

**Teacher perceptions of change through participation in the
Incredible Years
Teacher Classroom Management Programme**

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Abstract

Background

An understanding of the process of teacher change is necessary to explain the outcomes of professional development and to identify under what conditions, how and why change may or may not occur. No research has qualitatively examined the process or factors which influence teacher change over the course of training in the Incredible Years Teacher Classroom Management (IY TCM) programme.

Aims

This study aimed to explore teacher perceptions of the process and impact of teacher change through participation in the IY TCM programme in relation to outcomes for students. It also aimed to investigate the factors which influence teacher change and the relationship between teacher perceived changes in their students' social, emotional and behavioural functioning and self-perceived teacher change.

Sample

Participants were 12 primary school teachers who attended training in the IY TCM programme in Ireland.

Methods

A mixed methods design with a predominantly qualitative focus was employed. Teacher perceptions of change in their knowledge, skills, beliefs and practices in relation to outcomes for students and the factors which influence this change were explored using focus groups and interviews. Teacher completion of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) for 9 children pre- and post-intervention was used as a quantitative measure of teacher perceptions of change in their students' social, emotional and behavioural functioning.

Findings

Findings illustrate the complexity of the process of teacher change over the course of IY TCM training which can be explained in relation to theoretical models of change through professional development. Positive changes in teacher classroom management practice, efficacy, wellbeing and teacher social-emotional competence were identified in conjunction with outcomes for students' learning, behaviour and social-emotional wellbeing. Factors which supported and hindered change at individual, programme and school levels were found.

Conclusions

This study has contributed to an understanding of the process and impact of teacher change through IY TCM training as well as identifying the conditions necessary to support change at individual (e.g. positive attitude and willingness to change, time pressures, seeing the positive impact of programme for teachers and students), school (e.g. whole school approach, support from colleagues and principal, consistency of behaviour management) and programme levels (e.g. IY TCM programme structure, content and training methods), information which can be used to inform future training and support for teachers in programme implementation.

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1 REVIEW PAPER

The Incredible Years Teacher Classroom Management (IY TCM; Webster-Stratton, 1994, 2006) programme is part of an evidence-based set of parent, teacher, and child programmes developed for treating and preventing conduct problems and promoting social competence and emotional regulation in young children. Although the effectiveness of the IY TCM programme has been extensively investigated, there is limited research which has qualitatively examined teachers' perceptions of the intervention. Theory and research on teacher change through professional development (PD) indicates that teachers change in different ways and amounts as a result of participating in PD and multiple factors influence the type and amount of change they experience. As noted by Clarke and Hollingsworth (2002, p. 947), "The optimization of the outcomes of a process is facilitated by the understanding of that process. If we are to facilitate the professional development of teachers, we must understand the process by which teachers grow professionally and the conditions that support and promote that growth". The current study will therefore examine teachers' perceptions of change in themselves over the course of IY TCM training in relation to student outcomes and the factors which influence this change. It is hoped that this will support an understanding of the process of teacher change that results in improved student outcomes through participation in the IY TCM programme.

The review paper will provide a brief overview of the impact of challenging behaviour upon teaching and learning in school. Risk and protective factors associated with the development and maintenance of behavioural difficulties in young children will also be outlined, with particular reference to the role of teacher classroom management training and the use of evidence-based interventions. An overview of the IY TCM programme will subsequently be provided as it is the focus of the intervention in the present study. Although no research was identified which has directly examined the process of teacher change through participation in the programme, a review of available IY TCM research will be provided as a comprehensive account of its

evidence base as well as a context and rationale for the development of the research questions in the present study. As the researcher was interested in examining teacher change through participation in IY TCM, a second review question aims to identify theoretical models of teacher change through professional development which will be used as a basis for understanding the process, outcomes and factors which influence teacher change as a result of the programme. The paper will conclude by drawing together the available evidence and outlining areas whereby further research is required, culminating in the research questions for the present study.

1.1 CHALLENGING BEHAVIOUR IN SCHOOLS

Children's behavioural and emotional self-regulation, attention to instruction, co-operation and compliance, and adherence to classroom routines provide the foundation for academic success in school (Snyder *et al.*, 2011). Despite receiving significant attention in the literature, there is no standard agreed definition of social, emotional and behavioural difficulties (SEBD) (Cooper & Jacobs, 2011; Department of Education and Science, 2006, 1993). This lack of consensus is underpinned by different views on the origins of the difficulties as within-child variables or as a socially mediated phenomenon. For the purpose of this study, the term may be defined as "...disturbing and/or disruptive behaviour that interferes with social functioning and academic engagement...behaviour may be termed 'acting-out' (disruptive) or 'acting-in' (showing withdrawal and/or avoidance)" (Cooper & Jacobs, 2011, p. 8-9). The term also includes psychiatric disorders such as Attention Deficit/ Hyperactivity Disorder (ADHD), Oppositional Defiant Disorder (ODD), and Conduct Disorder (CD). The National Council for Special Education (Cooper & Jacobs, 2011) in Ireland recommends that depressive disorders are added to this list whilst UK guidance also acknowledges the potential for overlap between definitions of SEBD and those applied to children said to have mental health difficulties (Department for Education and Skills, 2001; Cole & Visser, 2005). Irish research by Shevlin, Kenny and Loxley (2008) maintains that students with SEBD are the most difficult to accommodate in schools.

Reported figures suggest that as many as 25% of young children in the US present with emotional and behavioural problems, with even higher rates for children from low-income families (Joseph & Strain, 2003; Qi & Kaiser, 2003; Snyder, 2001). While few studies have examined the prevalence of SEBD in Ireland, data from the large scale Growing up in Ireland Study noted that teachers considered 15% of nine year old children to have borderline or problematic levels of difficulty (Nixon, 2012).

The literature identifies a wide range of behaviour that can be viewed as problematic by teachers. Much of the discussion over definitions revolves around what is perceived to be disruptive, which includes both perceptions of the frequency of certain behaviours along with their seriousness (Department for Education, 2012). Challenging behaviour can be defined as “any repeated pattern of behavior or perception of behavior that interferes with or is at risk of interfering with optimal learning or engagement in prosocial interactions with peers and adults” (Powell *et al.*, 2007, p. 83). Challenging behaviours universally identified as of most concern to teachers include calling out, non-compliance, not listening, poor concentration, inattention, problems regulating emotions, inability to form relationships with adults or peers, difficulty engaging in learning activities, and arguing when reprimanded (Alter *et al.*, 2013; Fox & Lentini, 2006; Arbuckle & Little, 2004; Giallo & Little, 2003; Stephenson *et al.*, 2000). An issue raised by some researchers is that of context, which can in turn affect the perception of the types and seriousness of behaviours. Behaviour can be perceived as unacceptable in one setting and be quite acceptable in another setting, therefore, differences in the observer, location or situation of the incident may alter perceptions (Watkins & Wagner, 2000). Beaman *et al.* (2007) summarise the context of misbehaviour as influencing what teachers view as most serious (i.e. those behaviours that affect teachers and their teaching practice rather than those which impact on the pupils they teach).

A substantial body of research has shown that young children with early-onset emotional and behavioural difficulties are at significantly greater risk of severe antisocial problems, academic underachievement, peer rejection, school dropout, violence, mental health problems and drug abuse in adolescence and adulthood (Whitted, 2011; Moffitt & Scott, 2009; Costello *et al.*, 2006; Webster-Stratton & Reid, 2003; Raver & Knitzer, 2002; Rimm-Kaufman *et al.*, 2000). Although the above studies were mainly conducted in the US, similar difficulties exist in the UK and the link between disruptive behaviour and problems in school, such as school attendance, school failure and inadequate peer relationships have been acknowledged in publications such as Every Child Matters (DfES, 2003) and Cochrane reviews (Woolfenden *et al.*, 2001).

In contrast to challenging behaviours associated with SEBD, prosocial behaviours refer to proactive and reactive responses to the needs of others that promote wellbeing (Hastings *et al.*, 2007). Children who exhibit prosocial behaviours have higher social and emotional competence (SEC) and are more accepted by their peers (Elias *et al.*, 2003; Katz & McClellan, 1997). The definition of SEC by the Collaborative for Academic, Social, and Emotional Learning (CASEL, 2005, 2008) involves five major emotional, cognitive, and behavioural competencies: self-awareness, social awareness, responsible decision making, self-management and relationship management. In the classroom setting, it includes behaviours such as control of emotions, care about peers, effective communication with peers, engagement in group work, and maintaining a healthy relationship with others in school. SEC, in turn, provides the foundation for better adjustment and academic performance as reflected in more positive social behaviours, fewer conduct problems, less emotional distress, and improved academic performance (Greenberg *et al.*, 2003; Zins *et al.*, 2004; Zins *et al.*, 2007a; Zins *et al.*, 2007b).

1.1.1 Risk and Protective Factors for the Development and Maintenance of Behavioural Difficulties in Young Children

1.1.1.1 Child Biological and Developmental Factors

Persistent antisocial behaviours are sometimes linked to early maladaptive development of a child's internal organisation system and developmental abilities. Neurocognitive symptoms and certain temperamental characteristics such as inattentiveness, impulsivity, ADHD, and high rates of aggressive responses have been reported in children with behavioural difficulties (Webster-Stratton & Herman, 2010). Other child factors include depressive symptoms and deficits and/or delays in language and cognitive skills, social and emotional play skills, emotional regulation, and peer interactions (Dishion & Piehler, 2007). These children enter school with poor school readiness skills which further increase the likelihood of behaviour problems in the classroom (Malecki & Elliott, 2002).

1.1.1.2 Family Factors

Social learning theory proposes that early childhood symptoms of behavioural difficulties largely develop from “reciprocal psychological interactions” with parents in the home environment (Patterson *et al.*, 1992; Bandura, 1986). Parenting risk factors associated with the development of conduct problems include permissive, neglectful, rigid, and/or inconsistent parenting, harsh or abusive discipline, and low levels of monitoring (Webster-Stratton & Herman, 2010; Patterson & Dishion, 1985). Likewise, parents play a central role in children's development of cognitive coping styles and later internalising problems through modelling and selective reinforcement of those behaviours (Ostrander & Herman, 2006). Specific parent interpersonal characteristics put parents and children at risk for developing maladaptive interactions including parent psychopathology, parental conflict and divorce, maternal insularity, and lack of support. Low income is also a risk factor for the early onset of conduct problems (Webster-Stratton & Herman, 2010).

1.1.1.3 Teacher Factors (Classroom Management)

Both the curriculum and the quality of teaching have been identified as factors which can contribute to behavioural difficulties (e.g. Cooper & Jacobs, 2011). The emotional climate of the classroom and the quality of teacher-child relationships have also been shown to play a critical role in reducing problem behaviours among children at risk (Hamre & Pianta, 2001, 2006). Teachers who proactively reinforce children's prosocial behaviours by maintaining well-managed, emotionally positive classrooms are likely to support the development of appropriate social behaviour and emotional self-regulation that is a prerequisite for academic success (Webster-Stratton & Reid, 2004; Webster-Stratton *et al.*, 2004; Webster-Stratton & Taylor, 2001). Considerable research has demonstrated that effective teacher classroom management strategies promote student interest in learning (Kunter *et al.*, 2007), enhance academic achievement and school readiness (Webster-Stratton & Reid, 2004), and prevent and reduce disruptive behaviour (Hawkins *et al.*, 1999; Kellam *et al.*, 1998). On the other hand, ineffective classroom management practices interfere with students' motivation and on-task learning and contribute to escalating risk for developing disruptive behaviour problems (Webster-Stratton *et al.*, 2004; Kellam *et al.*, 1998). Transactional theories of development suggest that classrooms become chaotic and difficult to manage when children with behavioural difficulties engage in a spiraling cycle of emotionally negative "coercive processes" with teachers (Ritchie & Howes, 2003), whereby their oppositional and/or negative behaviour is reinforced either by high incidences of critical comments and/or punishment or by teachers giving in to their demands (Patterson *et al.*, 1992; Reinke & Herman, 2002). As Patterson *et al.* (1992) described, these patterns of coercive pupil-teacher interactions contribute to negative outcomes including peer rejection, negative school reputations, academic failure, and further escalation of antisocial problems.

Recent views of classroom management in the literature go beyond a commonly held view that it is about maintaining order and control (Brophy, 2006). Student socialisation has been included within the broader definition of classroom management as “the actions teachers take to create an environment that supports and facilitates both academic and social-emotional learning” (Evertson & Weinstein, 2006, p. 4). Simonsen *et al.* (2008) defined effective classroom management in terms of five critical evidence-based features: (a) maximising structure, (b) establishing and teaching positively stated expectations, (c) actively engaging students in instruction, (d) implementing a continuum of strategies to increase appropriate behaviour, and (e) implementing a continuum of strategies to decrease inappropriate behaviour. Prevention and early intervention strategies for young children with challenging behaviours have included positive proactive approaches which focus on preventing behavioural problems by teaching and practicing new, appropriate behaviours involving the consistent use of behaviour-specific praise and implementation of rewards and sanctions (e.g. Stormont *et al.*, 2007; Fox *et al.*, 2002; Sutherland *et al.*, 2002; Van der Heyden *et al.*, 2001; Stipek & Byler, 2004).

Research has shown that teacher stress and low levels of wellbeing are largely caused by student misbehaviour (Bakker *et al.*, 2007; Evers *et al.*, 2004; Friedman, 2006). Friedman’s (2006) review of teacher stress found that burnout typically results from issues associated with the social-psychological aspects of teaching, from classroom management issues and problematic student-teacher relationships rather than from instructional teaching problems. Conversely, teachers commonly report feeling positive emotions when their students enjoy learning or have positive relationships with them, particularly in cases of difficult or demanding students (Hargreaves, 1998; Sutton & Wheatley, 2003). Therefore, training teachers in effective classroom management should enable them to more efficiently deal with disruptive behaviour and promote social-emotional competence and academic achievement, while lowering the risk of teacher stress and burnout.

1.1.2 Teacher Classroom Management Training

Research indicates that many teachers do not feel prepared to meet the needs of children with SEBD (Reinke *et al.*, 2011). Surveys of early childhood teachers identified managing difficult behaviour in the classroom to be the greatest challenge and the area in which they need additional training (Reinke *et al.*, 2011; Hemmeter *et al.*, 2006). In fact, nearly half of new teachers leave the profession within five years, many citing student misbehaviour as the primary reason (Ingersoll, 2002). In line with international findings, a report commissioned by the Teaching Council in Ireland noted that behavioural difficulties amongst pupils pose significant challenges to teachers and argue that the findings “point to the need to provide teachers with behaviour management skills through initial and continued teacher development” (Darmody & Smith, 2011, p. 42). Contrary to this recommendation, in a related study on CPD from the same cohort of teachers, Banks and Smith (2010, p. 32) found that teachers were more likely to engage in CPD where pupils were more engaged in schoolwork and better behaved. They argue that: “It is a matter of concern that teachers who work with pupils who are disengaged from school life are less likely to take part in CPD. These teachers are the ones who are most likely to be in need of support”.

A variety of factors have been identified in the literature as affecting the development of teacher skills including teacher efficacy (both individual and collective) (Tschannen-Moran *et al.*, 1998; Goddard, 2002), teacher motivation (Smith *et al.*, 2003), quality of school leadership (Rohrbach *et al.*, 2006), collegial support and collaboration (Grossman *et al.*, 2001) and professional development opportunities (Sandholtz & Scribner, 2006). Teacher training is considered to be of major importance in developing the skills needed for addressing social-emotional learning and effective classroom management (Zins *et al.*, 2007a; Zins *et al.*, 2007b). Training teachers to provide a supportive classroom environment and in the use of effective strategies for reducing behaviour problems has been shown to improve the emotional climate of the classroom

(Webster-Stratton *et al.*, 2004, Webster-Stratton, *et al.*, 2008; Raver *et al.*, 2008), reduce child conduct problems (Ialongo *et al.*, 1999) and improve children's social-emotional competence (Flannery *et al.*, 2003). Despite this, many teachers do not receive enough (if any) training in evidence-based classroom-management practices (Begeny & Martens, 2006). A common method for supporting teachers is in-service training. Unfortunately, research has consistently demonstrated that training by itself is insufficient (Allen & Forman, 1984; Fixsen *et al.*, 2005); it is often characterised as a 'train-and-hope' approach in which training is provided through one or two isolated events, after which trainers hope that recipients will apply the newly acquired skill with fidelity and durability. In contrast, positive effects are found when training in classroom management is supplemented with ongoing self-management, coaching, consultation, performance feedback, or some combination thereof (Carter & Van Norman, 2010; Jeffrey *et al.*, 2009; Keller *et al.*, 2005; MacSuga & Simonsen, 2011; Myers *et al.*, 2011; Noell *et al.*, 2002; Noell *et al.*, 2005; Simonsen *et al.*, 2013). Given the documented importance of social-emotional development during the early school years, the relationship between children's social-emotional development and challenging behaviour, the increasing numbers of children with social-emotional problems and challenging behaviour in schools, and the reported training needs of teachers, it is evident that there is a need to improve training and support for teachers in evidence-based classroom management practice.

1.1.3 Evidence-Based Interventions in Schools

The literature associated with risk factors for the development of behaviour difficulties indicates that early intervention which targets multiple risk factors across settings is critical (Reinke *et al.*, 2012). Given educational reform and an increase in accountability for student outcomes (Lembke & Stormont, 2005), schools need to use evidence-based interventions (EBIs) (Hoagwood *et al.*, 2007). EBIs are well-developed interventions in which highly regarded scientific methods have established the programme as effective (Chambers *et al.*, 2005;

Kratochwill & Stoiber, 2002). A multitude of primary prevention programmes have been developed to promote SEC and prevent behavioural problems (see Durlak *et al.*, 2011, for a meta-analysis of school-based universal social and emotional learning interventions). Social and emotional learning (SEL) interventions are associated with positive outcomes such as improved attitudes about the self and others, increased prosocial behaviour, lower levels of problem behaviours and emotional distress, and improved academic performance (Greenberg *et al.*, 2003; Zins *et al.*, 2004; Zins *et al.*, 2007a; Zins *et al.*, 2007b). SEL programming incorporates two coordinated sets of educational strategies (Collaborative for Academic, Social, and Emotional Learning, 2005). The first involves direct instruction and application of specific social and emotional skills, while the second strategy involves fostering students' SEC through establishing safe, caring learning environments involving peer and family initiatives, improved classroom management and teaching practices, and whole-school community-building activities (Durlak *et al.*, 2011).

