which the study has been conducted, please contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk.

Thank you for your time in reading this information



An investigation into Emotion Coaching and Teacher Talk in the Primary Classroom

Dear Parents/Carer.

Your child is being invited to take part in a research study. Before you decide whether or not to take part, it is important for you to understand why the research is being done and what it will involve. Please take time to read the following information carefully

What is the purpose of the study?

This study involves evaluating and understanding how and if a training programme for teachers called Emotion Coaching* impacts on classroom practice, particularly teacher talk: the way in which teaching staff verbally respond to pupils' academic and social behaviour.

* Emotion Coaching is an organization that delivers training as part of continual professional development (CPD). It is not a recruitment agency, nor will they benefit directly from any results of the research.

The researcher is independent of the Emotion Coaching UK network, not affiliated to or positively promoting the philosophy

Why have I been invited to participate?

Your child has been invited to participate in this study because their teacher has signed up to the Emotion Coaching training (delivered by EmotionCoachingUK: www.emotioncoachinguk.com)

Emotion Coaching is based on the principle that nurturing and supportive relationships provide the foundations for positive outcomes and emotional development in children and young people.

Emotion Coaching UK has been set up to promote Emotion Coaching as a way of supporting and sustaining emotional and behavioural wellbeing. Emotion Coaching UK provides training to those working with children and young people.

Does my child have to take part?

It is up to you whether or not your child takes part. If you decide your child can take part, you are still free to withdraw consent at any time, without giving a reason. Your decision for your child to participate will not have any impact on your child's educational opportunities, attainment or progress.

What will happen to my child he/she takes part?

Observations classroom lessons where your child will be (Maths or Literacy, 6x 20 minutes) will take place. Teacher talk towards pupils will be audio recorded. There will be no judgements made on your child's academic ability and any information collected will not be shared with any other party, unless there are safeguarding concerns.

What are the possible benefits/disadvantages of taking part?

Taking part in this study will help others to understand primary classroom practice of teacher talk and Emotion Coaching. There are no disadvantages to taking part in this study.

Will what my child says/does in this study be kept confidential?

All information collected from the observations will remain strictly confidential (subject to safeguarding limitations).

Any information given during the observations that will identify your child (name, address, friends, etc.) will be either omitted or given pseudonym information.

Data collected will be kept secure at all times. Data files will be encrypted and electronic devices will be password protected so that any information collected cannot be accessed by anyone other than the researcher. Brookes University owns all data collected by the researcher in the study.

What should I do if I want my child to take part?

If you decide that your child can take part in this study, you will be asked to sign the consent form attached.

What will happen to the results of the research study?

The results of the study will be used in a thesis for a Doctorate of Education (EdD). It may be that the results may be used from here in presentations or publications for further reference.

Who has reviewed the study?

This study has been approved by the University Research Ethics Committee, Oxford Brookes University.

Contact for Further Information

For further information, please contact me, Kate Dew, at 15097140@brookes.ac.uk Or my Director of Studies at Ngaciu@brookes.ac.uk For Emotion Coaching UK's Code of Conduct Declaration, please visit https://docs.wixstatic.com/ugd/623336_a10c47e0047e4a37855259f91547a354.pdf

If you have any concerns about the way in which the study has been conducted, please contact the Chair of the University Research Ethics Committee on ethics@brookes.ac.uk.

Thank you for your time in reading this information

Appendix E: Consent Forms

Appendix E1: Consent Form for Gatekeeper/Head teacher



CONSENT FORM: Head Teacher/Gatekeeper Permission

Full title of Project: An evaluative investigation into the relationship between Emotion Coaching training and teachers' verbal feedback to pupils

Name, position and contact address of Researcher:

Kate Dew, EdD Researcher, Oxford Brookes University

15097140@brookes.ac.uk

			Please initial box
1.	I confirm that I have read and underst above study and have had the opportu researcher.		
2.	I understand that my school's particip to withdraw at any time up until the p giving reason.		
3.	I agree to the use of pseudonymised in it's community (including names, class publications		
4.	I understand that the researcher is not affiliated with Emotion Coaching and will keep any data confidential (subject to legal and safeguarding limitations). Brookes University owns all data collected by the researcher in the study.		
	I agree for my school to tak	re part in the above study	
Name of School Head Teacher Date		Signature	
Nam	e of Researcher	Date	Signature



CONSENT FORM: Class Teacher Participants

Full title of Project: An evaluative investigation into the relationship between Emotion Coaching training and teachers' verbal feedback to pupils

Name, position and contact address of Researcher:

Kate Dew, EdD Researcher, Oxford Brookes University

15097140@brookes.ac.uk

			Please in	itial box
1.	I confirm that I have read and un above study and have had the op	derstand the information sheet for the oportunity to ask questions.		
2.		on is voluntary and that I am free to e point of researcher analysis, without		
3.	I understand that Brookes Unive researcher in this study	rsity owns all data collected by the		
4.	I agree to take part in the above	study.		
			Please in	iitial box
5.	I agree to the semi-structured	interviews being audio recorded	Yes	No
6.	I agree to 20 minute audio snapshots of my Maths and/or literacy lessons being recorded			
7.	I agree to the use of pseudony	ymised quotes in publications		
	_			
lame o	f Participant	Date	Signature	
lame of	f Researcher	Date	Signature	



PARENTAL CONSENT FORM

Full title of Project: An evaluative investigation into the relationship between Emotion Coaching training and teachers' verbal feedback to pupils

риј	pils	3					
Nan	ne, _l	position and contact address o	f Researcher:				
Kate Dew, EdD Researcher, Oxford Brookes University							
15097140@brookes.ac.uk							
				F	Please initial box		
	1.	I confirm that I have read and for the above study and have questions.	I understand the information she had the opportunity to ask	neet			
	2.	am free to withdraw him/her	participation is voluntary and the at any time, without giving read can choose not to take part at	son. I			
	3.	I understand that Brookes Un the researcher in this study	niversity owns all data collected	by			
	4.	I agree for my child take part study.	in the above				
		Name of Parent/Carer	Date	Signature			



PUPIL CONSENT FORM

	Please tick
 I have read/heard the information about Kate Dew's study 	
2. I have had the opportunity to ask questions about the study if I wanted to find out more	
3. I understand that I can choose not to take part at any point and not be audio recorded	©
4. I agree to take part	©
Signed: Date:	

Appendix F: Example Transcripts

Appendix F1: Example Observational Transcript

XXX = name of pupil or teacher

Q: OK, you are sitting very beautifully, I'm very proud of you all. We have to do a couple of little jobs this morning and I need your help. To be honest with you, I was having a bit of a stress yesterday evening, thinking, oh my goodness, we've got so much to do before the end of term, so I really need your help. We're going to do two little quizzes on our number work. And you are such amazing mathematicians in this class, I'm so proud of you. It's a little bit sort of not very exciting but we just have to do it. Sometimes in life we just have to get on with these things, don't we?

So I'm going to just give you a little bit of advice about how you can make the best of this, and then I'm going to set you off to be independent, OK? One of the tasks is counting on in multiples of four and eight, and fifty and one hundred. Now I'm going to let you have a whiteboard and pen on your table, so that you've got that to support your learning, do you think that will be helpful?

A: Yes.

Q: Excellent, OK. You can choose to use it or not. If you think, oh I know that one, you don't need to make notes, that's fine. If you're confident, do you think you're confident? Yes. But then you might find you want to check it anyway, do you know what I mean? Belt and braces is what they say, like double help, then you're not going to make a mistake. XXX, I really, really need your ears, OK, really need them. Can you show me that you're really green zoned? Thank you. That's better, isn't it? And it also helps XXX too, doesn't it, if you're really, really green zone.

So, don't worry about the word, multiples, it's just a really fancy way of saying, steps. So if we started off at zero and I said, can you count up in multiples, in steps of four, what would be the first step that we took, if we were stepping? XXX, can you help me out?

A: XXX is being really annoying.

Q: XXX, I'd like you to be really focused on your learning please. XXX, look at me, and I want you to let me and XXX work together. But I need you thinking about what you're doing, is that OK XXX? Can you look at me? XXX, look at me. Do you understand what I'm saying? Yes.

So if we started off at zero and I was walking up in steps of four, what would the first place be that I go to? Who can shout it out and help me out?

A: Four.

Q: Amazing. Where would I go next on my stepping stones?

A: Eight.

Q: Thumbs up, thumbs down? Easy?

A: Easy.

Q: Easy. If we did the same, counting in eights, where would my first step take me?

A: Eight.

A: Eight, sixteen.

Q: Thumbs up, thumbs down, easy?

A: Easy.

Q: Easy. OK, what about multiples of fifty?

A: Yes, fifty, hundred, hundred and fifty.

Q: XXX, I can see that you've got a really good explanation and I don't want you to just share it with XXX and XXX, I want you to share it with all of us. Really loud voice XXX.

A: It's like county in 5s.

Q: Only it's?

A: In 10s.

Q: Yes, it is. It's how much bigger? So instead of county in 5s, if you're counting in 50s, how much bigger is this than this?

A: 10.

Q: 10 times, well done XXX. So what knowledge can you use to help you to count in 50s, what do you already know? What times table knowledge will help you from what XXX has just been saying? Counting in 50s, it's 10 times bigger than, so which easy peasy times table could we use to help us? Tell me, shout it out?

A: 5.

Q: The 5s. So if I counted in 50s, it's like doing 5s, isn't it? Only it's 10 times bigger. So instead of 10, what would it be?