Much literature in implementation science has focused on the importance of fidelity, or the amount and quality of implementation of a new programme or practice (Schoenwald & Hoagwood, 2001). Only when interventions or practices are implemented as intended are they likely to produce favourable student outcomes (Durlak & DuPre, 2008). The literature on implementation science has highlighted that moving evidence-based practices into real-world settings is both a high priority and a challenge for researchers, practitioners, and policymakers (Kelly & Perkins, 2012; Fixsen *et al.*, 2005). A key task in supporting teachers' acquisition of new classroom practices is understanding the factors and processes that influence the quality of implementation of these practices (Aarons *et al.*, 2011; Leff *et al.*, 2009). Domitrovich *et al.* (2008) present a multilevel model for considering contextual factors that may affect the implementation quality of school-based interventions at the macro-level (district policies, financial support, leadership, availability of training), school level (structures, policies, financial support, leadership, availability of training), school level (structures, policies,

leadership, resources, personnel expertise, school culture) and individual level (professional characteristics, psychological characteristics, perceptions/attitudes towards intervention). Research findings indicate that diverse factors such as teachers' own teaching efficacy, their perception of the effectiveness of the SEL programme, the support of an effective principal, and the quality of the relationship with those providing ongoing coaching in an SEL programme can affect the quality of teacher implementation of programmes (Domitrovich & Greenberg, 2000; Ransford *et al.*, 2009; Buchanan *et al.*, 2009; Ee & Cheng, 2013).

Research has identified a number of high quality programmes for teachers which have been shown to reduce childhood conduct problems and strengthen SEC (Snyder, 2001). Although evidence-based classroom management programmes exist, surprisingly few education authorities adopt empirically supported interventions (Hutchings *et al.*, 2007). Research and policy initiatives, such as the No Child Left Behind Act of 2001 (U.S. Department of Education, 2002) have emphasised the importance of adopting evidence-based interventions in schools. One such evidence-based classroom management programme is the Incredible Years Teacher Classroom Management Programme (IY TCM; Webster-Stratton, 1994, 2006) that is widely delivered to teachers by the Educational Psychology Service (EPS) in which the researcher works.

1.2 OVERVIEW OF INCREDIBLE YEARS TEACHER CLASSROOM MANAGEMENT PROGRAMME

1.2.1 Overview of Incredible Years Series

The Incredible Years (IY) Training Series (Webster-Stratton, 1981, 1982) incorporates three complementary curricula for parents, teachers and children designed to promote social and emotional competence and to prevent, reduce, and treat behaviour and emotional problems in children (aged 3-8). The IY programmes are grounded in cognitive social learning and

relationship theories about the development of antisocial behaviours (Patterson *et al.*, 1992) as well as developmental, modelling, and self-efficacy theories (Bandura, 1977, 1982). Although the IY programmes have been subject to empirical evaluation resulting in endorsement by the Office for Juvenile Justice and Delinquency Prevention as one of eleven ‘blueprint’ model evidence-based programmes for treating and preventing disruptive behaviour disorders (Webster-Stratton *et al.*, 2001), this endorsement was based on the delivery of the parent training programme as a ‘core’ element and child and teacher training as ‘recommended’ elements. Previous research has been predominantly focused on evaluation of the IY parent training programme. It is only in recent times that researchers have begun to test the effectiveness of the teacher component as a stand-alone intervention on child and teacher outcomes (Blueprints for Healthy Youth Development, 2012).

1.2.2 Incredible Years Teacher Classroom Management Programme

The Incredible Years Teacher Classroom Management (IY TCM; Webster-Stratton, 1994, 2006) programme is part of the research-based set of IY parent, teacher, and child programmes developed for treating and preventing conduct problems and promoting social competence and emotional regulation in young children. It “focuses on promoting the teacher’s self-confidence and competence in using positive and proactive classroom management strategies and discipline approaches. It also helps teachers understand how effective classroom management strategies can strengthen students’ social competence as well as their academic competence” (Webster-Stratton, 2006, p. 3). The long-term goals of the programme are twofold in terms of the treatment and prevention of conduct problems (Webster-Stratton, 2006). The short-term goals are to promote child and teacher competencies as outlined in Figure 1 below:

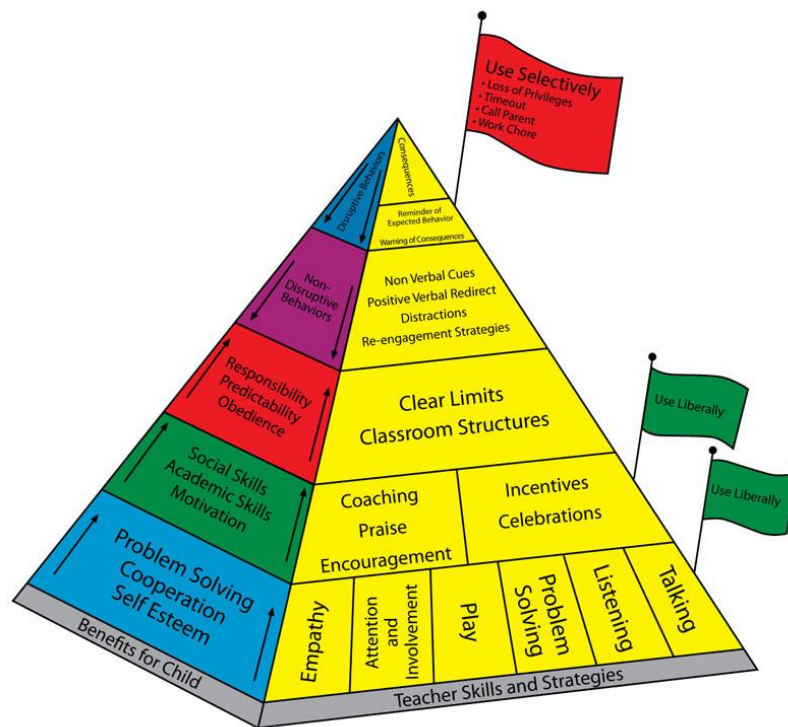
Figure 1: Short-term goals of IY TCM (Webster-Stratton, 2006, p. 5)

<i>Promote child competencies</i> <ul style="list-style-type: none">• Increase children's social, emotional and academic skills• Increase children's problem-solving skills and effective anger management strategies• Increase children's positive peer interaction and friendships• Decrease children's negative attributions and increase empathy skills• Decrease children's aggressive behaviour, oppositional behaviour, and related conduct problems
<i>Promote teacher competencies</i> <ul style="list-style-type: none">• increase teachers' positive communication skills, such as the use of praise and positive feedback to students, and reduce the use of criticism and unnecessary commands• Improve teachers' limit-setting skills• Improve teachers' problem-solving skills and anger management with students• Increase teacher support networks• Increase teachers' positive involvement with parents• Promote teachers' positive teaching in regard to social and emotional competence as well as academic competence

To achieve these aims, teachers are trained in evidence-based practices in effective behaviour management, proactive teaching approaches, strategies for building teacher-child relationships, positive parent-teacher collaboration, behaviour planning for individual students, and ways to promote students' emotional regulation, social and problem-solving skills. The IY TCM programme was updated several years ago to include additional video vignettes and new content regarding academic, persistence, social, and emotional coaching; methods of teaching children problem-solving skills and emotional self-regulation skills; social skills needed to develop positive friendships; proactive discipline hierarchies; and parent involvement strategies (Webster-Stratton, 2006).

As noted earlier, the IY series is grounded in cognitive social learning theories about the development of antisocial behaviours in children (Webster-Stratton & Herman, 2010). In particular, it draws on Patterson *et al.*'s (1992) theory about how coercive cycles of interaction between adults and children reinforce unwanted behaviour patterns and Bandura's theory (1986) about the importance of modelling and self-efficacy. The emphasis in the programme is on changing teachers' responses to specific child behaviours and helping their interactions with their students become more positive (Webster-Stratton, 2006).

It is recommended that the IY TCM programme is delivered in six full-day workshops spread out monthly over the school year (Webster-Stratton *et al.*, 2011). Although it is a manualised programme, facilitation is guided by a set of principles which give flexibility to allow adaptations for the given cultural contexts, teacher skill levels, and experiences of the participants (Webster-Stratton *et al.*, 2011). One of the key principles is that the IY teaching pyramid (see Figure 2) acts as a road map for content. The basic premise of the model is that positive teacher-student-parent relationships precede discipline strategies, and attention to positive behaviours should occur far more frequently than attention to negative behaviours. The programme is delivered in groups of approximately 15 to 20 teachers, thus capitalising on the dimensions of group processes that facilitate teacher cooperative learning, motivation, and self-efficacy. Given the connection between knowledge, efficacy and behaviour, increasing teacher confidence and self-efficacy is an important principle of the programme (Bandura, 1977, 1982, 1989). IY TCM training places considerable emphasis on experiential learning. During workshop sessions, teachers are given the opportunity to observe group leaders and video models demonstrating implementation of various teaching practices, reflect on the strategies in the group discussions, and practice the observed skills through role-play while receiving feedback and encouragement from their peers. Small group behaviour planning and classroom practice assignments help transfer what is learned in the workshops to practice in the classroom. Teachers subsequently share their experiences in implementing the strategy or behaviour plan at the next workshop.



Teaching Pyramid®

The Incredible Years

Figure 2: IY TCM Teaching pyramid (Webster-Stratton, 2006)

The author sought to identify research which has examined the process of teacher change through participation in the IY TCM programme. Although this topic has not been directly addressed in the literature, a review of available IY TCM research was subsequently conducted in order to provide a comprehensive account of the evidence base for the programme as well as a context and rationale for the development of the research questions in the present study. As the researcher was interested in examining teacher change through IY TCM, a second review question aimed to identify theoretical models of teacher change through professional development which will be used as a basis for understanding the process, outcomes and factors which influence teacher change as a result of participation in the programme. Both reviews will

be outlined in detail below.

1.3 RESEARCH EVIDENCE FOR INCREDIBLE YEARS TEACHER CLASSROOM MANAGEMENT PROGRAMME

1.3.1 Literature Search Process

An initial literature search was conducted through ERIC (Ebsco) and PsycInfo using the terms ‘*teacher perceptions*’, ‘*teacher change*’ ‘*teacher learning*’ and ‘*Incredible Years Teacher Classroom Management Programme*’. Although no research has directly examined the process of teacher change through participation in the IY TCM programme, a number of empirical studies of the programme were located (see Appendix 1 for table of studies) and will be reviewed below in sections 1.3.2 – 1.3.5 in order to provide a context and rationale for the present study. Search limits were set to return peer reviewed studies which evaluated the IY TCM programme, written in English, from 1990 to present. Manual searches of the reference lists of articles located were conducted to identify any further studies. A number of randomised controlled trials (RCTs) by the developers evaluated IY TCM as part of a larger treatment package for children with conduct problems and selected high risk populations that included child and/or parent training. There have also been several independent evaluations of the programme in conjunction with other interventions (e.g. IY classroom curriculum unit on social-emotional skills) and supplemented by other methods (e.g. coaching/consultation for teachers). Only five independent evaluations of IY TCM in isolation from other interventions have been undertaken. One exception to the criterion of including articles published in peer-reviewed journals only in the following review was made in the case of an Irish study of the effectiveness of IY TCM by McGilloway *et al.* (2011) which is documented in published summary report format. McGilloway *et al.*’s (2011) study represents the only independent randomised controlled trial evaluation of the IY TCM programme within an Irish context known to the researcher. Although the Coding Manual for Group-Based Design Intervention Research and Coding

Protocol: Group-Based Design, taken from the Procedural and Coding Manual for Review of Evidence-Based Interventions (Task Force on Evidence-Based Interventions in School Psychology, 2003), were used to inform critical review of the literature on IY TCM, the coding itself was not applied.

1.3.2 Effectiveness Trials

The IY TCM programme, in conjunction with parent and/or child training, has been empirically investigated by the programme developers through a number of randomised controlled trials.

Webster-Stratton *et al.* (2001) examined the effectiveness of parent and teacher training for 272 children. The mothers and teachers (61 Head Start teachers) of these children were randomly assigned to either an experimental condition in which parents participated in the Basic IY Parenting Program and teachers received IY TCM training or a control condition consisting of the regular Head Start programme. Pre- and post-measures of intervention effects included teacher (Teacher ADHD Checklist; Social Competence and Behavior Evaluation) and parent reports (Parenting Practices Inventory; Parent Involvement Questionnaire; Eyberg Child Behavior Inventory; Child Behavior Checklist) of child behaviour as well as independent observations at home (Dyadic Parent-Child Interactive Coding System-Revised; Coder Impressions Inventory) and in school (Multiple Option Observation System for Experimental Studies; Social Health Profile; Classroom Atmosphere Measure; Teacher Coder Impression Inventory). Construct scores combining observational and report data were calculated for negative and positive parenting style, parent-teacher bonding, child conduct problems at home and school, and teacher classroom management style.

Following the training, mothers in the experimental condition had significantly lower negative and higher positive parenting scores and parent-teacher bonding than control mothers. Children

of mothers who attended six or more intervention sessions showed significantly fewer conduct problems at home. After training, teachers in the experimental condition demonstrated significantly better classroom management skills than control teachers, including more positive and less harsh and critical techniques. There were significant experimental effects in children's observed aggressive and noncompliant behaviour at school, teacher-reported ADHD symptoms, and teacher reports of social competence. The clinical significance analyses indicated that 95.5% of the experimental children showed a clinically significant reduction in noncompliance with teachers and peer aggression compared with 55% of the control children. These findings provide evidence for the importance of training and supporting teachers using IY TCM as a relatively cost-effective method of improving behavioural and social outcomes for children.

Webster-Stratton *et al.* (2004) evaluated the IY TCM programme as part of a larger treatment package for children with conduct problems. A randomised trial compared the effects of child and parent training with and without teacher training for 159 children diagnosed with oppositional defiant disorder (ODD). Conditions that included teacher training demonstrated significant effects on teacher negative behaviour compared with controls (Cohen's *d* values ranged from .46 to .63). Trained teachers were less critical and harsh than control teachers. They were more nurturing and consistent, used more praise, and reported more confidence in teaching. Results also indicated that in IY TCM classrooms, children were significantly less aggressive with peers and more cooperative with teachers. Trained teachers also reported increased academic competence compared with children in control classrooms. However, as this study did not include a teacher training only condition, it is not known which domains measured in the study would be impacted by this condition without the added parent and child training. Results indicate that conditions involving parent, child and teacher training produced few significant additive effects when compared with treatments in single and dual risk domains. Although children's negative behaviour improved in conditions with teacher training compared to controls,

the fact that similar effects were also found for the parent training only and child training only conditions means that reductions in children's aggressive behaviour brought about by parent or child training generalised to the classroom without the need for direct teacher intervention. It was found that combining parent training with either child training or teacher training appeared to be the most potent treatment for children with pervasive behaviour problems.

A study by Webster-Stratton *et al.* (2008) evaluated the IY TCM programme in combination with the child classroom social, emotional and problem-solving curriculum (Dinosaur Curriculum). The study design randomly assigned culturally diverse matched pairs of schools serving low-income populations to intervention or control conditions. In the intervention condition, teachers were trained in IY TCM and implemented the Dinosaur Curriculum, while control schools followed the regular curriculum. Pre- and post-assessments measured social and emotional competencies, conduct problems, teacher competencies, teacher efforts to involve parents, and classroom environment, using both teacher questionnaires (Teacher-Parent Involvement Questionnaire; Teacher Satisfaction Questionnaire) and independent observations (Multiple Option Observation System for Experimental Studies; Teacher Coder Impressions Inventory; Classroom Atmosphere Measure) of teachers and children in classrooms.

Results from 153 teachers and 1,768 students indicated that in intervention classrooms, teachers used more positive classroom management strategies, fewer critical statements, and more specific teaching strategies that addressed social and emotional skills than control teachers. Intervention teachers also displayed significantly greater levels of responsiveness, engagement, cooperativeness and supportive behaviour. Accordingly, their students displayed enhanced social competence and emotional self-regulation, school readiness skills, and reduced conduct problems and off-task behaviours. The effect sizes were moderate to high, indicating that the curriculum and training had robust effects on changing teachers' classroom management

approaches. Effect sizes were particularly strong for students from classrooms with the poorest initial scores. The intervention had a large impact on students from classrooms with average levels of school readiness and conduct problems and an even larger impact on students from classrooms with very low initial levels of school readiness and high conduct problems. Therefore, children from classrooms that were at highest levels of initial risk benefitted most from the intervention. All of the student behavioural outcomes indicated strong teacher-level effects, meaning that groups of students associated with a particular teacher changed more than groups of students associated with a different teacher.

A strength of Webster-Stratton *et al.*'s (2008) study was the use of independent classroom observations of teachers' interactions and children's social and emotional behaviour to corroborate teacher self-report findings. While teacher report provides important information about teachers' perceptions of children's behaviour, these ratings may be biased in favour of reporting positive student changes to account for participation in the intervention. Another strength of the research relates to high intervention implementation integrity because research staff co-led the Dinosaur Curriculum with teachers. This allowed for an accurate evaluation of the intervention when it is delivered with fidelity. However, further research would be required to evaluate the programme under real world conditions without the same level of research support and monitoring and to determine what effects the IY TCM programme alone would have had without being combined with child training.

Herman *et al.* (2011) investigated the unique and combined effects of the IY parent, child, and teacher training programmes on children's co-occurring internalising symptoms. 159 families of children aged 4 to 8 years were randomly assigned to parent training (PT); parent plus teacher training (PT+TT); child training (CT); child plus teacher training (CT+TT); parent, child, plus teacher training (PT+CT+TT); or a waiting list control group. Children who received a single or

multi-component intervention had significantly lower mother-rated child internalising symptoms at post-treatment compared to controls. Subsequent analyses comparing the six intervention conditions suggested that children who received the triple component (parent, teacher, and child intervention) benefitted most. Although all groups trended in the hypothesised direction, secondary outcomes focused on teacher ratings of internalising symptoms did not reveal statistically significant differences. However, it has been found that, without training to identify these symptoms, teachers provide inconsistent ratings. There are important limitations to note, in particular the small sample size for each condition which limited power. As the study did not have a teacher training (TT) only condition, the unique effects of the teacher training programme on child internalising symptoms cannot be determined.

1.3.3 Independent Evaluations of IY TCM Programme in Conjunction with other IY Programmes and/or Training Methods

Independent investigators have replicated many of these findings in Chicago (Raver *et al.*, 2008), North Carolina (Williford & Shelton, 2008), Jamaica (Baker-Henningham *et al.*, 2009; Baker-Henningham & Walker, 2009; Baker-Henningham *et al.*, 2012), and as a standalone self-administered training programme with preschool teachers receiving consultation (Shernoff & Kratochwill, 2007).

Shernoff and Kratochwill (2007) adapted the IY TCM programme and compared the impact of two training methods: self-administered videotape modelling (VM) and self-administered videotape modelling plus consultation (VMC) on teacher's use of classroom management strategies, reductions in disruptive behaviours, acceptability of the programme and contextual barriers to implementation. Measures used included the Teacher Strategy Questionnaire (TSQ), observation system (adapted from the Early Screening Project), Social Competence and Behaviour Evaluation-Preschool Edition (teacher rating scale which measures social competence

and adjustment difficulties), Treatment Evaluation Inventory (teacher questionnaire to assess acceptability and effectiveness of strategies taught in intervention), Professional Development Evaluation Survey and Best Practices Interview (semi-structured teacher interview). A small sample comprising 4 pairs of teachers (N=8) were randomly assigned to VM or VMC conditions in a multiple probe design. 13 students (1-2 per teacher) displaying high levels of externalising behaviour also participated. Results indicated statistically significant between-groups differences in teacher confidence ratings, use of positive instructional practices, and acceptability, favouring use of the VMC approach. However, these results must be interpreted with caution, as the researchers acknowledge that the z approximation gives satisfactory accuracy only with sample sizes greater than 10 per group. Although there were positive trends favouring VMC versus VM students in terms of reductions in disruptive behaviour, no significant between-group differences were found. There were, however, clinically significant increases in social competence for VMC students. It is important to interpret the results of this study in the context of the training methods used (self-administered training) as they were not the conventional group training approach. Other limitations include the fact that the psychometric properties of two of the measures (Professional Development Evaluation Survey; Best Practices Interview) used have not been evaluated. Shernoff and Kratochwill's (2007) study identified several contextual variables considered to impact upon implementation of the programme, most notably time, other teachers' lack of training and perceived lack of congruence between institutional philosophies regarding classroom management and those espoused in the programme.

Williford and Shelton (2008) examined the effectiveness of IY parent training and an adaptation of the IY TCM programme delivered using mental health consultation for preschool children with disruptive behaviours. 96 children, their teachers, and their primary caregivers participated. Intervention group teachers received individualised mental health consultation focused on their use of empirically-supported behavioural strategies for decreasing disruptive behaviours.

Caregivers took part in parent training. Effectiveness was assessed in contrast to a comparison group. Parent (ADHD Rating Scale; Behavior Assessment System for Children; Parenting Stress Index-Short Form; Parenting Scale) and teacher (Teacher Strategies Questionnaire; Behavior Assessment System for Children) questionnaires were completed at baseline, after completion of the project, and one year post-treatment. Teachers in the comparison group reported that children's disruptive behaviour increased from baseline to post-intervention while teachers in the intervention group reported that behaviour remained relatively stable across time. There was a reported increase in the use of appropriate teacher strategies and parenting practices in the intervention group. This study provides evidence that the IY TCM programme can be effectively adapted for use in teacher mental health consultation with positive outcomes for teachers and students. However, important limitations relate to the lack of randomisation regarding the conditions and the fact that the comparison control group received comprehensive behavioural assessment, access to typical treatment, and increased support staff.

Raver *et al.* (2008) used a clustered randomised design to test whether IY TCM training combined with coaching (mental health consultation) reduces children's risk of behavioural difficulty and increases school readiness. 94 teachers and 602 children participated in the study. Teachers in the treatment condition teachers received IY TCM training and weekly coaching support/consultation from a mental health consultant (social worker). Pre- and post-observations using the Classroom Assessment Scoring System (CLASS) and the Early Childhood Environment Rating Scales were used to determine whether the intervention had an impact on classroom quality and emotional climate. Estimation of hierarchical linear models revealed that intervention classrooms had statistically significantly higher levels of positive classroom climate. Intervention teachers also demonstrated increased teacher sensitivity, less use of negative discipline approaches and behaviour management than control classrooms, but these differences were non-significant. While there are several strengths of Raver *et al.*'s (2008) study,

including its randomised, longitudinal design and observations of classroom quality, there are also a number of limitations. The findings are based on Head Start programmes in high poverty neighbourhoods in Chicago. Replication of these findings is needed to determine their generalisability to early childhood education classrooms in other urban and rural areas and to determine whether improvements in classroom quality are maintained over time. Furthermore, this study cannot determine whether similar results would have been obtained if the intervention had relied on teacher training only, without including mental health consultation which served a coaching and stress reduction role.

Baker-Henningham and Walker (2009) examined teacher perceptions of the acceptability, feasibility and usefulness of the IY TCM programme in Jamaica supplemented by the IY Dinosaur Curriculum. The sample involved 3 inner-city pre-schools comprising 15 classrooms. Individual consultation with teachers was also provided on a monthly basis. In-depth individual interviews were conducted post-intervention. Teachers reported enhanced understanding of children's needs and abilities, increased use of positive and proactive strategies, better relationships with parents and children, improved child behaviour and social skills, increased social-emotional competence and benefits to parent-child relationships. Teachers also reported their use of more developmentally appropriate and interactive strategies and less use of negative strategies, as well as feeling less stressed, more in control, and experiencing increased enjoyment of teaching. A hypothesis representing the teachers' perceptions of how the intervention achieved these benefits was developed. Three recurrent themes were identified: 1) enhanced understanding of children's needs and abilities, 2) increased use of positive and proactive strategies, 3) actively promoting children's social and emotional skills. However, it is important to note that the majority of teachers in this study had received little formal teacher training and so the benefits may be more wide-ranging than other studies. Furthermore, the research team implemented and analysed the data. Therefore, teachers may have enhanced the benefits and

minimised the difficulties associated with the intervention. It would be important that future studies elicit parent perceptions of the intervention and their views on parent-teacher collaboration as a result of the programme. Despite these limitations, Baker-Henningham and Walker's (2009) research shows that in-depth interviews with teachers can help in identifying the scope of potential outcomes of school-based interventions and build hypotheses about the mechanisms by which they achieve their effects.

Baker-Henningham *et al.* (2009) evaluated the effects of the IY TCM programme and the IY Dinosaur Curriculum in conjunction with monthly teacher consultation on the emotional climate of classrooms, teacher ratings of children's behaviour and teacher perceived acceptability of the programme in Jamaica. Five preschools were randomly assigned to an intervention (15 classrooms) or control condition (12 classrooms). The intervention was evaluated through structured observations at baseline and follow-up based on the Dyadic Parent Child Interaction Schedule and the Teacher-Pupil Observation Tool (T-POT). Rating scales of child behaviour and classroom atmosphere were devised by researchers. The Teacher Satisfaction Questionnaire (TSQ) was also completed post-intervention. Significant intervention benefits regarding teacher's behaviour included increased positive behaviour, reduced negative behaviour, and an increased focus on the promotion of children's social and emotional skills. Intervention benefits for the children included increases in appropriate behaviour, interest and enthusiasm. Classroom atmosphere benefits involved increased opportunities for children to share and help each other and teacher warmth. Strengths of the research include the random allocation of schools with pre- and post-measures, direct observations of teacher behaviour and classroom atmosphere, and the use of multilevel multiple regression analysis to control for the clustering effect. However, the study was also small scale and hence results cannot be generalised to other preschools in Jamaica or beyond. A larger replication of this study would be required to evaluate the effect of the intervention on child behaviour using multiple informants and direct observation.

Baker-Henningham *et al.*'s (2012) research used a clustered randomised design involving 24 inner-city preschools in Jamaica. Schools were randomly assigned to receive IY TCM training or to a control group. Three children from each class with the highest levels of teacher-reported conduct problems were also chosen for evaluation (225 children in total). Several adaptations were made to tailor the programme to the Jamaican context including supplementary video vignettes showing Jamaican classrooms, adapted handouts, and delivering the training over 8 days rather than 5-6 days. Furthermore, each intervention group teacher received monthly in-class assistance (modelling, coaching, support and feedback) in the implementation of the strategies. The primary outcome was directly observed child behaviour using the Dyadic Parent–Child Interaction Coding System (DPICS) and the Multi-Option Observation System for Experimental Studies (MOOSES). Secondary outcomes were measures of child behaviour by parent and teacher report, child attendance, and parents' attitude to school. Several measures were used for teacher-reported child behaviour including the Sutter-Eyberg Student Behavior Inventory (SESBI), Connor's Global Index, the Strengths and Difficulties Questionnaire (SDQ), and the Preschool and Kindergarten Behavior Scales (PKBS): Social Skills Scale.

Observational data indicated that children in intervention schools demonstrated significantly reduced conduct problems and increased friendship skills. Significant reductions in teacher and parent-reported behaviour difficulties and increases in teacher-reported social skills and child attendance were also found. Children in the intervention group were less likely to be rated in the clinical range for conduct problems by teachers post-intervention. The researchers acknowledge that the larger effect sizes (mean effect size for child behaviour = 0.49) found in this study, compared to the results of meta-analyses of universal school-based violence prevention programmes (mean effect sizes of 0.21 for child aggressive behaviour and 0.24 for child social skills), could be because many of the participants lacked formal professional teacher training and

the fact that only children with high levels of conduct problems at baseline were evaluated. It is therefore unknown whether the intervention benefitted children with low-to-moderate levels of conduct problems, thus limiting the generalisability of the findings. As the programme was adapted to suit the Jamaican context and teachers also received in-class consultations, the study design does not allow for identification of the relative importance of these components and in particular of IY TCM training alone.

1.3.4 Evaluation of Fidelity of IY TCM Programme

Despite the importance of fidelity, intervention studies rarely monitor and report the multiple aspects of the construct. Reinke *et al.* (2013) used data from a larger efficacy trial of the IY TCM programme to explore multiple domains of intervention fidelity across workshop training and coaching, and teacher classroom level implementation of skills. Data was gathered from 34 teachers in 6 schools who received IY TCM training and weekly on-site coaching. Fidelity measures included: (a) a workshop fidelity rating scale completed by the leaders, (b) post-training teacher evaluations of the workshops, (c) teacher report of alliance with the coach, and (d) leader report of teacher engagement with the intervention. Independent observations of teacher implementation of classroom management skills were conducted pre- and post-IY TCM workshop sessions using the Multi-Option Observation System for Experimental Studies (MOOSES) and the Brief Classroom Interaction Observation Revised Observation Code. Findings indicated that the workshop and coaching sessions were facilitated with adequate adherence, and that a high level of leader training and alliance with the coach was perceived. A strength of the study is its examination of teacher engagement during the workshop sessions, as teachers who are disengaged during professional development are less likely to implement strategies in their classroom practice. Workshop leaders' ratings of teacher engagement during the session focused on praise were associated with observed changes in teachers' use of praise in the classroom but engagement ratings in other sessions did not predict changes in teacher

behaviours related to the workshop content. The study is limited by the fact that several of the fidelity measures used were investigator created and therefore there are no psychometric properties documenting their validity.

1.3.5 Independent Evaluations of IY TCM Programme as Stand-alone Intervention

Hutchings *et al.* (2007) conducted the first independent evaluation of the acceptability and effectiveness of IY TCM in the UK. 23 teachers completed the Teacher Satisfaction Questionnaire (TSQ) and participated in a semi-structured interview post-training. Qualitative teacher interviews explored: 1) background information, 2) the course itself, 3) application in the classroom, 4) practical implications, 5) comments and recommendations. The findings of thematic content analysis revealed that teachers reported a high level of satisfaction, ease of implementation, and usefulness of the programme. Teachers considered that they developed an increased range of effective strategies and greater use of positive strategies. The most useful components were sharing experiences and strategies with others and having an extended range of strategies available to them. All teachers reported that they had made use of the training in their classroom and reported student benefits e.g. children were more attentive, had increased confidence, were more considerate of each other, more respectful and enjoyed responsibility. Although 71% of teachers reported no barriers to implementation, 10% reported that it took time and 10% reported that the inconsistency of other staff was a barrier. Hutchings *et al.* (2007) also found that out of all the positive strategies taught during training, those promoting home-school collaboration received the lowest ratings by teachers.

The second study involved blind observation of teacher classroom behaviour in 21 classes whereby 10 teachers had received IY TCM training and 11 had not. A classroom observation schedule, the Teacher-Pupil Observation Tool (T-POT), was employed. The T-POT is a 75-item measure of the frequency of teacher and child behaviours designed specifically to capture the

skills taught during IY TCM. Inter-rater reliability between three coders demonstrated an average mean percentage agreement of 70%. Trained teachers gave significantly more direct commands and allowed children more time to respond to commands, while their students' behaviour was more compliant than untrained teachers. Pooled effect size calculations indicated substantial differences between the two groups on several other variables, but these differences may have failed to reach significance due to low power within the study. It is also important to note that there were no baseline measures of teacher classroom behaviours. Consequently, there is a possibility that the differences between IY TCM and non-IY TCM teachers resulted from sampling bias. The fact that trained and untrained teachers were working in the same schools may have resulted in untrained teachers picking up ideas and techniques from those who were trained.

McGilloway *et al.* (2011) undertook three separate but interrelated studies to assess the effectiveness of the IY TCM programme in Ireland. A clustered randomised controlled trial design was used to evaluate the effects on teacher management strategies (Teacher Pupil Observation Tool, TPOT; Teacher Strategies Questionnaire; Teacher Satisfaction Questionnaire) and on child behaviour (TPOT; SDQ teacher version; Conners Abbreviated Teacher Rating Scale). This study has significant limitations, most notably the small sample size of teachers (22 teachers, 217 children) and low level of statistical power. In addition, the results are based on a six-month pre-post intervention period, during which time the teachers were still receiving the training. Furthermore, observers were not always blind to randomisation which could have led to potential bias. Results indicated significant decreases in observed teacher negative classroom management strategies and significant increases in teacher reported frequency of use and perceived usefulness of positive strategies. The emotional symptoms subscale was the only SDQ scale which showed a significant improvement for intervention group children when compared with the control group. Further sub-analyses indicated that children who were at 'high' risk of

behavioural problems, as indicated by their total difficulties score on the SDQ, showed significant differences over time on the total difficulties and peer problems scales compared to controls, whereas no significant differences were found for 'low risk' children. These results indicate that the programme was most beneficial for children who showed the highest levels of social-emotional and behavioural difficulties.

McGilloway *et al.*'s (2011) research also involved a qualitative sub-study involving 11 teachers from six schools at baseline and immediately after completion of the programme. Interviews were used to assess teachers' views of managing conduct problems in the classroom, as well as teacher-perceived effectiveness and acceptability of the programme. Six key themes were identified from thematic analysis: (1) reality of the classroom environment, (2) the learning experience, (3) changes to the self, (4) perceived impact on child behaviour, (5) the positive classroom, and (6) further recommendations for the programme. Teachers identified the inherent difficulties associated with managing conduct problems in the classroom and the negative impact this can have on their emotional state. They valued the experiential learning, social support, and regarded the programme as building upon what they already knew and were trying to achieve. Changes to the teachers themselves included their use of positive classroom management approaches as well as an increased awareness of their teaching practice. Child outcomes included increased focus and on-task behaviour, reduction in disruptive behaviours, improved peer relationships, and improvements in their ability to talk about their feelings and resolve conflict with peers. They also considered the programme to have had an impact on the classroom environment with regard to it being calmer and more co-operative.

Carlson *et al.*'s (2011) study conducted pre-, post- and follow-up (16 weeks after training) measures using the Teacher Strategies Questionnaire (TSQ) to examine changes in teachers' perceptions of the usefulness and frequency of use of positive classroom management strategies

following IY TCM training. The programme was delivered in weekly 4-hour sessions (rather than monthly day-long sessions) with 24 teachers in two groups. Results of repeated measures analyses of variance indicated significant increases in teachers' perceptions of their frequency of use and usefulness of overall positive strategies from baseline to post-training. No significant differences were apparent between post-training and follow-up, thus indicating maintenance of gains made during training. This is an important finding given that Raver *et al.* (2008) supplemented teacher training with the support of a mental health consultant to provide advice and feedback to teachers when implementing strategies in the classroom, whereas Carlson *et al.*'s (2011) study did not. Although consultation support is clearly beneficial, Carlson *et al.*'s (2011) results suggest that teachers may be able to incorporate the strategies into classroom management practices without the support of a consultant. Results also indicate that there was no significant difference in teachers' perceptions of their use of strategies to increase home-school collaboration, as indicated by the Positive Approaches with Parents and Working with Parents scales. This is in line with Hutchings *et al.*'s (2007) finding. Given that strengthening home-school partnerships is a core theme of the IY TCM programme, further examination of this issue could help inform how to better target the home-school components of the programme in a way that increases its effectiveness for teachers.

Similar to much of the IY TCM research above, Carlson *et al.*'s (2011) study relies on teacher self-report data only. Therefore, caution should be taken in the interpretation of results. Self-report data can often reflect social desirability bias or a tendency to rate one's attitudes and practices in a favourable way (Robson, 2002) as opposed to reflecting actual changes in the classroom situation. It would have been beneficial to incorporate additional measures (e.g. observations) to assess teacher classroom management strategy use and the relationship between perceptions of usefulness and actual strategy use. There are also limitations with regard to the fidelity of the intervention as it was delivered over an 8-10 week period instead of the

recommended six month timeframe as well as the fact that data was collected from two IY TCM training groups. This study is also limited by the lack of a control group. A repeated measure across time methodology with only one group of participants fails to provide information about how these teacher perceptions would change as a result of other factors such as time or maturation.