A: 100.

Q: Amazing. What would come next?

A: 150.

Q: Oh my goodness, you're such superstars. I don't think I even need to explain counting up in 100s, do I?

A: No.

Q: No, brilliant. Great, I'm going to send you away to do that job. There's another one that's a little bit trickier. XXX, green zone, fantastic. XXX, green zone, fantastic. Back row, green zone, and everyone green zone, amazing, thank you. There's a little bit of a trickier one, which is 10 more, 10 less. Ooh XXX's pulling a face at me. They're not so hard my darling, don't worry, and you will have a whiteboard to help you make some calculations to support you, OK? So don't worry, yes? Maths isn't scary.

Also, we need to do a 100 more or a 100 less. So I'm just going to talk you through how it looks on the sheet, so that you're not a bit bamboozled when you look at it. I'm really grateful for everyone who's in the green zone and not muttering, because I've got a really sore throat and I could do with being at home in bed really. And you've been so considerate over the last week when I've not been well, and they've been really good green zone listeners, Miss XXX, actually.

Q: That sounds really good.

Q: And helpful. It's hard, isn't it? We're all feeling a bit grotty, aren't we? But we've got to be kind to each other, haven't we, and be helpful. So it's got three columns, OK. You've got the starting number, oh my awful handwriting, that's terrible Mrs XXX. It's getting worse I think. And it says 10 less, 10 more. So if my starting number was 75, I need to fill in either side, does that make sense?

A: Oh yes, it does.

Q: So the 10 less column, I'd need to look at my starting number and imagine I was going backwards on a number line 10 steps. Where would I end up? Which column is going to change and which is going to stay the same? 10s and 1s, if we're going 10 less, which stays the same and which changes? Can you explain XXX?

A: The 1s stay the same and the 10s change.

Q: Well done, you corrected yourself then, didn't you? You went, oh no, well done. Mistakes help us learn, don't they? So we don't need to worry about the 5, that's going to stay the same. It's only the 10s that we need to be going back. Can you help me out with what might go in here? XXX, you're looking really confident.

A: 65.

Q: Fantastic. Right, 10 more. OK, so XXX's guided us a bit by saying, we don't need to worry about the 1s, that's going to stay the same. XXX, you're looking really confident with this. What's the 10 more, what's the 10 more?

A: 8?

Q: Yes, you're right, 8, 10s, well done. So what's my whole number going to be?

A: 85.

Q: 85. You're saying, 85, like you're not sure, but you are spot on XXX, really good, well done. So I'm not going to go through that all with you because I think we're OK. And the other one is doing a 100 less and a 100 more. So if I started, what can we see on the board? Can we say what we can see?

A: 283.

A: 183.

Q: Ooh wow, XXX, you were so on it, you just had to say it, didn't you? Amazing. It's like that fact popped into your head like a firework. That's impressive. I can't work out my maths that quickly, so it's OK to take your time, we don't need to rush it. I was about to ask you about what changes and what stays the same. XXX, you look really confident.

- A: The 83 stays the same and the 200 changes to a 1.
- Q: Excellent explanation XXX, thank you.
- A: And it also changes to a 3 as well.
- Q: Oh you've given me two answers, wow. I said we were good mathematicians in here, didn't I? We are excellent mathematicians. And I like also, a lot of us have got a really good perseverance approach to maths. It doesn't come like a firework like XXX had in his brain, sometimes it does and that's OK. Sometimes you've got to have a little bit of an effort, haven't you? Put some perseverance in, put some application in, and then you get there, don't you? Everybody happy with what you're doing?

A: Yes.

- Q: Yes. It's not complicated, don't over think it. If you want to use a whiteboard to support your knowledge you can, if you want to make little notes in the side, calculations that might help you, brilliant. Any questions from anybody? XXX?
- A: Can you do, what's that other thing?
- Q: That was when you were away my darling, don't worry, I will catch you up with it when we've got a moment, OK? This morning we need to do lots of what I call, housekeeping kind of jobs, lots of little bitty bits that all need finishing off. And then we can relax a bit more and enjoy our Christmas activities, OK? Just before we go, let's check we all know what we need. It's your own work, OK, so we're not working as a team on this activity. We have done quite a bit of teamwork this morning but this morning, now, it's focusing on your knowledge, OK? Sometimes having a peak at someone else's book doesn't actually help you because how do you know that they've got it right? They might have got the wrong answer. So it's about your knowledge that I need to see, OK? You need a pencil, you need your maths book, you need your brain, you need some focus, some positivity, and we're going to get this done. Is that OK? Everyone OK? Are we OK?

A: Yes.

Q: Excellent. Right, off you go. You can make a start as soon as you get your book, OK. Wow, well done XXX, you look so focused, thank you. Well done XXX, you look super focused. Everyone on this table. XXX, I'm not sure that looks like a comfortable space to work there, it's a bit squeezy, isn't it? Why don't you come here, just for this little bit of work? And then when we work with friends later, doing our Christmas ?? (15.16), then, that's OK, but I'd like you to find a sensible space, OK? You are working on your own anyway. Well done XXX. Everybody got their book open? We've got a lot to get through, so I need you all to be in the green zone and focused, OK? We're not helping each other, this is something we've got to do ourselves. You've got to have a go and if you need some support, just let me know, OK? So you all get on with the task that we need to do.

OK, so take your time, really make sure it's correct. That's a brilliant start. Right, let's have a look XXX. You do get it, sometimes you worry a bit, don't you, I think? And you think, oh actually, yes, I'm OK on this. So read it out, what does it say? Let's all stay in the green zone please, be lovely and focused. Make sure you're using your whiteboard and pen. XXX, do you know what you're doing? Make sure you're making steps of how many? Point to the number. What does it say? Read it out my darling. So each step is?

A: 4.

Q: Right, so then you tell me what comes next? I can hear someone saying, I don't get this. Don't panic. Just take a look at one example. So looking around and XXX, very green zone. Have you finished, can you move on to the next bit for me please? So what I'd like you to do, is can you write what you found challenging? Yes, but the thing is, XXX, you really persevere, don't you? Because how long did it take you when you were doing one star, you know, your maths badge that was really, really tricky? A hundred questions in ten minutes.

A: Six tries.

Q: Six tries, so you really persevered, didn't you? They look fine to me, my darling. And that's the one that you helped me out with on the carpet, isn't it? So you've already done that one in your head. If you've finished your maths work, I'd really like you to come and join me on the carpet please. Oh XXX, you were ready quickly. So I, basically, asked, that you could bring in just something really simple from home, didn't I? Because it's such a busy time in here, isn't it? Mummies and daddies and grandparents don't need extra jobs. They really don't need you going home saying, please can I have a costume that's very elaborate, because it's not fair, is it?

So I did say to you, don't worry if what I told you seems really basic, I will bring in lots from home. XXX, I'd like you to go back to where you were sitting please. You're going to sit in a really sensible space. I see you're all really desperate to see what's in my bag. XXX, I can see that you have found a good place, how you're going to sit in it, great. I have brought a really nice book from home. This is what I'm kind of picturing our nativity scene to look like. This book is called, A Medieval Christmas.

A: What's it about?

Q: So this is what I'm picturing our nativity scene looking like. What would you say is your impression of that picture? What impact does it have? What do you notice about it? Any comments? Green zone, hands up, I might get upset if you're shouting at me. XXX?

A: It's got lots of detail.

Q: Lots of detail. It has, hasn't it? What else do you notice about it? What jumps out of the page at you? XXX, you're sitting so nicely in the green zone with your legs crossed there, that's really excellent, thank you. XXX's sitting so nicely in the green zone. Are you going to do the same? You are, thank you. That looks so much better, doesn't it? And it looks more comfortable too I think. I'd suggest that the Christmas card goes away, lovely, thank you. Let's get back to what we were discussing. XXX?

A: I can see baby Jesus.

Q: You can see baby Jesus. I'm trying to draw out something else out of you, aren't I? It's a very colourful picture, I think, is what I'm saying, isn't it? What colours really jump out the page at you? Tina?

A: Green.

Q: The green, yes, beautiful green. What other colour really jumps out at you? XXX?

A: Blue.

Q: The blue, OK. These are really beautiful books that were made a long time ago and they're very precious books. These are kept in the British library and they were hand painted many hundreds of years ago, and they all used this very, very beautiful blue. Mary is often painted wearing blue. She's a heavenly person, so perhaps that's why. But there's another reason why the medieval artists used this blue, because it was expensive. It was made from a precious stone called, Lapis Lazuli. XXX, I know you've got a really interesting comment to make but I'm struggling with you calling it out at me darling, OK.

Lapis Lazuli is a semi-precious stone, a blue stone. It was used a lot by the Egyptians. So the beautiful Pharaoh death mask of Tutankhamun is gold with these blue stripes in. And the medieval artists loved to use this paint because it's a very vivid blue, very bright, isn't it? And also, it was very precious, I think it's kind of right that Mary is dressed in an expensive colour because she is very precious. I'd kind of like the nativity play to look as colourful and lovely as this. I will show you what's in here. Mathematicians, can we come and join the carpet now? Come and join us in five, four, thank you XXX, in three, well done XXX, in two, XXX, are we going to find a seat please, in one, I know you want to see what's in the bag of things from under Mrs XXX's bed.

A: Under Mrs XXX's bed?

Q: I hoard all sorts of things, I'm a bit like a magpie, I can't resist getting things. So I'm going to help you with your costumes. You don't need to jump up and down, I will show you things. Angels, I have got quite a lot of tinsel. XXX, I'm going to help you choose when we have a moment. I'm really impressed with XXX's green zone sitting. I'm really impressed with XXX's green zone sitting. XXX and XXX, you're going to show me your green zone sitting. XXX, is there anything to look at, at the moment? Is there anything in my hands? Not really, is there? Angels, I've got loads of this fabric, so I can help you make some wings. Kings, I'm picturing you looking extremely richly dressed.

A: Oh that looks so nice.

Q: The wise men in the bible story came from the East, it's all beautiful things, look. So we can dress you up Kings, in all sorts of gorgeousness. I thought, XXX, thank you. I thought that might be good for one of the King's gifts. So my house is looking a little bit empty now because I usually keep my keys in there on the hall table, but I thought, wouldn't that make a really good gift for a King to give. And also, because it's made of paper machete, if it does get dropped it doesn't matter because, one, it won't break, but also, it's not made of anything that will break into sharp pieces.

I thought this would make a really good gift for a King. I love sort of scouting about in charity shops and I like hoard things. I think this was 50p or something. It is made in Russia.

A: What does hoard mean?

Q: Hoard, like a dragon would hoard its treasure. What do you think that means XXX? You want to collect it and have it, don't you? Own it.

A: Can I have that one?

Q: That's nice, isn't it? XXX keeps his pocket money in that one. So I thought that would be a nice gift for a King. And also, that one, there should be a lid for that one, there we go. Do we think they'll be good gifts?

A: Yes.

- Q: Excellent, good. More King stuff.
- A: There's so much King stuff.
- Q: So much King stuff. Can you tell that Mrs XXX likes shiny things?
- A: Yes.
- Q: I wondered, OK, give me your thoughts, we've got two stars, I was wondering if we could maybe do something with this, couldn't we, star pupil?
- A: Cut all of them out, then stick them on
- Q: Yes, XXX, don't shout at me. It's one of XXX's old duvets. It's clean, it's washed and everything. But it's a slightly smaller size, you know when you get big and you need a bigger duvet, don't you? So we don't use this anymore. So I kept it, I keep loads of fabrics. Mary and angels and shepherds.
- A: This looks like my nan's tablecloth.
- Q: Oh I wondered if that might go on the Kings as well. What do you think?
- A: It's a dress.
- Q: It's an old skirt.
- A: XXX can wear that.
- Q: I'm not going to expect you to wear the skirt XXX. What I'll do, is cut, XXX, I'm really glad that you're still showing me green zone sitting. I'm really glad because, not to embarrass you, I did have to request that you sat in green zone and you really are, and you've stayed in green zone and you're not shouting out. I wouldn't expect XXX to wear that
- A: It's see through.
- Q: XXX, do you need to shout at me, darling? It's, we could cut that off. What happened to the rest of the material, is I made it into a cushion. OK, this had two layers. So, do we think we're going to look fantastic for the nativity play?
- A: Yes.
- Q: Do you need to worry about bringing lots of stuff from home?
- A: No.
- Q: If you have a question, can we pop our hands up please?
- Q: So I'm going to be, again, talking with you one at a time about what we can do to make your costume and improve your costume. What day are you going to bring it in to school?
- A: Wednesday.
- Q: XXX, what we talked about when you were away, was that we're doing a nativity scene and we've got Mary, Joseph, donkeys, sheep, shepherds, angels, stars. So it's, we've already

got a Mary and Joseph, but if you want to choose to be a shepherd, and XXX is, XXX, I thought this might be nice for your shepherd outfit, like a little shawl thing. Where are you XXX? I'm looking and I can't find you. You're right there, right next to me. What do you think? Do you think that would look nice?

A: Yes.

Q: So shepherds doesn't have to mean, oh I'm wearing boring brown and dressed as a boy, so that could be a choice, or an angel or a star. Let's have a think, shall we? We can come back to it later and make a decisions later. You have a muse, have a little think about what you might quite like to be, OK, and then we'll sort that out. XXX, it's fine, because what day did I ask you to bring them in?

A: This Wednesday, is it?

Q: Wednesday, yes.

A: That's when it's Christmas jumper day.

Q: Christmas jumper day too.

A: Am I allowed to wear a dress?

A: And Christmas dinner day.

Q: I know, it's exciting, isn't it? Right, we are, looking at the time, wow, nearly getting to lunch time. Where does the time go? I am going to read out, we've got a really good routine Miss XXX, and you're going to show how good you are at it. So we have some story time and then three people at a time, no more, tiptoe over and wash hands and then come and sit down again. So then we've all got clean hands for lunch. Why is that important XXX? Why is it important to have clean hands? XXX, why is it important?

A: Because you'll spread germs.

Q: Yes, you don't want to put dirty hands into your mouth, do you? And you've been outside, so it's important that we keep our hands clean. You don't want to give yourself an infection and also, you don't want to spread any yukiness around. I'm going to do loads of questions about costumes on Wednesday, when I can see what you've brought in, OK? XXX, can you bank that thought just for now, then we can get on with our handwashing.

A: My mum might need a little more time to make the sheep costume.

Q: XXX, that's absolutely fine, OK. Right, so, oh do you remember, we were trying to work out that mystery, weren't we? Because Lou and Barney are going to a fancy dress party, aren't they?

A: Yes.

Q: And they were playing catch, weren't they? Hiding and jumping out at each other. And then Lou got really confused, didn't she? Because what had happened? XXX, I'd really like you to sit with us and join in. I'd really like you to sit with us and join in, is that distraction going to go away? Oh it is. Where are you going to put it? Right there, thank you. XXX?

A: So

- Q: Sorry, I put you on the spot a bit there, didn't I? Take your time. Do you want me to come back to you and give you some thinking time? XXX, tell me?
- A: Well Barney was ?? (44.17), then because Barney looks so similar, Barney was following Lou, Barney was behind Lou but they was in front of Lou. And then, because they're so similar, Lou thought the thing was Barney.
- Q: Yes. Well that's what we sort of surmised had happened, wasn't it? I don't think that's even the right word. I think I mean, inferred that from the text, hadn't we? OK. So we're on our way

Appendix F2: Example Observational Transcript

XXX = name of pupil or teacher

- Q: So, if you remember, about ten months ago, I came in because you were about to do some training on emotion coaching. And I'm interested in how teachers and pupils build relationships, so, this is kind of after that training, to have a bit of a discussion and just kind of see where you're up to, I guess. Is that alright?
- A: Yes, of course.
- Q: So, if you could just start off, just tell me where you're based at the moment?
- A: Yes, so last year I was purely year XXX based and now I'm XXX based.
- Q: A bit of a change?
- A: A bit of a shift, yes, but I want to continue, just getting the experience everywhere.

Redacted section due to anonymity

- Q: Perfect, great. And so, going back to, so I think it was around December time, do you remember the Emotion Coaching training?
- A: Vaguely, it was a long time ago, yes.
- Q: What sort of things can you remember? You don't have to remember anything, but was there anything that sort of stood out for you?
- A: So, I have now embedded into every conversation I have with the children, that their emotions are, every emotion's OK, whether you're feeling sad, angry, upset, frustrated, happy. They're all the same emotion, whether they're positive or negative, it doesn't, I don't know how to say it. If you're feeling sad it's OK. I feel like, and I make sure that they know I feel like that sometimes and it's OK to feel like that. If you're frustrated, it's OK to feel like that. And I just make sure that they know, the emotion they're feeling is OK, it's normal. It's not something that they don't know, that's crazy that's happening to them.
- Q: Did you, did that before?
- A: Not as much as I do now, no. I think that's really, and I think it really helps the children as well, because they know, it's OK that I'm feeling angry but it's then what they do with the anger.
- Q: Was there something specific in that training that you thought, actually, that has made me think about that a little bit more?
- A: I think we just had a lot, if I can remember right, we spoke a lot about emotions, not labelling a child and their emotions being OK. And relating to the child, so that they know, even though we're older, we still feel like that. I think that's, we had a conversation around that and that's stuck with me.
- Q: And was there anything else that resonated with you?
- A: I took that away as the main thing. It just stuck with me and I just make sure, on a daily basis, every conversation I'm having, like XXX, you could see him getting really agitated in a seat just then, and he said, I'm feeling really unsettled. And I said, well that's great that you can notice that, you know, you're feeling unsettled, but it's what we do with it. It's OK to feel unsettled but then let's, you know, let's bring it back, sort of thing. Yes, I just took that away really as the main point.