Fergusson *et al.*'s (2013) study found significant pre- to post-intervention increases in teachers' frequency of use, perceived usefulness and general satisfaction with the IY TCM programme in New Zealand. 237 teachers completed the Teacher Strategies Questionnaire (TSQ) and the Teacher Workshop Satisfaction Questionnaire. Large effect sizes were reported for teacher improvements in their frequency of use of positive behaviour management strategies ($d=0.86$) and changes in their perceptions of the usefulness of the strategies ($d=0.88$), as well as a moderate improvement in their overall confidence in managing classroom behaviour ($d=0.60$). However, the fact that the study relied on teacher report data alone and the lack of a comparison control group are important limitations. In addition, the use of a before and after design could be subject to biases arising from time, which means that the effect sizes reported should be interpreted in this light. There are also issues regarding the generalisability of the results as the sample was chosen on the basis of the group leaders' skills in delivering the IY Parenting programme in the past.

Research by Hutchings *et al.* (2013) represents the first study which investigated the effectiveness of the IY-TCM programme as a stand-alone, non-adapted intervention using a randomised controlled trial design and independent, blind classroom observations. The study examined whether IY TCM training improved teacher behaviour and whether any observed improvement in teacher behaviour impacted child behaviour at the whole class level and with children at risk of developing conduct problems. Children were screened for high or low levels

of behaviour problems using the cut-off points of the SDQ (Goodman, 1997). Independent classroom observation using the Teacher-Pupil Observation Tool (T-POT) represented the primary outcome measure. Results indicated that there was no significant change in teacher behaviour towards the whole class but there was a significant reduction in negative behaviour towards target children in the intervention group. Child outcomes included a significant decrease in classroom off-task behaviour and significant main effects for target child negatives towards the teacher and target child off-task behaviour. Small to medium effect sizes were reported (Cohen's d values ranged from 0.36 to 0.53). Interaction effects were found for negative behaviours towards the teacher and off-task behaviour for target children. Children with low total difficulties SDQ scores in the intervention group showed no change while children with high total difficulties SDQ scores showed a significant reduction in both negative behaviour towards the teacher and off-task behaviour. Regardless of the total difficulties SDQ score, both variables showed similar patterns for children in the control group. A significant contribution of Hutchings *et al.*'s (2013) study is that it demonstrated the ability of IY TCM to change teacher behaviour in the classroom as a key mechanism for effectively changing child behaviour, without the need for direct intervention with the children.

1.4 TEACHER CHANGE THROUGH PROFESSIONAL DEVELOPMENT

1.4.1 Teacher Professional Development

There have been many definitions of teacher professional development (PD) in the literature. For example, the National Professional Development Center on Inclusion (NPDCI, 2008, p. 3) defined PD as "...facilitated teaching and learning experiences that are transactional and designed to support the acquisition of professional knowledge, skills, and dispositions as well as the application of this knowledge in practice". McDonald (2009, p. 624) defined PD in terms of "systematic processes that bring about teacher change in attitudes, beliefs and practices to impact upon the learning outcomes of students." Research has identified the continuing professional

development and learning of teachers as one of the key factors for improving the quality of schools (Borko & Putnam, 1995; Darling-Hammond, 1993, 1997; Talbert & McLaughlin, 1994; Thompson & Zeuli, 1999), mediating the effectiveness of policy for teachers and teaching practice (Desimone *et al.*, 2007; Smith *et al.*, 2005) and improving student achievement (Desimone *et al.*, 2005).

A proliferation of research over the past two decades has identified the features and forms of ‘effective’ PD activities that result in changes in teaching practice and, by extension, increases in student learning (Yoon *et al.*, 2007; Darling-Hammond, 1997; Garet *et al.*, 2001; Stoll *et al.*, 2006; Wenger, 1998; Hawley & Valli, 1999; Wilson & Berne, 1999; Desimone, 2009). A summary of this research is briefly provided in Figure 3 below:

Figure 3: Characteristics of ‘effective’ professional development

- **Content focus:** The content knowledge of teachers plays a vital role in both the quality of instruction and student performance. Professional development characterised by a content focus not only leads to increased teacher knowledge but also can lead to changes in teacher practices (Desimone, 2009; Desimone *et al.*, 2002; Garet *et al.*, 2001). Furthermore, professional development lacking a strong content component has been found to be ineffective in changing teacher practices (Cohen & Hill, 2001).
- **Active learning:** Opportunities for teachers to engage in active learning are related to the effectiveness of PD (Garet *et al.*, 2001; Loucks-Horsley *et al.*, 1998). Active learning can take a number of forms, including observing expert teachers or being observed, interactive feedback and discussion; reviewing student work; and leading discussions (Baniower & Shimkus, 2004; Borko, 2004; Darling-Hammond, 1997).
- **Coherence:** Change in teacher practice through PD is influenced by the extent to which teacher learning is consistent with teachers’ knowledge, beliefs and experiences, as well as the consistency of school, district, and state reforms and policies with what is taught in PD (Elmore & Burney, 1997; Firestone *et al.*, 2005; Fullan, 1993; Guskey, 1994; Penuel *et al.*, 2007).
- **Duration:** PD is more effective in changing teachers’ practice when it is of longer duration (Supovitz & Turner, 2000; Cohen & Hill, 2001) and includes follow-up (Joyce & Showers, 2002; Stein *et al.*, 1999). Research has shown that creating change in teachers is a time-consuming process that requires many meetings and workshops over an extended period of time (Calderón & Marsh, 1988).
- **Collective participation:** The collective participation of groups of teachers from the same school, subject, or class level is related to improvements and change in teacher knowledge, skill and classroom practice. Such arrangements set up opportunities for interaction and discourse, which is a powerful form of teacher learning (Baniower & Shimkus, 2004; Borko, 2004; Fullan, 2007; Guskey, 1994; Loucks-Horsley *et al.*, 1998).

1.4.2 Teacher Professional Learning

Despite the importance of PD for student achievement and the identification of the features of ‘effective’ PD, much of the research has yielded disappointing results with teacher professional learning activities often being characterised as ineffective (Hanushek, 2005). Furthermore, learning is often not integrated into changes in practice (Cervero, 2001; Fullan, 2007). Webster-Wright (2009) argues for a shift in discourse and focus from delivering and evaluating PD programmes to understanding and supporting the experience of professional learning. Reframing PD as professional learning (PL) moves the emphasis away from training, education, or development to a more holistic experience involving the interaction of the learner, the context and what is learned. Consequently, the term ‘professional learning’ is also commonly used. Fraser *et al.* (2007, p. 156-7) suggest that teachers’ professional learning “can be taken to represent the processes that, whether intuitive or deliberate, individual or social, result in specific changes in the professional knowledge, skills, attitudes, beliefs or actions of teachers”. Conversely, teachers’ PD refers to the broader changes that may occur over an extended period of time causing qualitative shifts in aspects of participants’ professionalism (Fraser *et al.*, 2007).

1.4.3 Theoretical Models of Teacher Change through Professional Development

Professional learning (PL) and professional development (PD) can be located within the more general concept of ‘teacher change’. Richardson and Placier (2001) suggest that teacher change can be described in terms of learning, development, socialisation, growth, improvement, implementation of something new or different, cognitive and affective change and self-study. Forms of PD and PL may, therefore, be better understood as manifestations of particular change strategies. Despite a seeming consensus on the features of PD activities that lead to teacher change (Desimone, 2009), previous reviews have demonstrated that the available literature fails to explain how teachers learn from these initiatives (Borko, 2004) and the conditions that support and promote this learning (Clarke & Hollingsworth, 2002; Opfer & Pedder, 2011). Why

are there reports of teachers participating in PD with all the characteristics of effectiveness and yet learning or change does not occur? Opfer and Pedder (2011) consider that the PD effects literature has committed an epistemological fallacy by taking empirical relationships between forms of activity or task (e.g. being activity based), structures for learning (e.g. collaboration between teachers), location (e.g. situated in practice), and some measure of teacher change to *be* teacher learning. As Timperley *et al.* (2007) note, there is a 'black box' (the uncertainties) related to the process of teacher change through PD, situated between professional learning opportunities and their impact on teaching practice. Little is known about how teachers interpret the understandings and utilise the particular skills, and about the consequent impact on teaching practice and student outcomes: "Understanding the processes involved in changing teaching practice is, however, a neglected area. Few studies have addressed the issue directly" (Timperley *et al.*, 2007, p. xl).

Early approaches to effecting teacher change through PD were based on a deficit-training-mastery model and often consisted of 'one-shot' workshops aimed at teacher mastery of prescribed skills and knowledge (McDonald, 2009). The ineffectiveness of this approach has provided the impetus for research related to the process of change and PD. Current perspectives now emphasise sociocultural and social constructivist views which have identified the importance of teacher learning, meaning and experience to facilitate change. Accordingly, there has been a shift in focus from earlier conceptions of change as something that is done to teachers to change as a complex process that involves learning (Clarke & Hollingsworth, 2002; Fullan & Stiegelbauer, 1991; Guskey, 1986; Hall & Loucks, 1977; Schon, 1983). The central focus of current PD efforts most closely aligns with the "change as growth or learning" perspective (Clarke & Hollingsworth, 2002, p. 948). At the core of current perspectives of teacher change and PD are views of "teachers as learners" and "schools as learning communities" (Clarke & Hollingsworth, 2002, p. 949). A number of models of teacher change through PD will be

outlined below as an attempt to conceptualise the changes that result from teacher PD as well as to answer the question of why ambitious reforms appear to work successfully in some settings and not in others.

1.4.3.1 Literature Search Process

As outlined in section 1.3.1 above, an initial literature search was conducted through ERIC (Ebsco) and PsycInfo using the terms '*teacher perceptions*', '*teacher change*' '*teacher learning*' and '*Incredible Years Teacher Classroom Management Programme*'. Although there were no studies which directly examined the process of teacher change through participation in the IY TCM programme, a number of empirical studies of IY TCM were obtained and reviewed above. A subsequent search was therefore conducted of the ERIC (Ebsco) and PsycInfo databases using combinations of the terms: '*model*' '*theory*' and '*process of teacher change*' '*process of teacher professional learning*' and '*teacher professional development*' '*staff development*' '*programme implementation*'. Search limits were set to return only peer-reviewed articles, written in English, from 1975 to present, thus ensuring early studies of teacher change through professional development were also identified. Manual searches of the reference lists of articles located were conducted to identify any further studies. Articles were included which outlined theoretical models of teacher change through professional development. Models or theories were included whereby the focus was on the change process at the individual teacher or group level and outlined in the context of formal continuing professional development activities (i.e. in-service teacher training and/or implementation of a new programme or innovation). Articles were excluded whereby the focus was on initial teacher education, incidental/informal learning of teachers, the change process at the school/organisational level, or were developed with specific reference to individual programmes or subjects (e.g. mathematics, science, technology, PE). In general, there are a variety of theoretical approaches to teacher change through PD, which, for the purpose of this review are organised in terms of stage models of teacher change through PD,

complexity theory framework of teacher change through PD, collaboration as a context for teacher change through PD, efficacy-based models of teacher change, and models or theories of teacher change through programme innovation (see Appendix 2 for table of studies reviewed).

1.4.3.2 Stage Models of Teacher Change

Guskey (1986, 2002) outlined a model of teacher change which describes a temporal sequence of change from PD experiences to change in teachers' attitudes and perceptions. Rather than planning for programmes to change teachers' beliefs (and then behaviours), Guskey (1986, 2002) promotes the view that PD changes teachers' practices which impact upon student outcomes which in turn leads to changed teacher beliefs and attitudes. It is not the PD per se, but the experience of successful implementation and improved student outcomes that changes teachers' attitudes and beliefs. Change is regarded as a developmental and experientially based learning process. Practices which produce positive student outcomes are retained and repeated thus leading to enduring change in practice. While often criticised for presenting teacher change as a linear process (Clarke & Hollingsworth, 2002), Guskey (2002) acknowledged that it is probably more cyclical in nature i.e. change in teachers' attitudes and beliefs leads to further changes in practice and additional student outcomes and so forth.

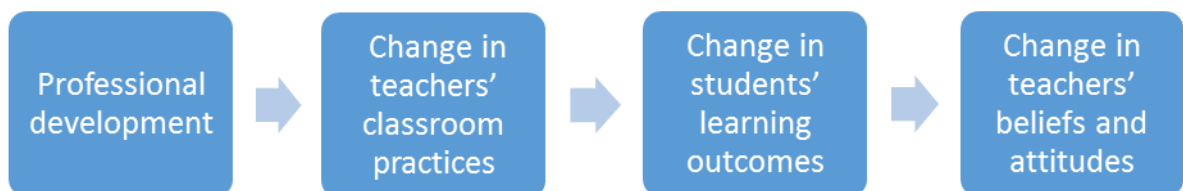


Figure 4: A model of teacher change (Guskey 1986, 2002)

There are several implications of Guskey's (1986, 2002) model of teacher change for PD. It recognises that change is a gradual and difficult process which often brings anxiety and requires time, effort and additional workload. Guskey (1986, 2002) emphasises that new programmes or

innovations will not be implemented uniformly due to the multitude of situational and contextual variables. Therefore, a balance needs to be found between programme fidelity and adaptation considerations. Since change occurs mainly after implementation of an innovation and there is evidence of improved student learning, continued follow-up, support, and pressure following the initial training is crucial to allow teachers to tolerate difficulties, to initiate change among those who are not motivated to change, whilst also providing encouragement to those to persist in the face of challenges.

Desimone (2009) proposed an operational theory of how PD influences teacher and student outcomes. This model suggests that teachers experience effective professional development which alters their knowledge, skills, beliefs, and practice. Changed practice subsequently influences student achievement. Desimone's (2009) notion of non-recursive, interactive pathways in the model does not prevent differential emphases on either the basic components (professional development, knowledge, practice, and student achievement) or the addition of moderating and mediating elements: (a) student characteristics, such as achievement and disadvantage; (b) individual teacher characteristics, such as experience, knowledge, beliefs, and attitudes; (c) contextual factors at the classroom, school, and district levels; and (d) policy conditions at multiple levels.

Clarke and Hollingsworth (2002) developed the Interconnected Model of Professional Growth (shown in Figure 5) as a model of teacher change which recognises professional growth as a continuous process of learning. Change occurs in recurring cycles through the mediating processes of 'reflection' and 'enaction' in four domains which encompass the teacher's world. The external domain can be interpreted as the PD activity e.g. in-service training. The domain of practice, the domain of consequence, and the personal domain constitute the individual teacher's professional world. The model locates 'change' in any of these domains. Professional

experimentation in the domain of practice involves teachers experimenting in their classrooms. Practices that are found to work are retained and repeated. Change in the domain of consequence is tied to the inferences the teacher draws from their classroom practice. For example, Clarke and Hollingsworth (2002) consider that using a new teaching strategy can have a positive outcome for one teacher, but a feeling of loss of control for another teacher. In terms of the reflective connection between the domain of practice and the domain of consequence, it is the teacher's interpreted change rather than any observable change that is considered crucial to subsequent change in knowledge and beliefs: "Teacher interpreted change is the only consequence of teacher experimentation that is 'of consequence' either to the teacher or to the researcher seeking to explain changes in teacher knowledge and beliefs" (Clarke & Hollingsworth, 2002, p. 956).

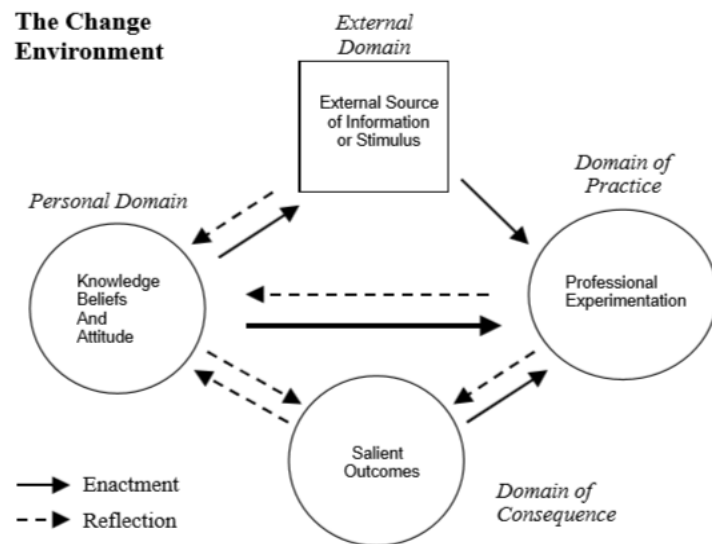


Figure 5: Interconnected model of professional growth (Clarke & Hollingsworth, 2002, p. 951)

A notable strength of the model is its recognition of the complexity of professional growth through the identification of multiple and cyclic movements between the systems of influence of the teacher's world. For significant teacher learning or growth to occur, change must occur in

multiple areas of influence (Clarke & Hollingsworth, 2002). The interconnected non-linear structure enables identification of particular ‘change sequences’ (when change in one domain leads to change in another through enaction or reflection) and ‘growth networks’ (defined as evidence of lasting change). The alternate pathways give recognition to the idiosyncratic and individual nature of teacher professional growth. The Interconnected Model gives due recognition to the situated and cognitive nature of teacher growth in terms of the development of individual practice and individual theories of practice within the change environment that both constrains and affords individual variation e.g. opportunities to participate in PD programmes, administrative support to implement innovative teaching strategies, collegial discussion and structured opportunities to share and reflect on each other’s practice.

1.4.3.3 Complexity Theory Framework of Teacher Change

Opfer and Pedder (2011) attempted to shift the conceptual framing of teacher learning and PD research from a cause-and-effect approach to a focus on teacher learning as a complex system. They adopted a complexity theory framework to demonstrate the ways in which elements of three subsystems (the teacher, the school, and the learning activity) interact and combine in different ways and with varying intensities to influence teacher learning. Opfer and Pedder (2011) adopt a process logic of explanation that couples an understanding of systems with a search for initial conditions, sequences, and combinations of mechanisms that come together into processes that generate explainable but variable outcomes. This approach assumes that in different combinations, circumstances, and sequences, the same causes that may produce teacher learning and change may also lead to intellectual stagnation and inertia. Their dynamic model of teacher learning and change moves beyond a focus on the effects of PD activity to consider individual and school-level influences that mediate teacher learning and change. The specific sets of activities, systems, and supports for learning in use in one context, with one set of teachers, may be quite different from those that would be necessary to achieve the same end in

another context with a different set of teachers.