- Q: And do you think it's changed the way you talk to children at all?
- A: Definitely the children's emotions but it has, I wouldn't say, changed the way I speak to children, but it's, I've definitely adapted the way. And I just make sure that that is built into every conversation I have. We're, as a school, very hot on having restorative conversations, whether they are physical towards another child, like verbally unkind, we always make sure, they can have cool down time, you know, time away, time out, just to cool down. But we always make sure we have that restorative conversation and that's where I use it really.
- Q: So, you think it's kind of fit with that?
- A: Yes, definitely.
- Q: And do you see a change in other people? When we talked last time, you said that actually, you found it fairly easy to kind of build relationships with the children and that actually, even on the playground, that that was a nice thing, you would go and have conversations. But you didn't always feel that every staff was consistent in that across the school.
- A: Yes.
- Q: Do you think that anything has changed over the last year, not necessarily because of Emotion Coaching, but just in general, do you think it's changed?
- A: I think more of us are on the same page.
- Q: In what way, would you say?
- A: With the building relationships and, you know, building that relationship out on the playground. It can be a bit more informal, it can be a bit, you know, more relaxed, more unstructured. And making sure that we have the time and make the time to do that, because that's really important for the kids. And to know that, yes, you are my teacher and you help me do my work in the classroom, but outside of it, we can have fun, we can like play together, I don't know, we can go and see things outside, like hopscotch and things like that. If we do it with them, it builds that relationship.
 - So, I think, more of us are on the same wavelength with that. I think there are still a few that don't but that's their personal choice and, you know, I can't do much about that.
- Q: And the kind of emotion coaching stuff, you said you're quite aware of children's emotions. Does that fit in with the systems that you had previously? So, I think last time you mentioned the zones of regulation, zones of learning and dojo, I think those were the three.
- A: Yes.
- Q: And restorative justice, I think you mentioned.
- A: Yes.
- Q: Does it all fit together?
- A: Definitely.
- Q: Do you think anything doesn't fit or what's your feeling on all of that?
- A: So, in our, the only thing I'd say, is in our classrooms we have a, we have little pots with colours, and the kids have their own name and they can put their, how they're feeling, into a pot. I don't know whether the colours match. Because purple is I'm

feeling, I could have this wrong, but I think purple is I'm feeling sick, sad, something like that. But then purple is a very close colour to blue and blue is our blue zone learners, you're the best of the best. So, I sometimes look at that and think, like green is happy, you know, I'm feeling excited, things like that. I can't remember the other two colours, I've just looked at it with XXX. But I think, I don't know whether it fits as well as it could.

- Q: OK, that part of it?
- A: Yes, because I think if you're asking someone, if you're asking a child and they put it in the purple, well that purple, it's a very close colour to blue to a lot of children. Does that link, do you know what I mean, the link, there is no link because it's not a negative thing but they're feeling sick, they're feeling sad, if they're putting it in the purple, I can't remember the exact words. But then if you're above, I don't know, that was the only bit that I was a bit
- Q: So, is that Zones of Regulation or is that Zones of Learning?
- A: Learning. Yes, but I think the kids get confused.
- Q: That's interesting.
- A: Then sometimes, they don't even know the colours for their emotions, and then they're, oh but I'm blue. So, I don't know, it's the colour thing, I think.
- Q: And is that the same in every class or is that just in your class?
- A: Every class has it. Whether they do it a different way or they just stick a name on a colour with the emotion, I could be saying this all wrong. I'm pretty sure I looked at it before and I was a bit like, hmm colours. I think they kind of should match, if that's a whole school approach, it would make sense.
- Q: So, I'm guessing, in the classroom, you don't use that so much?
- A: I don't, for XXX because I think it's good to recognise feelings and what emotion XXX is feeling. And to say, yes, I am feeling cross, but then once settled and he knows what he's doing, he can then move it and he can see a change, and how we've both worked together as a team to get him to where he wants to be. So, it does work, in a sense, I just, for me, the colour thing. I think the colours, I think it should all match and then the kids, yes, maybe it's just me.

Redacted due to anonymity

- A: They do the pots, yes. So, it is the same across the board, whether you do pots or sticking your name or, I think a lot of them have done pots now because you can physically take it out and physically move it, rather than stick it up there and faffing about and stuff. I mean, to be honest, we don't go into many other classrooms now because of bubbles and things like that, so I'm not really sure how it's like down this end, but that's definitely how it is up there.
- Q: And how does that fit in then with Dojo? Is Dojo used still?
- A: Yes, we still use Dojo on a daily basis, although we don't use stickers because of Covid. We're still very hot on it
- Q: So, which ones are used more, Dojo or the emotion pots?
- A: Dojo. Yes, Dojo's a big thing here because the kids can earn them. And then when they get to twenty, they get given like a twenty Dojo note, and they can put it in their tray. And we've still got the shop. And you know what kids are like, they like a bit of plastic, do you know what I mean? Like a plastic fiddle thing or, do you know what I

- mean? They just like a bit of rubbish really. But to them, that's their motivation, oh have I got enough money? So, that's big here still.
- Q: And so, you've got, hang on, let me just check, you've got dojo, you've got your emotional side of it as well. How often is the sort of emotional pots referred to in your class throughout the day? Would you say it's something that you do?
- A: Morning.
- Q: When they first come in?
- A: Yes. I go back to it with XXX ... So, it's easy for me just to turn round and say, right, we were feeling cross, now I'm feeling excited. But I wouldn't say that any of the children go back to it, which we probably should. But then, if a child's put they're happy and then they come in after lunch and something's happened and they're feeling cross, it's good to recognise they're still feeling cross, but the teacher may not know that. So, I think maybe we could work on a bit more of the independent side of it. If you, obviously, you can go and move it, sort of thing. It's that whole, bringing that whole class, I don't know.
- Q: Maybe for the whole class, it's not needed as much?
- A: No, like some kids are happy all day, so they don't need it, you know. I think for some children, it would be helpful to think, oh actually, how am I feeling? What emotion am I displaying? And go back to it, potentially, I think it would help some of them, maybe not all of them, but maybe if they're just given that opportunity, five minutes after lunch. It would just help the teacher recognise if there was anyone, you know, feeling sad or, yes.
- Q: I think, from last time, you said you'd had a bit [of training] on restorative justice and you've had previous bits in lots of different ways. The emotion coaching stuff, how, whereabouts would you say that it is useful on a scale?
- A: Me, personally, it's been very useful, because I embed it now in every conversation I have and in our restorative conversations. Yes, I think it has helped me adapt. Yes, I think it's been very helpful for me.
- Q: And then if there was any kind of additional training that you felt that you would need, because we talked about this last time, and I think you said, actually, it would be really useful to have that kind of around the consistency in the school. But is there anything that you feel, personally, or from a school level, that you think would be useful, kind of in terms of building relationships?
- A: I think we all need top ups now and again. I remember the training and things like that but I mean with everything going on, it's not been at the, do you know what I mean? But I think it's so important for the children, and for us, and they're here, you know, five days a week. I think top ups, you know, whether it's, I don't know, just a short thing on an inset day, just to keep the whole school approach going, just for the consistency across. I mean I know kids are only coming into contact with the same adults, which, yes, but if they weren't and if things do eventually go back to what was normal, there does still need to be that consistency across everybody. So, no matter what adult the child goes to, they sort of know the same vibe they're going to get. Yes, so just little top ups, whether it's in like a TA meeting, like once a term.

Yes, I think that would be helpful. And also, we've got a new TA, so she's not going to have had any of this. So, I think it's also important, when we have new people, just to, yes.

Q: Is there anything else you want to talk about?

- A: No, I don't think so. I think I've just blurted it all out. I think this one's here to stay.
- Q: For some schools I've found it is and for some, like they've just said, actually, it's just not useful.
- A: I think, for us, I think we have, well I know at my end anyway, like [place in school], we've really taken it on and I notice it.
- Q: You've seen it [EC]?
- A: Yes. Obviously, I'm sure that if there's a child, you know, I need a second adult just to, you know, be there, you know, a united friend in school, we're both on the same page.
- Q: Yes. Thank you so much. Thank you for your time.

Appendix G: Coding Levels, Definitions and Examples for Observational Transcripts

Table A1: Observational Transcripts: Coding nodes, definitions, transcript examples and key literature

Coding Node	Sub Node 1	Sub Node 2	Definition	Example from transcripts	Key Literature from which code is derived
Learning (effort and	Positive	Specific	Praise, satisfaction or approval towards an academic behaviour with reason	"Oh well done at spotting that missing letter, stomp" (Pre obs, part. 3)	Bergin and Bergin (2009; 158). Coercion versus Positive talk;
attainment towards school work, such		Non- specific	Praise, satisfaction or approval towards an academic behaviour without reason	"Amazing" (Pre obs; part. 5)	positive interactions • Bomber (2015; pp132/135/137/146)
as reading, maths or answering		Repetiti on	Validation of a response by repeating word/answer from pupil in a positive tone	Pupil: "The green one" Teacher: "The green, yes" (Pre obs; part. 5)	Explicit (specificity) language; positive language
a learning based question)	Negative	Specific	Reprimand, dissatisfaction or disapproval towards academic behaviour with reason and/or correction	"But Jack, what would make a lot more sense, is if there was a clear split between those two" (Pre obs; part.2)	 Ubha and Cahill (2011; 289) Consistent, positive language
		Non- Specific	Reprimand, dissatisfaction or disapproval towards academic behaviour with no reason	"It's not the feelings, is not what I'm looking at" (Post, P2)	Colley and Cooper (2017; 254) Reference to national policy of behaviourist principles
	Ambiguous		Combination of positive/negative responses or unable to be defined as a response to academic behaviour	"So, how do I get across to here, what do I do now?" (Post obs; part.4)	 Harrop and Swinson (2000); White (1975); Schreeve et al (2002); Apter et al. (2012) –
Social (Following	Positive	Specific	Praise, satisfaction or approval towards a social behaviour with reason	"Fantastic. Marcus, got his board down, looking at me, showing he's ready to learn" (Pre obs; part.7)	categorisation of positive versus negative classroom language
class rules and displaying appropriat		Non- specific	Praise, satisfaction or approval towards a social behaviour without reason	"Good boy, well done" (Pre obs; part.11)	
e manners towards others)	Negative	Specific	Reprimand, dissatisfaction or disapproval towards social behaviour with reason and/or correction	"Ruby, we need to take the jumper off our head please" (Pre obs; part.4)	

	Ambiguous	Non- specific	Reprimand, dissatisfaction or disapproval towards social behaviour with no reason Combination of positive/negative responses or unable to be defined as a response to social behaviour	"Anker, I'm just going to wait because that's the second time" (Post obs; part.2) "I'm really grateful for everyone who's in the green zone and not muttering" (Pre obs; part.5)	
Socio- Emotion al	Dismissing		Dismissal, argument or invalidation of an emotion displayed in the classroom by a pupil	"So it's not anything for you to worry about" (Pre obs; part.3)	Bergin and Bergin (2009; pp158/9).Bomber (2015; pp)
Learning (Emotion- pased talk in	Labelling	Positive Emotion	The label assigned (teacher) to a displayed emotion (pupil): Happy, joy, positive excitement	"That sounds so nice, you're very lucky" (Post obs; part.6)	Ubha and Cahill (2011; pp289)Colley and Cooper
classroom)		Negative Emotion	The label assigned (teacher) to a displayed emotion (pupil): sad, worried, anxious	"Are you a bit purple, a bit poorly?" (Pre obs; part.4)	(2017; pp254)
	Validation	Solution	Acceptance, agreement or acknowledgement of a pupil's emotional state with support to resolve	"So I'll hover around here to make sure everything's OK, alright Esme?" (Pre obs; part.6)	
		Non- Solution	Acceptance, agreement or acknowledgement of a pupil's emotional state with no support	"So please don't be hard on yourself" (Pre obs; part.4)	
	Ambiguous		Emotion-based discussion that does not fit into the above SEL categories	"Oh crikey, that sounds a bit dramatic, oh goodness. but your team is big enough that they'll be fine without you" (Pre obs; part.4)	

Appendix H: Quantitative Data

Appendix H1: Raw Scores for Observational Transcripts

Table A2: Total number and percentage of words used during pre/post EC training observational transcripts (teacher and pupils) and average teacher talk per minute

Participant number	Teacher words	Pupil words	TOTAL words	Percentage teacher talk	Minutes of transcript	Words per minute (teacher)
PRE						
2	3466	527	3993	86.80%	34	101.9
4	8620	663	9253	93.20%	101	85.3
5	4497*	427	4924	91.30%	59	94.8
7	3713*	224	3937	94.30%	58	69.3
11	2517	329	2846	88.40%	35	71.9
6	752	462	1214	61.90%	8	94
3	1714	219	1933	88.70%	17	100.8
			TOTAL	86.37%	312	88.29
				Outlier = P6 (61.9%) = 90.8%		
POST						
2	1089	78	1167	93.30%	11	99
4	2822	521	3343	84.40%	49	57.6
6	1315	460	1775	74.10%	14	93.9
3	1459	150	1609	90.70%	16	91.2
			TOTAL	85.63%	90	85.43
				Outlier P6 = 89.5%		

Table A3: Summary table of raw numbers of statements in each category of talk/sub code and average number per min pre/post EC training

	Total no.	Pre total	Post total	Av. Pre (N = 7)	Av. post (N = 4)	Pre SPM	Post SPM
Social behaviour							
Negative	177	139	38	19.9	9.5	0.45	0.42
Specific	101	79	22	11.3	5.5	0.25	0.24
Non-specific	66	50	16	7.1	4	0.16	0.18
Positive	118	88	30	12.6	7.5	0.28	0.33
Specific	64	53	11	7.6	2.8	0.17	0.12
Non-specific	52	34	18	4.9	4.5	0.05	0.2
Ambiguous	28	17	11	2.4	2.75	0.05	0.12
Learning behaviour	•						
Negative	96	69	27	9.9	6.75	0.22	0.3
Specific	34	25	9	3.6	2.3	0.08	0.1
Non-specific	26	19	7	2.7	1.8	0.06	0.08
Positive	227	169	58	24.1	14.5	0.54	0.64
Repetition	47	29	18	4.1	4.5	0.09	0.2
Specific	69	52	17	7.4	3.4	0.17	0.19
Non-specific	50	41	9	5.9	2.3	0.13	0.1
Ambiguous	49	34	15	4.9	3.75	0.11	0.17
SEL							
Validating	31	26	5	3.7	1.25	0.08	0.06
Solution	16	13	3	1.9	0.8	0.04	0.03
Non-solution	15	13	2	1.9	0.5	0.04	0.02
Labelling	28	23	5	3.3	1.25	0.07	0.06
Positive emotion	9	8	1	1.1	0.3	0.03	0.01
Negative emotion	18	15	3	2.1	0.8	0.05	0.03
Dismissing	13	13	0	1.9	0	0.04	0
Ambiguous	17	16	1	2.3	0.25	0.05	0.01

Table A4: Code per minute of talk types by individual participant: pre and post observational transcripts. All raw scores standardised by determining occurrence per minute to ensure comparable data (due to differences in transcript lengths)

	Pre										Post	t										
Part. No.	Lrn pos	Lrn Neg	Lrn Amb	Soc pos	Soc Neg	Soc Amb	SEL Val	SEL Lab	SEL Dis	SEL Amb	Lrn pos	Lrn Neg	Lrn Amb	Soc pos	Soc Neg	Soc Amb	SEL Val	SEL Lab	SEL Dis	SEL Amb	WPM pre	WPM post
2	1.65	0.68	0.38	0.35	0.37	0.21	0	0	0	0	0.73	0.82	0.18	0.64	0.91	0.09	0	0	0	0	101.9	99
3	0.76	1.41	0.53	0	0.18	0	0	0	0.12	0	0.94	0.38	0.38	0.5	0.5	0.19	0	0	0	0	100.8	91.2
4	0.09	0.07	0.04	0.11	0.5	0.02	0.1	0.06	0.08	0.03	0.65	0.24	0.14	0.25	0.33	0.08	0	0.02	0	0	85.3	57.6
5	0.58	0.02	0.05	0.37	0.36	0.08	0.14	0.24	0.03	0.08											94.8	
6	0.22	0.1	0	0.33	0.24	0.03	0	0	0	0											69.3	•
7				0.13	0.38	0	1	0.38	0.13	1	0	0	0	0.21	0.29	0.21	0.36	0.29	0	0.07	94	93.9
11	1.26	0.23	0.14	0.66	0.8	0.03	0	0	0	0											71.9	
Avg.	0.76	0.42	0.19	0.28	0.40	0.05	0.18	0.10	0.05	0.16	0.77	0.48	0.23	0.40	0.51	0.14	0.09	0.08	0.00	0.02	88.29	85.43

Appendix H2: SPSS Test Statistics Outputs: Data Distribution Histograms; Tests of Normality

Learning: Positive

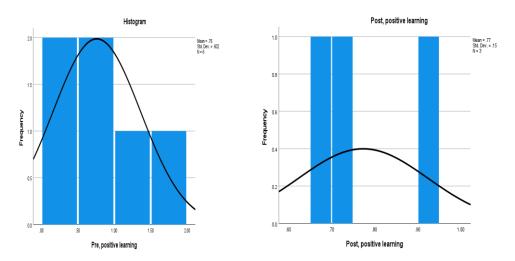


Figure A2: Histograms for Learning Positive talk category data (pre- and post-EC training)

Table A5: SPSS output for tests of normality on Learning Positive category data (pre- and post-EC training)

Tests of Normality Kolmogorov-Smirnov^a Shapiro-Wilk Statistic Statistic Sig. Pre, positive learning .167 6 .200 .947 6 .714 Post, positive learning .280 3 .937 3 .516

Learning: Negative

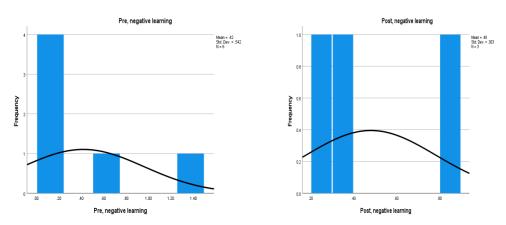


Figure A3: Histograms for Learning Negative talk category data (pre- and post-EC training)

^{*.} This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Table A6: SPSS output for tests of normality on Learning Negative category data (pre- and post-EC training)

Tests of Normality

	Kolm	ogorov-Smir	nov ^a	Shapiro-Wilk			
	Statistic	df	Sig.	Statistic	df	Sig.	
Pre, negative learning	.303	6	.091	.789	6	.047	
Post, negative learning	.296	3		.918	3	.446	

a. Lilliefors Significance Correction

Social: Positive

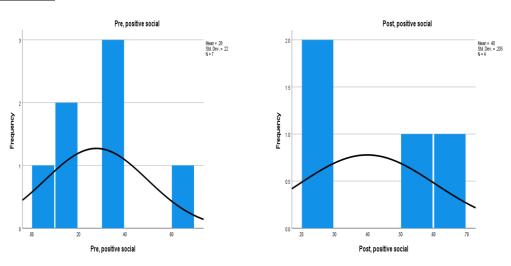


Figure A4: Histograms for Social Positive talk category data (pre- and post-EC training)

Table A7: SPSS output for tests of normality on Social Positive category data (pre- and post-EC training)

Tests of Normality						
Kolmogorov-Smirnov ^a Shapiro-Wilk						
	Statistic	df	Sig.	Statistic	df	Sig.
Pre, positive social	.196	7	.200*	.937	7	.615
Post, positive social	.268	4		.900	4	.433