1.4.3.4 Collaboration as a Context for Teacher Change

Research has found that teacher collaboration is a powerful learning environment for PD and change (Borko, 2004; Grossman *et al.*, 2001; Meirink *et al.*, 2010; Shulman & Gamoran Sherin, 2004). Collaborative models of PD engage teachers in joint inquiry or problem-solving as a means of creating and extending knowledge and shifting beliefs and practice (e.g. Putnam & Borko, 2000; Borko *et al.*, 1997; Boudah *et al.*, 2001; Briscoe & Peters, 1997; Englert & Tarrant, 1995; Palincsar *et al.*, 1998; Stein *et al.*, 1999). A “communities of practice” (CoP) (Lave, 1991; Lave & Wenger, 1991) framework, based on the idea of learning as social participation, has often been used to describe these collaborative initiatives (Englert & Tarrant, 1995; Palincsar *et al.*, 1998; Perry *et al.*, 1999). According to Schlager and Fusco (2004), a community of practice can play an integral role in teacher PD. Perry *et al.* (1999, p. 218) describe COPs established in teachers’ PD as “intellectual groups who share goals/purposes and engage in planning, enacting, and reflecting. In these communities learning proceeds from action, expertise is distributed, and knowledge is socially constructed”.

Although collaboration is considered a powerful PD environment for teachers, little empirical research has investigated specifically how teachers learn in collaborative settings (Borko, 2004). Instead, there has been a focus in the literature on what teachers learn from collaboration and on the conditions under which collaboration is most effective for teacher PD (Borko *et al.*, 1997; Little, 1999). Butler *et al.* (2004) investigated individual and collective learning processes and the relationship with shifts in teachers’ professional practices in the context of a collaborative PD initiative. Their study illustrates the value of interfacing a COP framework with models of self-regulated learning for understanding teacher development (Kremer-Hayon & Tillema, 1999). By participating in a collaborative learning community, teachers benefitted from the

distributed expertise and opportunities to share ideas and problem-solve challenges with colleagues. It was also found that working with others has the potential to sustain momentum through inevitable challenges. Butler *et al.* (2004) outlined a model of self-regulated learning for describing how teachers shifted their practice by identifying best practices, enacting changes in their classrooms, reflecting on outcomes, and adapting approaches.

1.4.3.5 Efficacy-based Theories of Teacher Change

Ross and Bruce (2007) developed a model of teacher change (see Figure 6 below) influenced by social cognition theory (Bandura, 1997) and research on student self-assessment. Ross and Bruce (2007) propose that teacher change occurs through reflection on experience and that self-efficacy beliefs mediate the influence of self-assessment on teacher practice. According to Bandura's (1997, p.3) social cognitive theory, self-efficacy is defined as "beliefs in one's capabilities to organize and execute the courses of action required to produce given attainments". Teacher self-efficacy has been described as "the extent to which the teacher believes he or she has the capacity to affect student performance" (Berman *et al.*, 1977, p. 137). Researchers have demonstrated that teachers with high self-efficacy beliefs generate stronger student achievement, are more likely to try new ideas, set more challenging goals, use classroom management approaches that stimulate student autonomy, persist in the face of challenges, collaborate with colleagues and parents, take personal responsibility for student outcomes, and are more likely to successfully implement new programmes (Guskey & Passaro, 1994; Tschannen-Moran *et al.*, 1998; Ross, 1998; Woolfolk *et al.*, 1990; Allinder, 1995; Goddard *et al.*, 2004; Han & Weiss, 2005; Skaalvik & Skaalvik, 2007). Self-efficacy develops through reflection on four sources of efficacy information (Bandura, 1997): 1) mastery experiences (situations whereby teachers experience successful outcomes as a result of their practice), 2) vicarious experience (social comparison by observations of successes and failures of others), 3) verbal persuasion (by peers and superiors), and 4) physiological and affective states. Of the four sources of self-efficacy

information identified by Bandura (1997), the most powerful is mastery experience - being successful in the classroom. Bandura (1977, 1982) suggested that self-efficacy is the mediating variable between knowledge and actual behaviour. Researchers (e.g. Guskey, 1988; Smylie, 1988; Scribner, 1999; Ashton & Webb, 1986; McLaughlin & Marsh, 1978) have found that teachers' level of efficacy influenced their response to PD such that those with high self-efficacy were more likely to change and implement new practices or programmes.

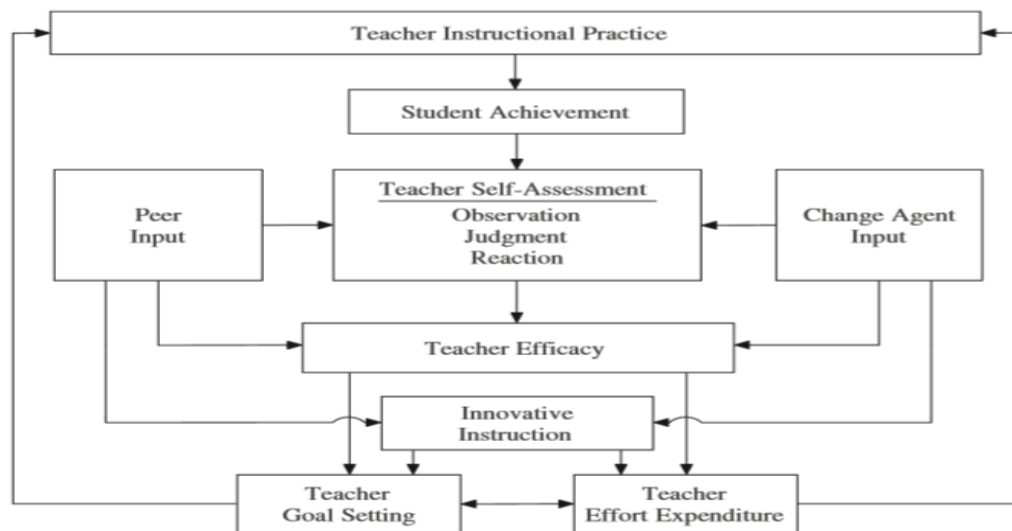


Figure 6: Refined model of teacher self-assessment (Ross & Bruce, 2007, p. 154)

At the core of Ross and Bruce's (2007) model is teacher self-assessment in which teachers observe their effect on student achievement and make a judgement about how well they attained their instructional goals. Ross and Bruce (2007) maintain that self-assessment, especially regarding positive mastery experiences, contributes to teacher efficacy. Peers and PD presenters can also influence teacher self-assessment and provide teacher efficacy information through feedback recognising teaching success (mastery experiences), social persuasion (telling colleagues they are capable of performing a task), vicarious experience (highlighting the successful performance of someone similar to the teacher), and managing physiological and emotional states (strengthening positive feelings or reducing negative feelings such as stress). The contributions to teacher self-assessment and teacher efficacy, in concert with information on

innovative instruction, heighten teacher efficacy, which influences goal setting and effort expenditure. In the model, changes in goals and effort contribute to improved instructional practice, which result in higher student achievement.

As well as being a predictor for change through PD, a small number of researchers have investigated the effects of PD on the development of teacher efficacy. For example, Timperley and Phillips (2003) found that when teachers implemented new instructional practices in reading which resulted in unanticipated changes in their students' achievement, their self-efficacy beliefs were enhanced. Tschannen-Moran & Woolfolk Hoy (2001, p. 803) maintain that "the professional development of teachers would be structured as powerful mastery experiences with an eye toward helping teachers garner evidence of improved learning on the part of their students in order to reap the efficacy pay-off that would result". Despite this, a number of researchers have found an 'implementation dip' in self-efficacy as teachers began to implement a change initiative (Ross, 1994; Stein & Wang, 1988; Woolfolk Hoy & Burke-Spero, 2005). These self-efficacy beliefs tended to rebound for teachers who were able to successfully implement the change initiative. To support teachers in these early stages of change, researchers have concluded that there needs to be continued support and follow-up after initial training (Stein & Wang, 1988).

1.4.3.6 Theories of Teacher Change through Adoption of an Innovation

The results of numerous studies (Fuller, 1969; Hall *et al.*, 1977; Richardson, 1990) show the perceptions of those involved in innovations to be of major importance to the success of the change process. The Concerns-Based Adoption Model (CBAM; Hall & Loucks, 1978), which is specific to teacher change, presents a series of heuristics for understanding and supporting teachers' perceptions and experiences of change involving adoption of an innovation. It is identified as a model which can be used to study top-down change facilitated by an external

change agent. The concept of ‘concern’ refers to the personal experiences that teachers have when they are involved in a change, including the feelings, questions, uncertainties, and possible resistance they may have in response to new situations and/or changing demands (Hall *et al.*, 1977). The CBAM consists of three evaluative frameworks (Stages of Concern, Levels of Use, Innovation Configurations) for determining where teachers fall in the change process.

The Stages of Concern (SoC) framework was the original focus of the CBAM. It provides an organised method for evaluating teachers’ perceptions, feelings and motivations about the innovation and the change process, from lack of awareness about the proposed change, to refining and refocusing newly established practices. The SoC questionnaire is structured around three clusters of concern: self (concerns about personal ability), task (concerns about the performance of the task), and other or impact (concerns about cooperation among colleagues and concerns about the progress and results for students). The seven Stages of Concern (Awareness, Informational, Personal, Management, Consequence, Collaboration, Refocusing) are illustrated in Figure 7 below.

Figure 7: Stages of concern about an innovation (Hall & Loucks, 1978)

General category of concerns	Distinct stage of concern with general description	
Impact	Stage 6 - Refocusing	The focus is on exploration of more universal benefits from the innovation including the possibility of major changes or replacement of innovation with a more powerful alternative.
	Stage 5 - Collaboration	The focus is on coordination and cooperation with others regarding use of the innovation.
	Stage 4 - Consequence	Attention focuses on impact of the innovation on students in his or her immediate sphere of influence. The focus is on relevance of the innovation for students, evaluation of student outcomes, including performance and competencies, and changes needed to increase student outcomes.
Task	Stage 3 - Management	Attention is focused on the processes and tasks of using the innovation and the best use of information and resources. Issues related to efficiency, organization, management, scheduling, and time demands are the utmost concern.
Self	Stage 2 - Personal	Individual is uncertain about the demands of the innovation, his or her inadequacy to meet those demands, and his or her role with the innovation. This includes analysis of his or her role in relation to the reward structure of the organization, the decision-making process, and consideration of potential conflicts with existing structures or personal commitments.
	Stage 1 - Informational	A general awareness of the innovation and interest in learning more detail about it is indicated. The person seems unworried about himself or herself in relation to the innovation. She or he is interested in the substantive aspects of the innovation in a selfless manner such as general characteristics, effects, and requirements for use.
Unrelated	Stage 0 - Awareness	Little concern about or involvement with the innovation is indicated.

Consideration of teachers' concerns during PD and the process of adopting evidence-based interventions, as indicated by their status on the SoC framework, may serve to reduce the likelihood of passive or active resistance to new practices, and provide useful information for evaluating and supporting intervention and programme implementation. Research studies have demonstrated the relationship between teachers' concerns, the fidelity of their implementation, and the effects on student behaviour and performance (George *et al.*, 2000; Van den Verg & Ros, 1999). To maximise the chances of an innovation succeeding, PD facilitators must therefore connect with the relevant clusters of concern (Hall & Loucks, 1978). Despite this, a number of criticisms of the SoC framework have been identified. Bailey and Palsha (1992) note that Stage 0 and 1 are basically indistinguishable and that Stage 6, Refocusing, is not reasonably a separate category. Anderson (1997) argues with the assumption that teachers progress linearly in their

development and innovation, most notably at the Management stage. He argues that the framework does not assume any points in its scale whereby tensions become tighter and resistance higher. There have also been criticisms that the model is not sensitive to context.

1.4.3.7 Synthesis of Models of Teacher Change

The research evidence presented above indicates that there are a wide range of factors related to teacher change which have been incorporated into the theoretical models described and are summarised in Table 1 below. For significant change to take place, it appears that change must occur in multiple domains including changes in teacher knowledge, skills, beliefs/attitudes and/or practice. Teacher reflection on changes in their practice and consideration of the impact on student outcomes is central to this process. The experience of successful implementation of changes in one's practice and improved student outcomes (mastery experiences) seems to play a key role in changing teachers' attitudes and beliefs. This includes heightening teacher efficacy or belief in their capacity to bring about change in their students, which influences goal setting and effort expenditure, and in turn contributes to further improvements in teaching practice and student outcomes. The models of teacher change have identified a variety of factors which serve to promote or inhibit teacher change including factors related to the context of the PD activity, individual teacher factors, student characteristics and factors in the school environment as well as at policy level. In particular, teacher collaboration and peer support is a powerful context for facilitating change. Research has highlighted the importance of examining the subjective reality of teachers during change and implementation of innovation. Teacher change is regarded as a highly personal experience involving changes in teachers' feelings, motivations and perceptions at different stages in the change process. It is the teacher's individual interpretive acts and their perceptions of change phenomena that they consider salient that are regarded as important in explaining teacher learning or change.

Table 1: Factors associated with theoretical models of teacher change

Factors	Model of teacher change
Change in teacher knowledge, skills, beliefs/attitudes and/or practice	Guskey (1986; 2002) Clarke & Hollingsworth (2002) Desimone (2009) Butler <i>et al.</i> (2004) Ross & Bruce (2007) Opfer & Pedder (2011) CBAM (Hall & Loucks, 1978)
Outcomes for students	Guskey (1986; 2002) Clarke & Hollingsworth (2002) Desimone (2009) Ross & Bruce (2007) CBAM (Hall & Loucks, 1978)
Factors influencing change (PD factors, individual teacher factors, student factors and/or school/policy factors)	Guskey (1986; 2002) Clarke & Hollingsworth (2002) Desimone (2009) Ross & Bruce (2007) Opfer & Pedder (2011) CBAM (Hall & Loucks, 1978)
Reflection/ teacher self-assessment	Guskey (1986; 2002) Clarke & Hollingsworth (2002) Ross & Bruce (2007) CBAM (Hall & Loucks, 1978)
Teacher efficacy	Ross and Bruce (2007) Guskey (1986; 2002) Clarke & Hollingsworth (2002)
Teacher collaboration	Ross & Bruce (2007)
Change as a personal experience (role of teacher feelings, motivations and/or perceptions)	CBAM (Hall & Loucks, 1978) Clarke & Hollingsworth (2002)

1.5 SUMMARY

While the IY TCM programme has been empirically investigated under conditions of university-based implementation and in some school settings, there is less available research regarding its effectiveness when implemented under conditions of typical practice. Although RCTs by the developers evaluated IY TCM as part of a larger treatment package for children with conduct

problems and selected high risk populations that included child and/or parent training, it is unknown what effects the IY TCM programme alone would have had without being combined with parent/child programmes. There have also been several independent evaluations of the programme in conjunction with other interventions (e.g. IY classroom curriculum unit on social-emotional skills) and supplemented by other methods (e.g. coaching/consultation for teachers). As outlined above in the review, only five independent evaluations of IY TCM as a stand-alone intervention implemented in school settings have been undertaken (Hutchings *et al.*, 2007; McGilloway *et al.*, 2011; Carlson *et al.*, 2011; Fergusson *et al.*, 2013; Hutchings *et al.*, 2013). Furthermore, there has been limited research to date which has examined the revised and enhanced version of IY TCM (Webster-Stratton, 2006). Revisions incorporate an additional session on problem solving and a greater focus on self-regulation and coaching through the addition of supplemental vignettes and group training activities. From the review, it is evident that existing IY TCM research has involved a predominantly quantitative focus on outcomes. Only three studies have undertaken qualitative analysis of IY TCM (Hutchings *et al.*, 2007; Baker-Henningham & Walker, 2009; McGilloway *et al.*, 2011). Of these, Baker-Henningham & Walker's (2009) research supplemented IY TCM with the curriculum unit on social-emotional skills (Dinosaur Curriculum) and McGilloway *et al.*'s (2011) Irish study is not published in a peer reviewed journal. Therefore, it appears that Hutchings *et al.*'s (2007) study is the only evaluation of IY TCM as a stand-alone intervention which qualitatively examined teachers' perceptions and has been published in a peer-reviewed journal. In-depth investigations of teachers' perceptions of school-based interventions are important as their views are likely to impact programme implementation and sustainability (Han & Weiss, 2005; Beets *et al.*, 2008).

Despite a seeming consensus on the features of professional development (PD) that lead to teacher learning or change (Garet *et al.*, 2001; Desimone, 2009), previous reviews have demonstrated that the available literature fails to explain how teachers learn from PD (Borko,

2004) and the conditions that support and promote this learning (Clarke & Hollingsworth, 2002). As Timperley *et al.* (2007) note, there is a 'black box' related to the process of teacher learning through PD, situated between professional learning opportunities and their impact on teaching practice. Little is known about how teachers interpret the understandings and utilise the particular skills made available through professional learning opportunities, and about the consequent impact on teaching practice. A number of models of teacher change through PD were reviewed in an attempt to consider and conceptualise the changes that result from teacher learning as well as to answer the question of why ambitious reforms appear to work successfully in some settings and not in others. It is clear that PD research is required that views the learner, context, and learning as inextricably interrelated. There is a need for more research that investigates the experience of teacher change as constructed and embedded within authentic professional practice. This is congruent with many qualitative research approaches which seek to understand professionals' experiences of learning in a way that respects and retains the complexity and diversity of these experiences, with the aim of developing insights into better ways to support professional development.