^{*.} This is a lower bound of the true significance.

a. Lilliefors Significance Correction

Social: Negative

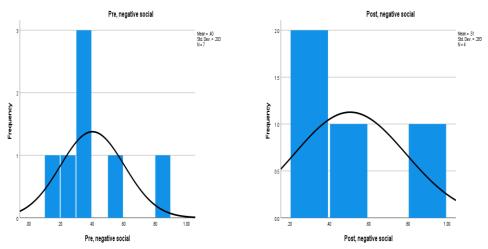


Figure A5: Histograms for Social Negative talk category data (pre- and post-EC training)

Table A8: SPSS output for tests of normality on Social Negative category data (pre- and post-EC training)

Tests of Normality							
	Kolm	ogorov-Smii	'nov ^a		Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.	
Pre, negative social	.262	7	.159	.887	7	.261	
Post, negative social	.261	4		.857	4	.250	

a. Lilliefors Significance Correction

SEL Validating

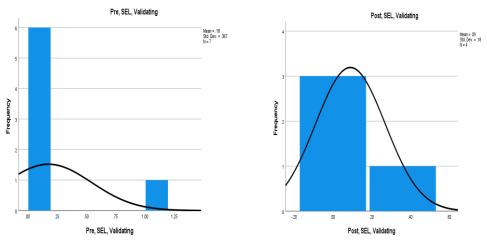


Figure A6: Histograms for SEL Validating talk category data (pre- and post-EC training)

Table A9: SPSS output for tests of normality on SEL Validating category data (pre- and post-EC training)

Tests of Normality							
	Kolm	ogorov-Smii	'nov ^a		Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.	
Pre, SEL, Validating	.397	7	.001	.570	7	.000	
Post, SEL, Validating	.441	4		.630	4	.001	

a. Lilliefors Significance Correction

SEL Labelling

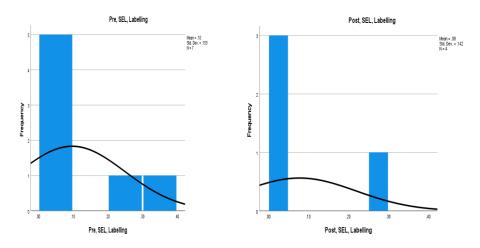


Figure A7: Histograms for SEL Labelling talk category data (pre- and post-EC training)

Table A10: SPSS output for tests of normality on SEL Labelling category data (pre- and post-EC training)

Tests of Normality							
	Kolm	ogorov-Smii	rnov ^a	!	Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.	
Pre, SEL, Labelling	.310	7	.040	.725	7	.007	
Post, SEL, Labelling	.407	4		.679	4	.006	

a. Lilliefors Significance Correction

SEL Dismissing

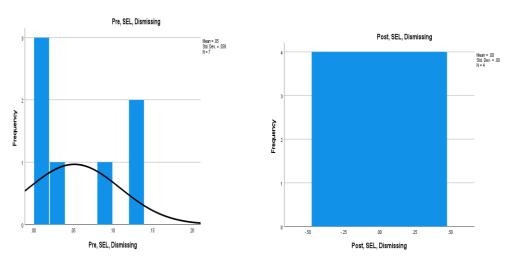


Figure A8: Histograms for SEL Dismissing talk category data (pre- and post-EC training)

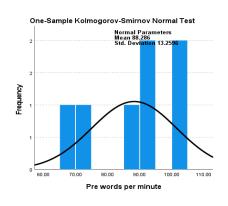
Table A11: SPSS output for tests of normality on SEL Dismissing category data (pre- and post-EC training)

Tests of Normality

	Kolm	ogorov-Smir	'nov ^a			
	Statistic	df	Sig.	Statistic	df	Sig.
Pre, SEL, Dismissing	.242	7	.200*	.824	7	.070
Post, SEL, Dismissing		4			4	

^{*.} This is a lower bound of the true significance.

Words per Minute (WPM)



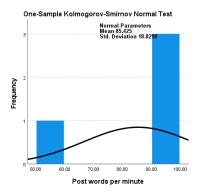


Figure A9: Histograms of data for Words per Minute (pre- and post-EC training)

Table A12: SPSS output for tests of normality on Words per Minute data (pre- and post-EC training)

Hypothesis Test Summary

	Null Hypothesis	Test	Sig. ^{a,b}	Decision
1	The distribution of Pre words per minute is normal with mean 88.29 and standard deviation 13.25964.	One-Sample Kolmogorov- Smirnov Test	.200°	Retain the null hypothesis.
2	The distribution of Post words per minute is normal with mean 85.43 and standard deviation 18.82983.	One-Sample Kolmogorov- Smirnov Test	.d	Reject the null hypothesis.

a. The significance level is .050.

a. Lilliefors Significance Correction

b. Lilliefors Corrected. Asymptotic significance is displayed.

c. This is a lower bound of the true significance.

d. Cannot be computed because there are less than 5 records.

Appendix H3: Test Statistics Output Within Research Phase: Mann-Whitney U tests PRE EC TRAINING

Table A13: SPSS Mann-Whitney U test outputs for ranks: Learning Positive and Learning Negative talk categories

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к	а	n	ĸ	S

	Talk Category	N	Mean Rank	Sum of Ranks
WPM	PreLrnPos	7	8.50	59.50
	PreLrnNeg	7	6.50	45.50
	Total	14		

Table A14: SPSS Mann-Whitney U test outputs for test statistics: Learning Positive and Learning Negative talk categories

Test Statistics^a

	WPM
Mann-Whitney U	17.500
Wilcoxon W	45.500
Z	895
Asymp. Sig. (2-tailed)	.371
Exact Sig. [2*(1-tailed Sig.)]	.383 ^b

a. Grouping Variable: Talk Category

b. Not corrected for ties.

Table A15: SPSS Mann-Whitney U test outputs for ranks: Social Positive and Social Negative talk categories

R	а	n	ks

	Talk Category	N	Mean Rank	Sum of Ranks
WPM	PreSocPos	7	5.93	41.50
	PreSocNeg	7	9.07	63.50
	Total	14		

Table A16: SPSS Mann-Whitney U test outputs for test statistics: Social Positive and Social Negative talk categories

Test Statistics^a

	WPM
Mann-Whitney U	13.500
Wilcoxon W	41.500
Z	-1.407
Asymp. Sig. (2-tailed)	.159
Exact Sig. [2*(1-tailed Sig.)]	.165 ^b

a. Grouping Variable: Talk Category

Table A17: SPSS Mann-Whitney U test outputs for ranks: SEL Validating and SEL Dismissing talk categories

Ranks

	Talk Category	N	Mean Rank	Sum of Ranks
WPM	PreSEVal	7	7.57	53.00
	PreSEDis	7	7.43	52.00
	Total	14		

Tables A18: SPSS Mann-Whitney U test outputs for test statistics: SEL Validating and SEL Dismissing talk categories

Test Statistics^a

	WPM
Mann-Whitney U	24.000
Wilcoxon W	52.000
Z	068
Asymp. Sig. (2-tailed)	.946
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^b

a. Grouping Variable: Talk Category

b. Not corrected for ties.

Table A19: SPSS Mann-Whitney U test outputs for ranks: SEL Labelling and SEL Dismissing talk categories

Ranks

	Talk Category	N	Mean Rank	Sum of Ranks
WPM	PreSELab	7	7.43	52.00
	PreSEDis	7	7.57	53.00
	Total	14		

Table A20: SPSS Mann-Whitney U test outputs for test statistics: SEL Labelling and SEL Dismissing Negative talk categories

Test Statistics^a

	WPM
Mann-Whitney U	24.000
Wilcoxon W	52.000
Z	068
Asymp. Sig. (2-tailed)	.946
Exact Sig. [2*(1-tailed Sig.)]	1.000 ^b

a. Grouping Variable: Talk Category

POST EC TRAINING

Table A21: SPSS Mann-Whitney U test outputs for ranks: Learning Positive and Learning Negative talk categories

Ranks

	Talk Cat POST	N	Mean Rank	Sum of Ranks
WPM Post Training	PostLrnPos	4	5.13	20.50
	PostLrnNeg	4	3.88	15.50
	Total	8		

Table A22: SPSS Mann-Whitney U test outputs for test statistics: Learning Positive and Learning Negative talk categories

Test Statistics^a

WPM Post

	Training
Mann-Whitney U	5.500
Wilcoxon W	15.500
Z	726
Asymp. Sig. (2-tailed)	.468
Exact Sig. [2*(1-tailed Sig.)]	.486 ^b

a. Grouping Variable: Talk Cat POST

b. Not corrected for ties.

Table A23: SPSS Mann-Whitney U test outputs for ranks: Social Positive and Social Negative talk categories

Ranks

	Talk Cat POST	N	Mean Rank	Sum of Ranks
WPM Post Training	PostSocPos	4	3.88	15.50
	PostSocNeg	4	5.13	20.50
	Total	8		

Table A24: SPSS Mann-Whitney U test outputs for test statistics: Social Positive and Social Negative talk categories

Test Statistics^a

WPM Post

	Training
Mann-Whitney U	5.500
Wilcoxon W	15.500
Z	726
Asymp. Sig. (2-tailed)	.468
Exact Sig. [2*(1-tailed Sig.)]	.486 ^b

a. Grouping Variable: Talk Cat POST

Table A25: SPSS Mann-Whitney U test outputs for ranks: SEL Validating and SEL Dismissing talk categories

Ranks

	Talk Cat POST	N	Mean Rank	Sum of Ranks
WPM Post Training	PostSEVal	4	5.00	20.00
	PostSEDis	4	4.00	16.00
	Total	8		

Table A26: SPSS Mann-Whitney U test outputs for test statistics: SEL Validating and SEL Dismissing talk categories

Test Statistics^a

WPM Post

	Training
Mann-Whitney U	6.000
Wilcoxon W	16.000
Z	-1.000
Asymp. Sig. (2-tailed)	.317
Exact Sig. [2*(1-tailed Sig.)]	.686 ^b

a. Grouping Variable: Talk Cat POST

b. Not corrected for ties.

Table A27: SPSS Mann-Whitney U test outputs for ranks: SEL Labelling and SEL Dismissing talk categories

Ranks

	Talk Cat POST	N	Mean Rank	Sum of Ranks
WPM Post Training	PostSELab	4	5.50	22.00
	PostSEDis	4	3.50	14.00
	Total	8		

Table A28: SPSS Mann-Whitney U test outputs for test statistics: SEL Labelling and SEL Dismissing talk categories

Test Statistics^a

WPM Post

	Training
Mann-Whitney U	4.000
Wilcoxon W	14.000
Z	-1.512
Asymp. Sig. (2-tailed)	.131
Exact Sig. [2*(1-tailed Sig.)]	.343 ^b

a. Grouping Variable: Talk Cat POST

Appendix H4: Test Statistics Outputs Between Research Phases: Wilcoxon Signed Rank Tests (Related Samples)

Pre and Post Learning: Positive

Table A29: SPSS Wilcoxon Signed Rank test Hypothesis Test Summary output: Pre and Post Positive Learning talk categories

Hypothesis Test Summary

Null Hypothesis	Test	Sig. ^{a,b}	Decision
The median of differences between Pre, positive learning and Post, positive learning equals 0.	Related-Samples Wilcoxon Signed Rank Test	1.000	Retain the null hypothesis.

a. The significance level is .050.

Table A30: SPSS Wilcoxon Signed Rank Test Summary output: Pre and Post Positive Learning talk categories

Related-Samples Wilcoxon Signed Rank Test Summary

Total N	3
Test Statistic	3.000
Standard Error	1.871
Standardized Test Statistic	.000
Asymptotic Sig.(2-sided test)	1.000

No statistically significant difference in the number of positive learning statements used by the adults pre and post EC training.

b. Asymptotic significance is displayed.

Pre and Post Learning: Negative

Table A31: SPSS Wilcoxon Signed Rank test Hypothesis Test Summary output: Pre and Post Negative Learning talk categories

Hypothesis Test Summary

	Null Hypothesis	Test	Sig. ^{a,b}	Decision
1	The median of differences between Pre, negative learning and Post, negative learning equals 0.	Related-Samples Wilcoxon Signed Rank Test	1.000	Retain the null hypothesis.

a. The significance level is .050.

Table A32: SPSS Wilcoxon Signed Rank Test Summary output: Pre and Post Negative Learning talk categories

Related-Samples Wilcoxon Signed Rank Test Summary

Total N	3
Test Statistic	3.000
Standard Error	1.871
Standardized Test Statistic	.000
Asymptotic Sig.(2-sided test)	1.000

No statistically significant difference in the number of negative learning statements used by the adults pre and post EC training.

b. Asymptotic significance is displayed.

Pre and Post Social: Positive

Table A33: SPSS Wilcoxon Signed Rank test Hypothesis Test Summary output: Pre and Post Positive Social talk categories

Hypothesis Test Summary

	Null Hypothesis	Test	Sig. ^{a,b}	Decision
1	The median of differences between Pre, positive social and Post, positive social equals 0.	Related-Samples Wilcoxon Signed Rank Test	.068	Retain the null hypothesis.

a. The significance level is .050.

Table A34: SPSS Wilcoxon Signed Rank Test Summary output: Pre and Post Positive Social talk categories

Related-Samples Wilcoxon Signed Rank Test Summary		
Total N	4	
Test Statistic	10.000	
Standard Error	2.739	
Standardized Test Statistic	1.826	
Asymptotic Sig.(2-sided test)	.068	

No statistically significant difference in the number of positive social statements used by the adults pre and post EC training.

b. Asymptotic significance is displayed.

Pre and Post Social: Negative

Table A35: SPSS Wilcoxon Signed Rank test Hypothesis Test Summary output: Pre and Post Negative Social talk categories

Hypothesis Test Summary

Null Hypothesis		Test	Sig. ^{a,b}	Decision
1	The median of differences between Pre, negative social and Post, negative social equals 0.	Related-Samples Wilcoxon Signed Rank Test	.465	Retain the null hypothesis.

a. The significance level is .050.

Table A36: SPSS Wilcoxon Signed Rank Test Summary output: Pre and Post Negative Social talk categories

Related-Samples Wilcoxon Signed Rank Test Summary

Total N	4
Test Statistic	7.000
Standard Error	2.739
Standardized Test Statistic	.730
Asymptotic Sig.(2-sided test)	.465

No statistically significant difference in the number of negative social statements used by the adults pre and post EC training.

b. Asymptotic significance is displayed.

Pre and Post SEL: Validating

Table A37: SPSS Wilcoxon Signed Rank test Hypothesis Test Summary output: Pre and Post SEL Validating talk categories

Hypothesis Test Summary

	Null Hypothesis	Test	Sig. ^{a,b}	Decision
1	The median of differences between Pre, SEL, Validating and Post, SEL, Validating equals 0.	Related-Samples Wilcoxon Signed Rank Test	.180	Retain the null hypothesis.

a. The significance level is .050.

Table A38: SPSS Wilcoxon Signed Rank Test Summary output: Pre and Post SEL Validating talk categories

Related-Samples Wilcoxon Signed Rank Test Summary

Total N	4
Test Statistic	.000
Standard Error	1.118
Standardized Test Statistic	-1.342
Asymptotic Sig.(2-sided test)	.180

No statistically significant difference in the number of SEL validating statements used by the adults pre and post EC training.

b. Asymptotic significance is displayed.

Pre and Post SEL: Labelling

Table A39: SPSS Wilcoxon Signed Rank test Hypothesis Test Summary output: Pre and Post SEL Labelling talk categories

Hypothesis Test Summary

Null Hypothesis		Test	Sig. ^{a,b}	Decision
1	The median of differences between Pre, SEL, Labelling and Post, SEL, Labelling equals 0.	Related-Samples Wilcoxon Signed Rank Test	.180	Retain the null hypothesis.

a. The significance level is .050.

Table A40: SPSS Wilcoxon Signed Rank Test Summary output: Pre and Post SEL Labelling talk categories

Related-Samples Wilcoxon Signed Rank Test Summary

Total N	4
Test Statistic	.000
Standard Error	1.118
Standardized Test Statistic	-1.342
Asymptotic Sig.(2-sided test)	.180

No statistically significant difference in the number of SEL labelling statements used by the adults pre and post EC training.

b. Asymptotic significance is displayed.

Pre and Post SEL: Dismissing

Table A41: SPSS Wilcoxon Signed Rank test Hypothesis Test Summary output: Pre and Post SEL Dismissing talk categories

Hypothesis Test Summary

	Null Hypothesis	Test	Sig. ^{a,b}	Decision	
1	The median of differences between Pre, SEL, Dismissing and Post, SEL, Dismissing equals 0.	Related-Samples Wilcoxon Signed Rank Test	.109	Retain the null hypothesis.	

a. The significance level is .050.

Table A42: SPSS Wilcoxon Signed Rank Test Summary output: Pre and Post SEL Dismissing talk categories

Related-Samples Wilcoxon Signed Rank Test Summary

Total N	4
Test Statistic	.000
Standard Error	1.871
Standardized Test Statistic	-1.604
Asymptotic Sig.(2-sided test)	.109

No statistically significant difference in the number of SEL dismissing statements used by the adults pre and post EC training.

b. Asymptotic significance is displayed.

Pre and Post Words Per Minute (WPM)

Table A43: SPSS Wilcoxon Signed Rank test Hypothesis Test Summary output: Pre and Post WPM categories

Hypothesis Test Summary

Null Hypothesis			Test	Sig. ^{a,b}	Decision
	1	The median of differences between Pre words per minute and Post words per minute equals 0.	Related-Samples Wilcoxon Signed Rank Test	.068	Retain the null hypothesis.

a. The significance level is .050.

Table A44: SPSS Wilcoxon Signed Rank Test Summary output: Pre and Post WPM categories

Related-Samples Wilcoxon Signed Rank Test Summary

Total N	4
Test Statistic	.000
Standard Error	2.739
Standardized Test Statistic	-1.826
Asymptotic Sig.(2-sided test)	.068

No statistically significant difference in the number of words per minute used by the adults pre and post EC training.

b. Asymptotic significance is displayed.