Theory and research on professional development (PD) indicates that teachers change in different ways and amounts as a result of participating in PD and multiple factors influence the type and amount of change they experience. Researchers investigating instructional-reform initiatives rarely examine teachers' views about change and the professional development that supports the change process (Le Fevre & Richardson, 2002; Tye, 2000). As noted by Clarke and Hollingsworth (2002, p. 947), "The optimization of the outcomes of a process is facilitated by the understanding of that process. If we are to facilitate the professional development of teachers, we must understand the process by which teachers grow professionally and the conditions that support and promote that growth". An understanding of the process of teacher change is necessary to explain more completely the outcomes of PD and to identify under what

conditions, why and how teacher change may or may not occur. Teachers' perceptions and beliefs (Brownlee, 2003; Chai *et al.*, 2009) shape their enthusiasm for teaching and guide their teaching philosophy (e.g. Pierce & Ball, 2009; Tan & Lan, 2011). What enters classrooms from PD depends on teachers having positive perceptions of what they are learning and how likely they are to succeed at it, perceptions that position them to invest in, learn, and transfer new skills to their classrooms (Barnes *et al.*, 2006). No research has examined in detail the process or factors that influence teacher change through IY TCM training. The literature clearly indicates that PD research needs to move beyond 'main effect' questions (Snyder *et al.*, 2011). Why teachers respond differently to professional development opportunities is not yet well understood. To advance research on teacher change through PD, it will be important to explicate which features of PD work for whom and under what circumstances.

It is clear that previous evaluations of IY TCM are generally realist in their framework. A more qualitative study is required which examines teachers' perceptions of change in themselves over the course of the IY TCM programme in relation to student outcomes and the factors which support/hinder this change. This research would shed light on the 'black box' between teacher PD (IY TCM training) and the student outcomes which have previously been identified through predominantly quantitative research. A critical realist perspective will be adopted in the present study to develop an understanding of the process and mechanisms associated with teacher change which result in improved student outcomes under the influence of the IY TCM programme. To achieve this aim, this study will attempt to address the following research questions:

- 1) What are teachers' perceptions of the process of change as a result of their participation in the IY TCM programme?*

- 2) *What student outcomes were perceived by teachers as a result of their participation in the IY TCM programme?*

- 3) *What is the relationship between self-perceived teacher change and teachers' perception of change in their students' social, emotional and behavioural functioning as a result of participation in the IY TCM programme?*

2 EMPIRICAL PAPER

2.1 INTRODUCTION

2.1.1 Background

Without effective early intervention, young children with social, emotional and/or behavioural difficulties (SEBD) are at significantly greater risk of experiencing academic underachievement, rejection by teachers and peers, school dropout, violence, delinquency, substance abuse and continuing mental health problems in adolescence and adulthood (Costello *et al.*, 2006; Whitted, 2011; Raver & Knitzer, 2002; Webster-Stratton & Reid, 2003; Moffitt & Scott, 2009). Teachers make a significant contribution to the social, emotional and behavioural development of their students not only by how and what they teach but also by how they relate, teach and model social and emotional constructs, and manage the classroom (Birch & Ladd, 1998; Hamre & Pianta, 2001, 2006; Murray & Greenberg, 2000; Pianta *et al.*, 2003). Jennings and Greenberg (2009) developed a mediational model (Prosocial Classroom Model – Figure 8) which considers teacher social-emotional competence (SEC) and wellbeing as a consequence and contributor to healthy teacher-student relationships, effective classroom management and effective implementation of social-emotional learning (SEL) programmes. A transactional relationship is also conceptualised between these three aspects of the model and the outcome of a healthy classroom climate which directly contributes to students' social, emotional, and academic outcomes. While a number of the elements of the prosocial classroom model will be referred to below as factors related to the prevention, development and maintenance of SEBD in children, more detailed discussion can be found in Jennings and Greenberg (2009).

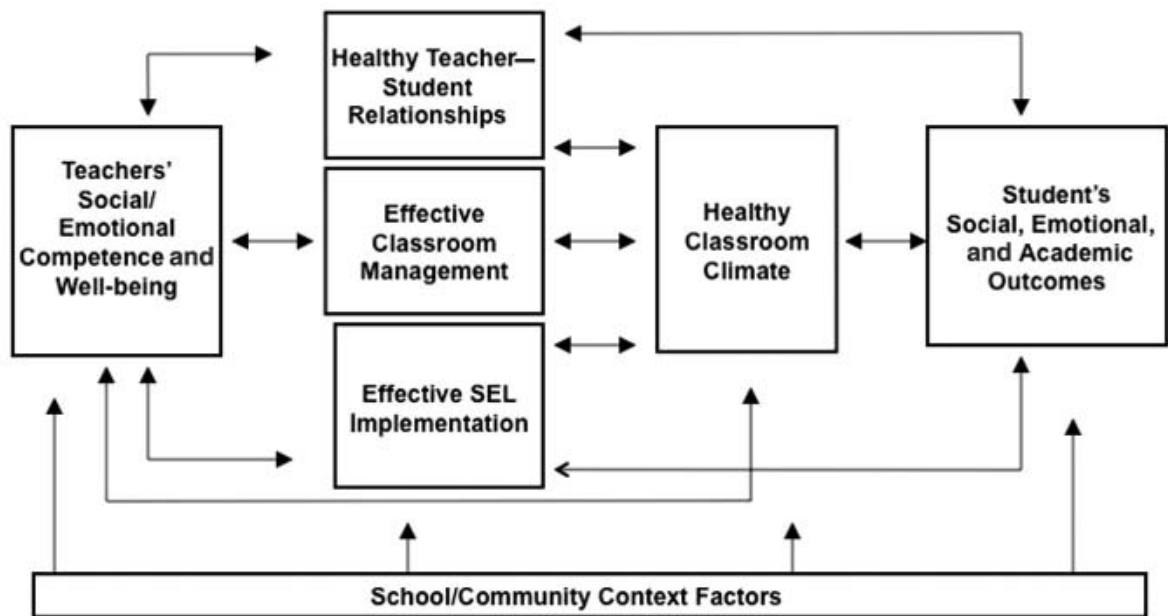


Figure 8: Prosocial classroom model (Jennings & Greenberg, 2009, p. 494)

Teacher wellbeing can be considered an umbrella term for both positive and negative indicators of psychological and physical health (Spilt *et al.*, 2011). High levels of disruptive behaviour have consistently been found to impact negatively upon teachers' job satisfaction, stress, and the likelihood of burnout (Bakker *et al.*, 2007; Friedman, 2006; Brouwers & Tomic, 2000; Evers *et al.*, 2004; Hastings & Bham, 2003; Tsouloupas *et al.*, 2010). Theoretically relevant positive indicators of teacher wellbeing include job satisfaction, work motivation, self-efficacy, self-esteem, and positive self-view (Brouwers & Tomic 2000; Hakanen *et al.*, 2006; Tsouloupas *et al.* 2010). Researchers have demonstrated that teachers with high self-efficacy beliefs generate stronger student achievement, are more likely to try new ideas, set more challenging goals, use classroom management approaches that stimulate student autonomy, persist in the face of challenges, collaborate with colleagues and parents, take personal responsibility for student outcomes, and are more likely to successfully implement new programmes (Guskey & Passaro, 1994; Tschannen-Moran *et al.*, 1998; Ross, 1998; Woolfolk *et al.*, 1990; Allinder, 1995;

Goddard *et al.*, 2004; Han & Weiss, 2005; Skaalvik & Skaalvik, 2007). Tschannen-Moran *et al.* (1998) developed an integrated model which reflects the cyclical nature of teacher efficacy (Figure 9).

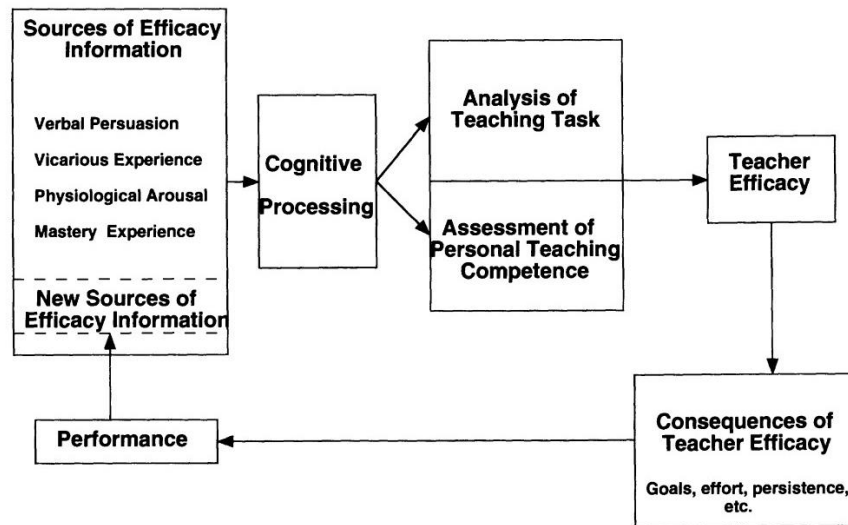


Figure 9: The cyclical nature of teacher efficacy (Tschannen-Moran *et al.*, 1998, p. 228)

Considerable research has demonstrated that the development of supportive teacher-student relationships, effective classroom management and effective SEL implementation play a critical role in promoting a positive classroom climate, preventing and reducing problem behaviours, enhancing students' interest, connection and engagement to school, and increasing academic and social-emotional outcomes (Durlak *et al.*, 2011; Birch & Ladd, 1997; Pianta & Stuhlman, 2004; Raver *et al.*, 2008; Kellam *et al.*, 2008; Webster-Stratton *et al.*, 2004, 2008; Hamre & Pianta, 2001; McNeely *et al.*, 2002; Osher *et al.*, 2007; Buhs *et al.*, 2006; Kunter *et al.*, 2007). Despite this, many teachers report a lack of training, preparedness and confidence to meet the needs of children with SEBD (Reinke *et al.*, 2011; Hemmeter *et al.*, 2006).

2.1.2 Incredible Years Teacher Classroom Management Programme

The Incredible Years Teacher Classroom Management Programme (IY TCM; Webster-Stratton, 1994, 2006) is part of an evidence-based set of parent, teacher, and child programmes developed for treating and preventing conduct problems and promoting social competence and emotional regulation in children aged three to eight (Webster-Stratton & Herman, 2010). These programmes have been endorsed by the Office for Juvenile Justice and Delinquency Prevention as one of eleven ‘blueprint’ model violence prevention evidence-based programmes (Webster-Stratton *et al.*, 2001). The IY TCM programme targets teachers’ use of effective classroom management strategies for managing misbehaviour, promoting positive relationships students and for strengthening children’s social-emotional competence and problem-solving skills (Reinke *et al.*, 2012).

A number of randomised controlled trials by the programme developers (Webster-Stratton *et al.*, 2001; Webster-Stratton *et al.*, 2004; Webster-Stratton *et al.*, 2008) have evaluated the intervention in conjunction with parent and/or child training for children with conduct problems and selected high risk populations. Child outcomes included significant reductions in conduct problems, aggression and non-cooperation, and improvements in social competence, emotional regulation, school readiness, and enjoyment in school activities, were reported in these studies. The programme also significantly impacted upon teacher behaviours in terms of less critical and harsh discipline, increased use of praise and positive classroom management strategies, and more confidence in teaching. There have also been several independent evaluations of the IY TCM programme in conjunction with other interventions (e.g. IY classroom curriculum unit on social-emotional skills) and supplemented by other methods (e.g. coaching/consultation for teachers) which have replicated many of these findings (e.g. Raver *et al.*, 2008; Williford & Shelton, 2008; Baker-Henningham *et al.*, 2009; Baker-Henningham & Walker, 2009; Baker-Henningham *et al.*, 2012; Shernoff & Kratochwill, 2007). As the IY TCM programme was

evaluated in conjunction with parent and/or child training or in combination with coaching/consultation in these studies, it is unknown what effects teacher training alone would have had on teacher and child outcomes. In this way, there is less available research which has evaluated the programme when implemented as a stand-alone intervention under conditions of typical practice.

Five independent evaluations of IY TCM in isolation from other interventions have been undertaken (Hutchings *et al.*, 2007; McGilloway *et al.*, 2011; Carlson *et al.*, 2011; Fergusson *et al.*, 2013; Hutchings *et al.*, 2013). Most of the available IY TCM research involves a quantitative focus on outcomes for teachers and children. For example, recent research by Hutchings *et al.* (2013) investigated the effectiveness of the IY TCM programme using a randomised controlled trial design and independent classroom observations. Multilevel modelling analyses indicated that there was a significant reduction in teacher negative behaviour towards target children in the intervention group. Child outcomes included significant decreases in classroom off-task behaviour and significant main effects for target child negatives towards the teacher and off-task behaviour. Children with high total difficulties SDQ scores showed a significant reduction in both negative behaviour towards the teacher and off-task behaviour while those with low total difficulties SDQ scores in the intervention group showed no change post-intervention.

There are only three qualitative investigations of IY TCM (Hutchings *et al.*, 2007; Baker-Henningham & Walker, 2009; McGilloway *et al.*, 2011). The results of Hutchings *et al.*'s (2007) thematic content analysis revealed a high level of teacher satisfaction, ease of implementation and general usefulness of the programme. Baker-Henningham and Walker (2009) examined teacher's views of the acceptability, feasibility and usefulness of the IY TCM programme supplemented by the curriculum unit on social-emotional skills (IY Dinosaur Classroom Curriculum) in Jamaica. Teachers reported enhanced understanding of children's needs and

abilities, the use of more developmentally appropriate strategies, more interactive teaching methods, increased use of positive and proactive strategies, better relationships with children, increased social-emotional competence and school readiness of children and benefits to parent-teacher relationships. Although not published in a peer-reviewed journal, McGilloway *et al.*'s (2011) Irish research involved a qualitative sub-study whereby interviews were used to assess teachers' views of managing conduct problems as well as teacher-perceived effectiveness and acceptability of programme. Therefore, it appears that Hutchings *et al.*'s (2007) study is the only evaluation of IY TCM as a stand-alone intervention which qualitatively examined teachers' perceptions and has been published in a peer-reviewed journal.

2.1.3 Teacher Change through Professional Development

Despite a seeming consensus on the features of professional development (PD) that lead to teacher learning or change (Garet *et al.*, 2001; Desimone, 2009), previous reviews have demonstrated that the available literature fails to explain how teachers learn from PD (Borko, 2004) and the conditions that support this learning (Clarke & Hollingsworth, 2002). As Timperley *et al.* (2007) note, there is a 'black box' related to the process of teacher learning through PD, situated between professional learning opportunities and their impact on teaching practice. Little is known about how teachers interpret the understandings and utilise the skills made available through professional learning opportunities, and about the consequent impact on teaching practice. A number of models of teacher learning/change through PD have been developed in the literature which can be broadly grouped into two categories: those which focus on the stages/phases of change through PD and those which examine how teachers change through PD i.e. learning processes.

Guskey's (1986, 2002) stage model of teacher change considers that PD changes teachers' practices which impact upon student outcomes and in turn lead to changed teacher beliefs and

attitudes. While often criticised for presenting teacher change as a linear process (Clarke & Hollingsworth, 2002), Guskey (2002) acknowledged that it is probably more cyclical in nature – change in teachers’ attitudes and beliefs leads to further changes in practice and additional student outcomes and so forth. Clarke and Hollingsworth (2002) developed a model of teacher change which recognises professional growth as a continuous process of learning - the Interconnected Model of Professional Growth (Figure 10). Change occurs in recurring cycles through the mediating processes of ‘reflection’ and ‘enaction’ in four domains which encompass the teacher’s world. Change and professional growth occur within the constraints and affordances of the change environment e.g. opportunities to participate in PD programmes, administrative support etc. (Clarke & Hollingsworth, 2002).

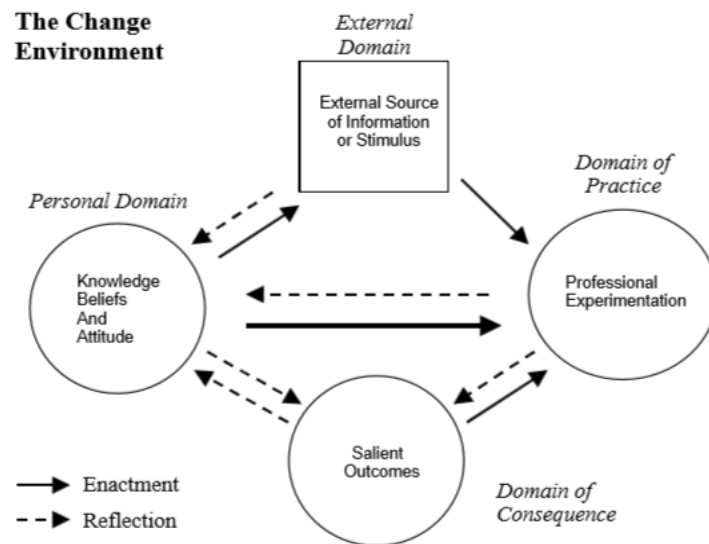


Figure 10: Interconnected model of professional growth (Clarke & Hollingsworth, 2002, p. 951)

The PD literature has also examined how teachers learn or change through collaboration (Borko, 2004; Grossman *et al.*, 2001; Meirink *et al.*, 2010; Shulman, & Gamoran Sherin, 2004, Borko *et al.*, 1997; Boudah *et al.*, 2001; Briscoe & Peters, 1997; Englert & Tarrant, 1995; Palincsar *et al.*, 1998; Stein *et al.*, 1999). A ‘communities of practice’ (CoP) (Lave, 1991; Lave & Wenger,

1991) framework has often been used to describe these collaborative initiatives (Englert & Tarrant, 1995; Palincsar *et al.*, 1998; Perry *et al.*, 1999). Although collaboration in a CoP is considered a powerful professional development environment for teachers (Schlager & Fusco, 2004), little empirical research has investigated specifically how teachers learn in these settings (Borko, 2004). Teacher efficacy has also been identified as playing a key role in teacher change. Ross and Bruce (2007) developed a model of teacher change which proposes that change occurs through reflection on experience and that self-efficacy beliefs mediate the influence of self-assessment on teacher practice.

2.1.4 Factors Influencing Teacher Change

Theory and research on teacher change indicates that the outcomes of PD are mediated by various psychological states of individuals as well as the organisational contexts in which they work. At the individual level, teacher motivation to attend PD (Smith *et al.*, 2003), perceived value and confidence that the programme/practice will lead to positive outcomes (programme efficacy) (Stein & Wang, 1988; Fullan, 1982), and level of congruence between the programme and the teachers' own goals and practices (Berman & McLaughlin, 1975) have been identified as factors which influence teacher learning through PD. Some researchers have suggested that teachers are more likely to change and implement new programmes if they have high personal self-efficacy (Smylie, 1988; Guskey, 1988; Scribner, 1999; Ashton & Webb, 1986).

At the school level, teachers' collective efficacy (e.g. Goddard, 2002; Klassen *et al.*, 2011) and school-level beliefs about teaching and learning create collective practices or norms of action which can influence change (Bowers & Nickerson, 2001; Hargreaves, 1999). For example, sustained implementation of particular strategies to support children with disruptive behaviour advocated during a PD initiative is unlikely if the strategies do not 'fit' with the school's approach (Giallo & Hayes, 2007). An emphasis on the development of 'communities of practice'

and ‘professional learning communities’ in recent times highlights the importance of whole-school PD initiatives and collegial networks to promote the sustained use of evidence-based practices (Stoll *et al.*, 2006; Stichter *et al.*, 2006; Grossman *et al.*, 2001; Palsha & Wesley 1998; Birman *et al.*, 2000). Implementation of a new model or programme presented through PD is most likely to be successful when strong support and leadership is provided (Berends *et al.*, 2002; Rohrbach *et al.*, 2006; Banilower *et al.*, 2007).

2.1.5 Rationale for Study

There is limited research which has qualitatively examined teachers’ perceptions of the IY TCM programme as a stand-alone intervention in school settings. In-depth investigations of teachers’ perceptions of evidence-based interventions are important as their views are likely to impact implementation fidelity and programme sustainability (Han & Weiss, 2005; Beets *et al.*, 2008; Schoenwald & Hoagwood, 2001). Qualitative interviews with teachers can assist in identifying the scope of potential outcomes and in building hypotheses about the mechanisms by which an intervention achieves its effects (Baker-Henningham & Walker, 2009).

Theory and research on professional development (PD) indicates that teachers change in different ways and amounts as a result of participating in PD and multiple factors influence the type and amount of change they experience. Despite this, researchers rarely examine teachers’ views about change and the PD that supports the change process (Le Fevre & Richardson, 2002; Tye, 2000). The results of numerous studies (Fuller, 1969; Hall *et al.*, 1977; Richardson, 1990) show that the perceptions of those involved in innovations to be of major importance for the success of the change process. An understanding of the process of teacher change is necessary to explain more completely the outcomes of PD and to identify under what conditions, why and how teacher change may or may not occur. Teachers’ perceptions and beliefs (Brownlee, 2003; Chai *et al.*, 2009) shape their enthusiasm for teaching and guide their teaching philosophy (e.g.

Pierce & Ball, 2009; Tan & Lan, 2011). What enters classrooms from PD depends on teachers having positive perceptions of what they are learning and how likely they are to succeed at it, perceptions that position them to invest in, learn, and transfer new skills to their classrooms (Barnes *et al.*, 2006). No research has examined in detail the process or factors which influence teacher change through IY TCM training. The literature clearly indicates that PD research needs to move beyond ‘main effect’ questions (Snyder *et al.*, 2011). To advance research on teacher change through PD, it is important to explicate which features of PD work for whom and under what circumstances. In general, a more qualitative study of IY TCM is therefore required.

The aim of the current study is to develop an understanding of teacher change that results in improved student outcomes under the influence of the IY TCM programme. In other words, it is hoped that the research will shed light on the ‘black box’ between teacher PD (IY TCM training) and student outcomes which have been identified in the quantitative research literature. To achieve this aim, teacher perceptions of the process of change over the course of training in the IY TCM programme will be examined in relation to student outcomes and the factors which influence this change.

2.1.6 Research Questions and Hypotheses

- 1) What are teachers’ perceptions of the process of change as a result of their participation in the IY TCM programme?*
- a) How do teachers’ knowledge, skills, beliefs and practice develop over the course of the IY TCM programme in relation to outcomes for students?
- b) What factors support or hinder teacher change during participation in the IY TCM programme?

- c) How do teachers retrospectively appraise their change in knowledge, skills, beliefs and practices as a result of participating in the IY TCM programme?
- d) Following participation in the IY TCM programme, what factors are perceived as supporting or hindering teacher change?

2) *What student outcomes were perceived by teachers as a result of their participation in the IY TCM programme?*

- a) How do teachers retrospectively appraise changes in their students' social, emotional and behavioural functioning as a result of participating in the IY TCM programme?
- b) Research hypotheses

Hypothesis 1: There will be significant before and after change in teachers' perceptions of their students' social, emotional and behavioural functioning as indicated by change in SDQ scores, across all students rated.

Hypothesis 2: There will be a significant difference in SDQ scores according to level of challenging behaviour from Time 1 (pre-intervention) to Time 2 (post-intervention). Children with high levels of challenging behaviour will show greater SDQ change compared to children with medium or low levels of challenging behaviour.

3) *What is the relationship between self-perceived teacher change and teachers' perception of change in their students' social, emotional and behavioural functioning as a result of participation in the IY TCM programme?*

Hypothesis 3: There will be a significant relationship between self-perceived teacher change and SDQ change scores, such that the higher the rating of self-perceived teacher change, the greater the change in SDQ scores.

2.2 METHOD

2.2.1 Design

An embedded mixed methods design (Creswell & Plano Clark, 2011) was used for this research. This design involves the researcher collecting and analysing both quantitative and qualitative data within a traditional quantitative or qualitative design (Greene, 2007). It can be either qualitative or quantitative dominant. An embedded design is appropriate when the researcher has different questions that require different types of data in order to enhance the application of a quantitative or qualitative design to address the primary purpose of the study (Creswell & Plano Clark, 2011).

A predominantly qualitative design involving focus groups and interviews was used to address the primary purpose of this study i.e. to investigate teachers' perceptions of the process of change in themselves and their students as a result of their participation in the IY TCM programme. Quantitative and qualitative data were collected separately. Teachers' perceptions and experiences of change were captured from the perspective of the group and the individual through focus group interviews over the course of the training and also retrospectively through individual interviews post-intervention. During individual interviews, teachers were asked to rate the level of change they perceived in themselves as a result of the training in order to examine the relationship between self-perceived teacher change and perceived change in their students. An embedded quantitative strand involving teacher completion of the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) pre- and post-intervention for nine children in their class supported the qualitative data in examining teachers' perceptions of change in their students' social, emotional and behavioural functioning. It is important to note, however, that any measure of change examined using a teacher questionnaire of student behaviour can reflect both a possible actual change in this behaviour but also a change in the conceptual framework deployed

by the teacher. There was no control group used in this study as the existent research evidence demonstrates the effectiveness of the IY TCM programme and the main focus was qualitative enquiry.

According to Creswell and Plano Clark (2011), researchers using an embedded design can keep the two sets of findings separate in their reports. In the present study, analysis of the quantitative and qualitative data was separate and findings were only integrated during the final stages of interpretation. This study involved both outcome and process evaluation (Robson, 2002). Outcomes investigated in the current study included teacher perceptions of change in themselves and their students as a result of their participation in the IY TCM programme. Process evaluation involved examining teachers' perceptions of the process of change in themselves and their students over the course of the training and the factors which supported and hindered same.

2.2.2 Participants

The research sample included 12 primary school teachers (11 female, 1 male), from 7 schools, who were invited to participate in the IY TCM programme training and research as part of the service provided by an Educational Psychology Service (EPS) in Ireland. Table 2 provides a summary of the participants' teaching positions and relevant experience. Of the 12 teachers, 11 were mainstream class teachers and 1 was a Learning Support/Resource teacher. The length of teaching experience ranged from 1-3 years to >15 years.

Table 2: Demographic variables for teachers

Teacher ID	Teaching role	Teaching experience	Class level	School
1	Class teacher	9-15 years	3 rd class	1
2	Class teacher	9-15 years	4 th class	1
3	Class teacher	4-8 years	Junior Infants	2
4	Class teacher	4-8 years	3 rd class	2
5	Class teacher	4-8 years	1 st class	3
6	Class teacher	9-15 years	Junior Infants	4
7	Class teacher	4-8 years	4 th class	5
8	Class teacher	1-3 years	5 th + 6 th class	6
9	Class teacher	4-8 years	4 th + 5 th class	7
10	Class teacher	4-8 years	Senior Infants	7
11	Class teacher	9-15 years	Junior Infants	6
12	Learning Support/ Resource teacher	>15 years	Learning Support/ Resource	4

2.2.3 Ethics

This study is guided by the Code of Professional Ethics of the Psychological Society of Ireland and the British Psychological Society. Ethical approval to conduct the study was obtained from the Research Advisory Committee of the EPS and the UCL Research Ethics Committee (see Appendix 3). Although the researcher obtained ethical approval from the UCL Research Ethics Committee to advertise the IY TCM training programme as a research study (given the fact that the EPS regularly delivers training in the programme), the Research Advisory Committee in the EPS did not approve for the training to be offered to teachers in this way. It meant that the researcher avoided the potential for forced consent. Of the 16 teachers who volunteered to attend the training, 12 teachers opted to participate in the research component. A detailed information sheet and consent form (see Appendix 4) was used to obtain informed consent from participants. The researcher also provided an outline of the study at the initial IY TCM training session and was available to participants by phone or email throughout the research process if they had any further queries, concerns or wanted to withdraw their consent. The study is compliant with the data protection legislation of the United Kingdom and the Republic of Ireland. Participants were ensured anonymity in relation to information gathered during the study by using unique codes assigned to each participant for research purposes. When completing the Strengths and

Difficulties Questionnaires (SDQs) based on individual children in their class, teachers were asked to assign a code to the pre- and post-measures. In this way, no identifying information in relation to any child was collected. Participants were provided with an opportunity for debriefing following the focus group sessions and the interviews to ask any questions or identify any concerns they may have.

2.2.4 Procedure

An information sheet and consent form (Appendix 4) was sent to local schools inviting teachers to participate in the training and research. The six day IY TCM programme training took place in a local education centre in Ireland over a six month period between October 2013 and March 2014. The course was facilitated by the researcher and her colleague, who are both qualified educational psychologists, and have received formal training in the facilitation of the programme.

The process of teacher change was investigated using focus group discussions (approximately thirty minutes each) at the monthly training sessions. Twelve teachers participated in each focus group session with a total of five focus group sessions over the six month training period. The four teachers who were not participants in the study engaged in group discussion about their implementation of the programme, which was facilitated by the researcher's colleague in a separate room in the education centre. The use of focus groups enabled examination of the process of teacher change from a group perspective over the course of IY TCM training. The researcher attended to best practice in the running of these sessions (Barbour, 2007; Robson, 2002; Willig, 2001). She endeavoured to strike a balance between an active and a passive role when moderating the sessions and managed the group so that everybody's views were articulated. The researcher sought to avoid bias by creating a permissive environment in which to ask open ended questions that did not lead the participants but encouraged discussion and

differing points of view. Prompts were used as an aide memoire, however, the researcher was careful not to talk too much or over-prompt. Answers were not constrained by the researcher which allowed free discourse amongst the interviewees. This modality allowed participants to talk about specific experiences whilst allowing the researcher a structure in order to focus on the research questions with flexibility and to note other novel insights. Focus group data was recorded using a digital voice recorder. Teachers were asked about significant change in the four domains identified in models of teacher change (i.e. knowledge, skills, beliefs, practice) in relation to outcomes for students. The questions used in the Most Significant Change (MSC) technique (Davies & Dart, 2005) were employed to identify the ways in which teachers perceive they have changed e.g. “Looking back over the last month, what do you think was the most significant change for you as a result of your participation in the IY TCM programme? Why is this significant for you?” (see Appendix 5 for questions and prompts used). Teachers were also asked about any factors which have supported or hindered change (e.g. individual/ school/ programme/ any other factors) e.g. “In your opinion, what factors have supported or hindered these changes for you?”.

Individual interviews were conducted six to eight weeks post-intervention to investigate teachers’ experiences of the programme and their perception of the ways in which they changed. Twelve teachers took part in these interviews which took place in their schools. All participants gave their consent for the interviews to be audiotaped using a digital voice recorder and varied in duration from twenty to forty minutes. To protect the identity of the participants, no names were audiotaped. Background questions were addressed only in relation to the participants’ length of teaching career, length of time teaching in the school, and class level. Because there was only one male in the sample, gender was not identified in Table 1. A semi-structured interview schedule was devised for the purpose of this study, detailing the issues/topics to be discussed, open-ended questions for each topic, as well as a series of follow-up questions, prompts and

probes (Appendix 6). Change in the domains of knowledge, beliefs, skills and practice, in relation to outcomes for students, were explored using questions from the Most Significant Change (MSC) technique (Davies & Dart, 2005). Teachers were also asked to rate their perception of how much they have changed on a four-point Likert scale (1=no change, 2=just a little change, 3=quite a lot of change, 4=significant change). Questions about teachers' perceptions of the factors which have supported or hindered change (individual factors, programme factors, school/contextual factors) were posed in order to ascertain under what conditions, why and how teachers change as a result of the IY TCM programme.

2.2.5 Measures

The Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) was used to investigate the impact of IY TCM training on teacher perceptions of change in their students' social, emotional and behavioural functioning. The Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997) is a brief behavioural screening questionnaire for 3-16 year olds. It assesses the occurrence of particular behaviours that have been associated with social, emotional and behavioural problems in children. It is widely used internationally and has also been standardised using a representative national British sample (Meltzer *et al.*, 2000). The 25 items relate to a range of positive and negative attributes which provide a total difficulties score as well as scores on six subscales. Five of these subscales measure potential 'difficulties': 1) emotional symptoms, 2) conduct problems, 3) hyperactivity, 4) peer difficulties, and 5) impact of difficulties on child's life. The sixth subscale measures 6) prosocial behaviour and is treated as a 'strength'. Responses to the first four subscales are combined to give a total difficulties score. Ratings of child distress and impact of difficulties on home life, friendships, classroom learning, and leisure activities combine to form the impact of difficulties on child's life scale. Each item is scored on a three-point Likert scale (not true, somewhat true, certainly true). The total difficulties score can range from 0 to 40, while each subscale score can range from 0 to 10.

A higher score indicates more problems/symptoms except for the prosocial behaviour subscale where a lower score indicates more problems. Participants completed pre- and post-measures of the teacher version of the SDQ for 9 students in their class. They were asked to complete SDQ rating scales for 3 students whom they considered presented with 'low', 3 'medium' and 3 'high' levels of challenging behaviour. A total of 10 teachers completed SDQs pre- and post-intervention. One teacher was working in a Learning Support/Resource Teacher role and therefore did not have her own class, while another teacher was unable to complete the post-intervention SDQs.

2.2.6 Data Analysis

Focus group and interview data were uploaded from the researcher's digital voice recorder to the computer and transcribed verbatim. It was not possible, however, to identify the quotes by focus group member as the researcher did not ask participants to state their name before contributing. Focus group and interview data were analysed using thematic analysis (Braun & Clarke, 2006). Themes or patterns within data can be identified in two ways using thematic analysis: inductive or 'bottom up' (e.g. Frith & Gleeson, 2004), or in a theoretical or deductive or 'top down' way (e.g. Boyatzis, 1998). A 'theoretical' thematic analysis was used for the purpose of this study. This approach is driven by the researcher's theoretical interest in the area, is more explicitly analyst-driven, and involves coding the data for specific research questions. Braun and Clarke's (2006) six stage step-by-step guide to undertaking thematic analysis in a deliberate and rigorous way was followed in this study. The stages included: 1) familiarisation with the data and transcription, 2) generating initial codes, 3) searching for themes, 4) reviewing themes, 5) defining and naming themes and sub-themes, 6) producing the report (see Appendix 7 for exemplar of process of thematic analysis). Separate sets of open-ended thematic analysis were used to analyse the data from the focus group discussions and the interviews in order to describe, explain and understand teacher change through IY TCM (see Appendix 8 and 9 for diagrams

representing themes from focus group and interview data). The findings from the focus group data revealed distinctive differences in teachers' perceptions of change in themselves and their students over the course of the training and as such were analysed and presented separately. However, there was a high degree of overlap across all five focus group discussions with regard to teachers' perceptions of the factors which supported/hindered change. Therefore, a single analysis of these factors was undertaken.

SDQ data was analysed using SPSS. A series of mixed-model analyses of variance (ANOVA) were used to test for main effects and any interaction of the independent variables (time, level of challenging behaviour and self-perceived teacher change) upon the dependent variable (mean total difficulties and subscale scores of the SDQ). The power of a statistical test is the probability that the null hypothesis will be rejected when it is, in fact, false (Faul *et al.*, 2007). The size of the sample used in a study influences the power of a test. According to Pallant (2013), when the group size of a study is small (e.g. $n=20$), the researcher needs to be aware of the possibility that a non-significant result may be due to insufficient power. Pallant (2013) recommends that the power of a test should ideally be .8 (80% chance of detecting a difference). If the power is less than .8, a non-significant result may suggest insufficient power rather than no real difference between groups. G*Power (Faul *et al.*, 2007) was used to compute power analyses for the use of the ANOVAs in the current study. The sample size required to assume an effect size of $f=.3$ and power at .8 was $N = 90$. As $N = 89$, the ANOVAs can be considered to have sufficient power to detect differences between groups and over time.

2.3 FINDINGS

2.3.1 Research Question 1: What are teachers' perceptions of the process of change as a result of their participation in the IY TCM programme?

2.3.1.1 Research Question 1(a): How do teachers' knowledge, skills, beliefs and practice develop over the course of the IY TCM programme in relation to outcomes for students?

The process of teacher change was investigated through a series of five focus group discussions, one at each of the monthly training sessions. Twelve teachers participated in each of these sessions and were asked about significant change in the four domains identified in models of teacher change (i.e. knowledge, skills, beliefs, practice) in relation to outcomes for students. The questions used in the Most Significant Change (MSC) technique (Davies & Dart, 2005) were employed to identify the ways in which teachers perceive they have changed i.e. “Looking back over the last month, what do you think was the most significant change for you as a result of your participation in the IY TCM programme? Why is this significant for you?” (Appendix 5). Separate sets of open-ended thematic analysis were subsequently used to analyse the data from the focus groups. The findings revealed distinctive differences in teachers' perceptions of change in themselves and their students at different points during IY TCM training as outlined in Figure 11 below.