Appendix I: Coding Levels for Semi-Structured Interviews

Appendix I1: Coding Levels, Definitions and Examples for Semi-Structured Interview Transcripts (pre-EC training)

Table A45: Semi-structured interviews (Exploratory phase): Coding nodes, definitions, transcript examples and key literature

Coding Node	Sub Node 1	Sub Node 2	SubNode 3	Definition	Transcript example Bracketed number = participant number	Key Literature from which code is derived	
Introduction and Experience (Setting tone and	Experience			Experience of participant: Job role; years of service; age/year groups taught; types of schools worked in	"I am still in year two but I do now do covering. I teach one afternoon a week, so year one and two." (12)	Denscombe (2010) – interview structure	
ensuring participant is comfortable)	Prior Training	Helpful		Key training experiences that have been particularly enjoyable/useful to their role	"We did Team Teach Training, so, obviously, all that sort of de-escalation and body language and all of those sorts of things as well, which was really helpful." (4)	n/a: information to ascertain thoughts/feelings on prior CPD	
		Unhelpful		Key training experiences that have been unhelpful, detrimental or against personal values in relation to role	"I think we had a brief training on characteristics and that, about ADHD, ASD and all that, but it was a lot of information in one session." (12)		
Classroom relationships (participant use,	Importance	Personal		Reference to the importance of relationships	"Yes, so it's all about being sure that everybody gets their voice heard and everybody has their turn." (10)	Bergin and Bergin (2009): secure type relationships between	
development and value of teacher- pupil relationships)	Schoo focus			Critical incidents	Reference to a particular incident where relationships have broken down and the impact of such	"And that was the biggest problem in the class and the reason why lessons were so challenging he found it very difficult to build those relationships" (4)	teachers/pupils Classroom relational importance/attitudes: Frymier (2007); Davis
			Academic versus relational	Reference to academic intent of schooling over relationships	"I think it's hugely important, at the beginning, to build those relationships. But also, to try and keep, try and maintain that focus on, we are in school, we're here to learn." (2)	 (2003); Pianta (2001) Colley and Cooper (2017; pp254) behaviourist principles Harrop and Swinson 	
		School focus	Clarity versus ambiguity	Interpretation of key principles driving relationships in the school and shared vision	"Every teacher does it differently but you're really promoting that within the classroom, promoting that language and that personal understanding." (4)	(2000); White (1975); Schreeve et al (2002); Apter et al. (2012) – categorisation of	
	Structure	Own classroom		How relationships are developed in the classroom – strategies	"But it's a reward system if you say, 'oh I wonder if we can get class dojos, we can all show we're in the green zone, sitting well and listening". (4)	language & impact	

Teacher Talk (use and value of teacher talk in	Use in classroom	School structure Positive versus negative	Clarity versus ambiguity	How relationships are developed in the school (systems) Participant perception of 'positive' talk and how this presents in the classroom	"For some children, they have their peg with their name on. For some children it's just a little sticky they can put up against it." (1) "Especially when it comes down to the learning you can quite often find yourself going into a bit of a negative spin,if someone has been reluctant to get on all	Bergin and Bergin (2009; pp158). Coercion versus Positive talk
teacher talk in the classroom and within the school as whole)		Academic versus social Why		Participant perception of academic versus social talk Participant perception on why	day" (2) "so I know where I can push them and where I need to hold back. Where it needs to be more pastoral and where it needs to be more academic pushing." (10) "If it's not me, who it is, and being quite	 Bomber (2015; pp132/135/137/146) Explicit (specificity) language Ubha and Cahill (2011;
	Principles	vviiy		they use the types of talk	transparent with them and letting them know, well the reason I'm not here is because I'm doing this" (3)	pp289) Consistent,positive languageColley and Cooper (2017; pp254)
		Personal experience		Changes to practice in teacher talk or particular notable instances	"And then that sort of was reinforced during the PGCE focusing on the positivity and making sure that you're recognising the good things" (2)	 behaviourist principles Harrop and Swinson (2000); White (1975); Schreeve et al (2002);
	Importance/ Value attitude			Participant attitude towards adult versus pupil talk	"if you're modelling it in a genuine way, they're more likely to take it on board. And, also, they're more likely to respect that you're a person." (2)	Apter et al. (2012) – Categorisation of language
Emotion Coaching Training expectation	Personal	Classroom practice		Participant perception on how EC training may/may not impact classroom	"So maybe some questions to keep in your head of what you could ask. And maybe behaviour techniques of how [child] he's difficult to get into class. So maybe some verbal ways of getting him in." (12)	 Gottman (1997; p7); Gottman and DeClaire (1997): principles of EC Havighurst (2010) changes in participant
(attitudes and feelings towards upcoming EC training)		How it fits in with prior experience		Participant perception on how EC training may/may not fit alongside into their prior training or experience	"It will be interesting just to see how much of what I do fits with that anyway, and whether there's things that I could do that are a bit different, that are worth trying, and that sort of thing." (3)	attitudes • Apter et al. (2010) where teachers knowledge in increased, relationships improve
	School	How it fits into school structure		How EC may/may not work alongside pre-existing systems	"And it's something else that's in our development plan, is attachment training for staff, because it needs to happen". (1)	Rose et al. (2016) improved empathy in staff across school
		Other staff		How EC may/may not impact on other staff's practice	"For the staff, I'd say, it would be to give them a really clear framework, and then make that connection with what we're all doing, how it links to our behaviour management". (1)	Bariola et al (2011) macro relational impact of EC outside of the classroom

Appendix I2: Coding levels, definitions and examples for semi-structured interview transcripts (post-EC training)

Table A46: Semi-structured interviews (Explanatory phase): Coding nodes, definitions, transcript examples and key literature

Coding Node	Sub Node 1	Sub Node 2	Definition	Transcript example Bracketed number = participant number	Key Literature from which code is derived
Introduction and Experience (Setting tone and ensuring participant is comfortable in environment)	Experience		Changes in experience of participant since last interview: Job role; age/year groups taught; leadership role/s	"I am but it's a mixed year group of three/four now. So, whereas, the class I had before, I would have three/four, then took them into four, so I've had some of them two years, this is now a brand new class." (7)	Denscombe (2010) – interviews structure
	Training		Key training experiences that have been particularly enjoyable or useful to their job role since last interview	"I've been able to sort of re-evaluate bits as well. And I read, When The Adults Change, by Paul Dix, which I know [other staff] used for, as a sort of basis for their thinking around our behaviour policies". (3)	n/a – information to ascertain thoughts/feelings on prior CPD
Classroom relationships (participant use, development and value of teacher- oupil relationships)	Importance	Personal	The importance of relationships and changes in attitude or viewpoints since the EC training/last interview	"I've just learnt that relationships with the children are really important". (4)	Bergin and Bergin (2009) – importance of the secure type relationship Studies supporting classroom relational importance/attitudes: Frymier (2007); Davis (2003); Pianta (2001) Colley and Cooper (2017; pp254) Reference to national policy of behaviourist principles Harrop and Swinson (2000); White (1975); Schreeve et al (2002); Apter et al. (2012) – categorisation of positive versus negative talk and impact on relationships
	Structure	Own classroom	Changes in classroom approach to relationships since last interview and/or EC training	"Whereas, now, I'm using it more as sort of engaging in learning and accepting challenge, because, on the whole, they are ready". (3)	
		School structure	Changes in school structures/approach to relationships since last interview and/or EC training	"Set it alongside our values, just really trying to say, this is where it fits, it's not an add-on, it's just something that will strengthen what we're already trying to achieve." (1)	
Teacher Talk (use and value of talk in the classroom and within the school as whole)	Importance	Personal	Reference to the importance of teacher talk. Changes in attitude or viewpoints since the EC training/last interview	But also build that trust and that stability by letting them know, 'this is what I expect' These are the kind of, the expectations, the rules in the classroom." (4)	 Bergin and Bergin (2009; pp158). Coercion versus Positive Bomber (2015; pp132/135/137/146) Explicit (specificity) language; positivity Ubha and Cahill (2011; pp289) Consistent, positive language Colley and Cooper (2017; pp254) Behaviourist principles Harrop and Swinson (2000); White (1975); Schreeve et al (2002); Apter et al. (2012) –
	Structure	Own classroom	Changes in teacher talk since last interview and/or EC training	"I try and make sure that any verbal feedback I give to the children, is really focused and really specific and really positive." (4)	
		School structure	Changes in school structures/approach to	"I think for the children, knowing that whoever adult's speaking to them, it's	

			teacher talk since last interview and/or EC training	going to be broadly the same thing, is helpful for them as well." (3)	categorisation of positive versus negative classroom language
Emotion Coaching Training (attitudes and feelings towards the EC training)	Experience		Attitudes/memories of EC training	"I remember the videos that we watched and the comparisons between how you would approach a situation. I remember watching the clip from Inside Out" (2)	 Gottman (1997; p7); Gottman and DeClaire (1997): principles of the parenting/educational programme in EC Havighurst (2010) study demonstrated
	Impact/ Benefits	Individual/ personal change	Perceptions of positive aspects of EC training for individual practice	"I think naming the emotion and talking about whether it's an appropriate strength of emotion for the situations, has really helped her" (3)	changes in participant attitude – more empathetic, self awareness and positivity • Apter et al. (2010) where teachers knowledge in increased, relationships improve • Rose et al. (2016) improved empathy in staff across school • Bariola et al (2011) macro relational impact of EC outside of the classroom • Further critique of EC needed here
		School/ others' practice	Perception on how EC training may impact colleagues or school system	"And we've actually now reframed our school, our strategic aims now we have, and the fourth one is to become a mentally healthy school". (1)	
	Challenges	Personal	Perceptions of challenges to implementing EC in classroom/for individual practice	"I think it is just giving time, I think, which we don't really have. It's a commodity that we have very little of". (9)	
		School practice	Perceptions of challenges of EC for whole school implementation	"But I still think, with some colleagues, it's a much bigger ask of them to focus on their own" (1)	