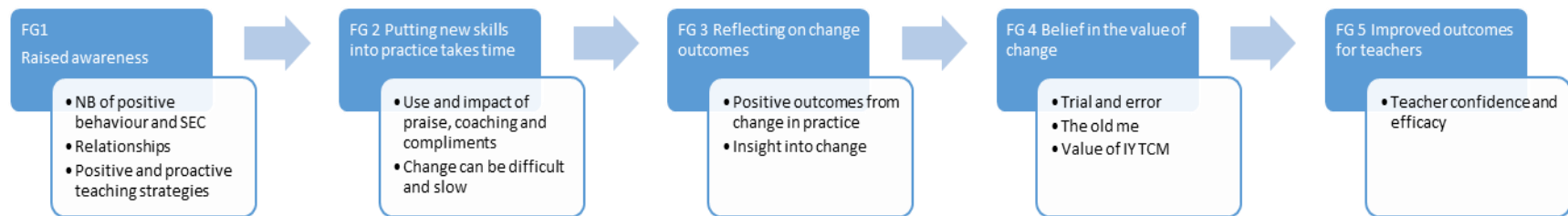


Figure 11: Themes illustrating process of teacher change across focus group data

Focus Group 1 Theme: Raised awareness

The most significant change identified by teachers in the first focus group involved raised awareness of the importance of children's positive behaviour and social and emotional competence to success in school. This was associated with changes in teachers' knowledge, skills and practice in developing relationships with parents and children, and their use of positive and proactive behavioural management strategies. See Appendix 10.1 for additional quotes to illustrate the following subthemes:

a) Positive behaviour and social-emotional competence – not just academics

Teachers perceived significant changes in their knowledge and beliefs regarding the importance of children's social, emotional and behavioural wellbeing to success in school accompanied by a shift in their teaching from an emphasis on academics/curriculum to supporting their behavioural and emotional needs.

I've tried to change my idea...like I'm very focused on the curriculum and what has to be covered...so I've tried to bring into my own head that the behaviour and how they're feeling and their experience is just as important really in school...I've tried to change a little bit that way.

b) Relationships

Teachers identified change in their beliefs about the importance of children feeling happy in school. They also spoke about increased awareness of and changes in their practice regarding the development of positive relationships with children as well as the impact of this on the classroom atmosphere and children's wellbeing. The importance of communication and working in partnership with parents was noted by several teachers.

...how important it is to be happy and if the children aren't happy, they won't learn...

...it's kind of brought more awareness back to interaction with the child and behaviour and how important it is to build relationships with the child.

...we held a parent information morning and there was a big turnout, nearly all the parents arrived and they just spoke about how it was great that they knew the rules at home and they were practising them at home, makes it easier in class.

c) Positive and proactive teaching strategies

Teachers talked about significant change in their awareness and use of positive language, specific commands and proactive teaching strategies. They consider that their reaction to misbehaviour is calmer and more structured which has resulted in a calmer classroom environment. In spite of the general use of positive and proactive strategies, some teachers referred to the effectiveness and continued use of familiar negative discipline approaches when positive strategies do not work.

And I find being proactive, it has helped me an awful lot...the classroom, the environment is much, much better, for everyone...

I kind of found just to be more kind of like self-aware as you said over your language and how you approach a situation and the kind of positive command...

Yeah, trying to pick the positive and praising people who are close by that are doing something good does sometimes work as well as giving out to ones that are being bold...

Focus Group 2 Theme: Putting new skills into practice takes time

The overall theme of focus group 2 involved change in teachers' skills and practice regarding their use of praise, coaching and compliments with positive outcomes for children. There was also an emphasis on the fact that change takes time and can be difficult due to the challenging behaviour of some children. See Appendix 10.2 for additional quotes to illustrate the following subthemes:

a) Use and impact of praise, coaching and compliments

Teachers identified a focus on the use of labelled praise and shared examples of the effects of praising children in terms of their behaviour and learning. Increased knowledge of the skills of coaching and praise meant that teachers are more aware of the social-emotional behaviours to focus on. Several teachers worked on compliments and were more explicit in teaching children how to give compliments to each other.

....the positive praise definitely has an effect on them...we can see the difference...like staying in their seats, much, much better at that, I'm using the praise as well while they're working and it really like, for the little lad in my class, he couldn't like, it'd just be scribble, scribble, scribble, it was always just get up, get it done any way at all, and he's taking time and he's actually using the colours properly...and group work, they're working better as a group, they're still not perfect at all but behaviour wise in the class has really improved.

I think the knowledge and the different kinds of coaching and praise was helpful for me anyway, I think you're more aware of what you're looking for and then you can spot it easier you know, whether it's academic or social, so I think that was a change for me, knowing specifically what I'm looking for and that it's not always just the academic...

b) Change can be difficult and slow

Teachers considered that some children with challenging behaviour and/or special needs can resist new approaches and that change can take longer when working with these children.

Despite this, teachers acknowledged the need to persist in using the new approaches.

I have found with all the different types of coaching and all the new skills that we would have discussed in the past two sessions as a whole for my class have been great, but I find for the target children who may have more difficulties, at the moment they seem to be resisting kind of minor changes and minor approaches...

Focus Group 3 Theme: Reflecting on change outcomes

The overall theme of focus group 3 involved the teachers reflecting on positive outcomes arising from their use of the IY strategies and providing an insight into the changes they were experiencing. See Appendix 10.3 for additional quotes to illustrate the following subthemes:

a) Positive outcomes from change in practice

There were many examples of changes in teachers' skills and practice with positive outcomes for children's learning, motivation and behaviour. Teachers were more specific in their language and changed their practice regarding their use of certain strategies (e.g. 'first-then', clear commands, individual and group incentive systems, unexpected rewards, special recognition). Several teachers talked about positive change in terms of a calmer classroom environment in general. Although change in teachers' practice regarding incentive systems was perceived as having a largely positive impact, some teachers considered that the negative behaviours of some

students increased as a result. In such cases, teachers recognised the need to adapt their approach accordingly.

I just kind of made a conscious effort to use the 'first then' rule with one particular chap that I am trying to deal with and yeah...I think that made a big difference. I don't think I wasn't you know, kind of explicit enough to him before but you know when I just put it to him very clearly it definitely had a very positive impact on his behaviour. He knew exactly what was expected and how he would get his sticker on the wall or get his reward or whatever so I find that was very useful.

I have tried sticker charts, individual sticker charts for every child...and I find that for the whole class it is great and it focuses them but for the children who I am targeting with their behaviours, their behaviours have actually flared up even more, it is like they are trying to challenge the system.

b) Insight into change

Teachers spoke about an increased awareness of and change in their general classroom management skills and practice, especially with regard to being more aware of focusing on positive behaviour and being specific in their language use. They consider that the programme has 'trained' them in a step-by-step manner to implement positive behaviour management strategies and has become a 'way of life'. Positive changes in the classroom atmosphere were identified and teachers reflected as to whether this is a result of IY TCM, their teaching, or the children. Teachers recognise and appreciate the value of IY TCM, with one teacher comparing it to 'a magic spell'.

I definitely have used I suppose the special recognition, the kind of special privileges, a whole lot more, not that I never did but I would be really more conscious of it and you know aware that I am doing it...

It has kind of trained us...yeah, in our way of teaching and our way of thinking in the classroom.

It kind of becomes a way of life now...Because as you said you are growing gradually...It is just bit by bit, step by step so like it is just kind of like a way of life now with your learning. It is your own behaviour you are changing too like.

...but like that when I think back to September like it was madness. Like it is still not perfect but I don't know whether the kids have just got calmed down or whether it is to do with the programme or whether it is to do with my teaching, I don't know but there is definitely a huge improvement.

Focus Group 4 Theme: Belief in the value of change

The overall theme of focus group 4 was a recognition and belief in the value of change and of the IY TCM programme despite the fact that change can be difficult and frustrating. See Appendix 10.4 for additional quotes to illustrate the following subthemes:

a) Trial and error

Some teachers shared their experiences of times when the strategies (e.g. ignoring) did not work. For some children, challenging behaviour escalated when the teacher tried to implement a new approach. One teacher felt so frustrated and overwhelmed by the level of challenging behaviour in her class that she gave up even though she felt that she should not have. On the other hand, some teachers shared positive experiences about the effective use of ignoring and teaching children to ignore, which was perceived as having a positive impact on tantrums. Several teachers acknowledged the difficulties experienced by some group members and encouraged them to persevere with the approaches.

It [ignoring and re-directing] worked on some kids better than others. Like, I've three very, very lively boys in my class and the ignoring worked on one of them very well and then the other two, I didn't see, it didn't work as well like I just ended up getting frustrated and giving in... I know I shouldn't but there's just too many things going on...

...by encouraging the children to put on their shields and to ignore the behaviour, I feel it's helped the students who are having these meltdown moments, the kind of the tantrums aren't as prolonged because they can see they're getting no reaction from their peers and they're getting no reaction from me. I found that a very useful technique.

b) The 'old me'

Teachers identified change in their skills and practice over the course of the programme and provided an insight as to why strategies may have been ineffective in the past (e.g. not giving adequate time for change to occur, giving up too soon, focus on whole class as opposed to individual behaviour planning, lack of positive attention, not verbalising their expectations clearly to children). In talking about the changes in themselves, a number of teachers mentioned "the old me" and that it can be easy to fall back into old habits.

I didn't put the positive attention into practice probably enough, do you know with individual pupils. I did with a whole class level but I didn't pick out and pick different parts of each pupil to try and work on, do you know that kind of way? So I suppose I've more individual plans going on for different children in the class now.

Yeah, I feel myself being more calm...but there are days now when I step back into the old me like for a little while and then I decide – no - you know what works. So, I go back to - like sometimes it is hard to keep it going like, it can be sometimes easier to do the other one, you know that kind of way? To shout out or to say whatever but I do find myself reminding myself more - no we'll go back to doing the praise and you know go down that route instead.

c) Value of IY TCM

Teachers spoke about their belief in the effectiveness and value of the IY strategies as well as change in their general attitude over the course of the programme regarding positive classroom management practice.

I suppose the strength of the positivity, you know, that it really really does work...

Well, the first couple of months it was hard because you're fighting natural instinct. In a situation just the normal instinct is to be negative and to just put it down. But this far into the course I think it's just the positive has been drummed into you and it's just kind of left that... Well I've left it behind anyway I think. And it was hard at the start not to react to a situation just it was the norm but now it's like my attitude has just totally changed like and it's a lot easier now than it was at the start.

Focus Group 5 Theme: Improved outcomes for teachers

The overall theme of the final focus group involved teacher perceptions of positive outcomes for themselves as a result of participating in IY TCM, especially in the area of teacher confidence and efficacy regarding their classroom management practice. See Appendix 10.5 for additional quotes to illustrate the following subtheme:

a) Teacher confidence and efficacy

Several teachers identified changes in their practice regarding their use of time out in a more positive manner (i.e. a place to calm down and think) and the importance of teaching children about time out. Teachers spoke at length about positive outcomes for themselves as a result of their use of time out and the IY discipline hierarchy. They consider that it provides them with a

structured approach and a series of steps to follow so that they do not react in haste. Therefore, they feel more confident, calmer, fairer and less stressed. There was a general sense of teachers feeling more confident in their classroom management practice and their ability to change their students' behaviour using the evidence-based IY programme. In particular, teachers feel more confident implementing consequences and time out as well as justifying this practice to parents.

I was always worried as a teacher whether like when you do have consequences and we are doing something are we correct or incorrect, do you know what I mean...so for that reason as you say like that there is a logical hierarchy as such and that you know that using the time-out and the loss of privileges that they are correct like ways to deal with certain situations...yeah and if you are using them you kind of have gone through your steps. And you have come to them as an end result rather than first instance.

...a lot of people kind of said it this morning is you feel more confident that yes I am following the programme it is not just I have kind of dreamed this up kind of thing that you know that there is kind of logic and reason to it that you know you can say look it is more focused I suppose and you are just confident in the sense that you know, you know you are following the steps and that they are logical and you know that you can explain and the child can explain hopefully what and why they are in a place where they are in like you know.

Well when I just think putting a child on [time out] you wouldn't be so apprehensive that they are going to lose the plot or anything you know if they are put on the chair. You know that they will see it more as - OK I will have to go there and calm down and nobody else is thinking badly of me – whereas before it was kind of a shameful place to end up.

2.3.1.2 Research Question 1 (b): What factors support or hinder teacher change during participation in the IY TCM programme?

During each focus group discussion, teachers were asked about their perception of the factors which support or hinder change (e.g. individual/ school/ programme/ any other factors) i.e. “In your opinion, what factors have supported or hindered these changes for you?”. Separate sets of open-ended thematic analysis were used to explore teachers' perceptions of these factors. However, due to a high degree of overlap and consistency across all five focus group discussions, a single analysis of teachers' perceptions of the factors which influence change was undertaken and these findings are presented in Figure 12 below. Each of the identified themes were perceived as both supporting and hindering change; aspects which will be described below.

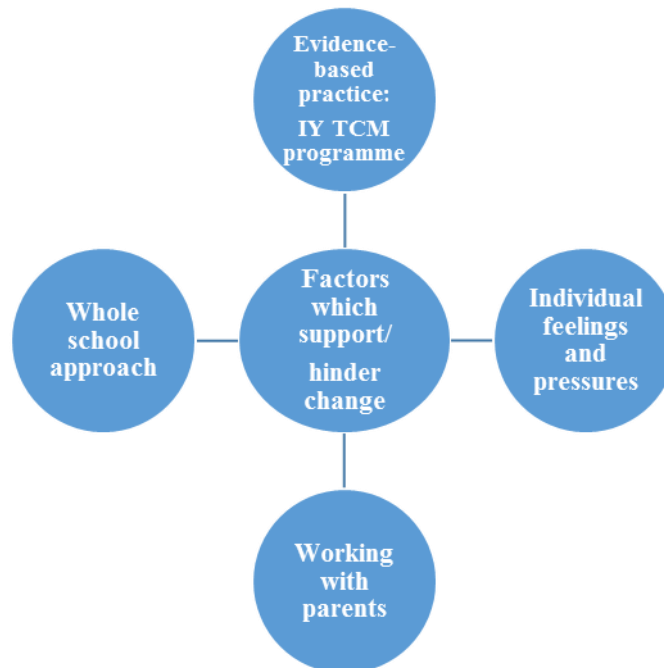


Figure 12: Themes of factors which support/hinder change (focus group data)

Theme 1: Whole school approach

See Appendix 11.1 for additional quotes to illustrate this theme.

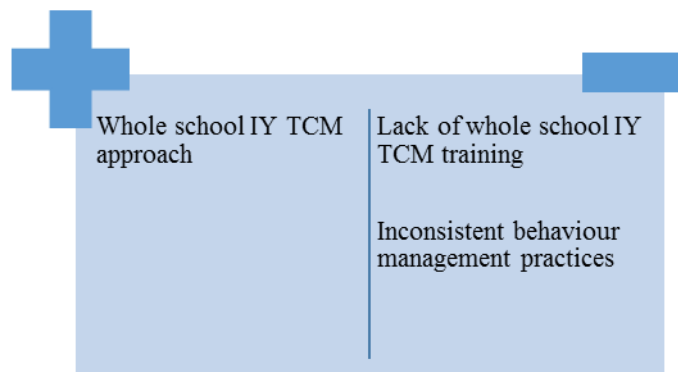


Figure 13: Whole school approach (+ supporting/ - hindering factors)

Teachers considered that a whole school approach to IY TCM is necessary to ensure consistency and support ongoing change. Lack of same was identified during each focus group session as particularly challenging for teachers. Most notably, other teachers' / SNAs' responses to and/or

management of misbehaviour which are not consistent with the teacher's IY approach hinder progress and are confusing for children. With lack of whole school IY training, teachers feel under pressure to conform to the 'norm' of the school in terms of behaviour management. This can put pressure on the IY trained teacher to respond in a negative manner despite them having a structured plan in place.

...that it's a whole school approach, that everybody's working off the same page and the same standards are set and the same practices and beliefs are within the whole school, I think would make it very effective (FG 1).

But I even get confused because like a situation that happened there and I said to the principal I can't give out to her. He wanted me to give out to her but I can't it is just going to send us backwards like, you are going to have to give out to her because I just can't. Because like we are after getting so far and if I go down that road then do you know like that has just left it awkward then for me. (FG 3)

Theme 2: Evidence-based practice – IY TCM programme

See Appendix 11.2 for additional quotes to illustrate this theme.

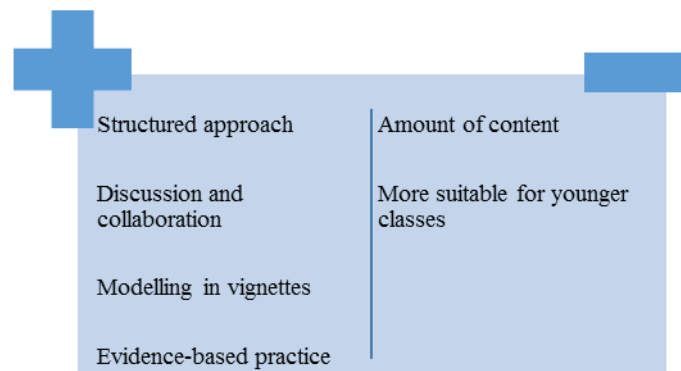


Figure 14: Evidence-based practice – IY TCM programme (+ supporting/ - hindering factors)

Aspects of the IY TCM programme and training were identified as factors which support change. The structure of the programme facilitates change in that it uses a step-by-step approach and the month-long break between sessions gives teachers time to try out the new strategies. Although teachers consider that the content knowledge is not new, *how* to implement the

strategies is. Having the opportunity to discuss and share experiences with other teachers at the training sessions emerged as a key factor supporting change. Teachers felt that it was reassuring when they listened to others in the group experiencing similar difficulties in the classroom. The modelling of strategies in the vignettes and the fact that the programme is evidence-based gave teachers confidence and reassurance in their practice. Factors which were perceived as hindering change were the amount of content in the programme and that it is more suitable for younger classes, which means that teachers need to adapt the techniques for use with older children.

The language and the experience together, there is that many teachers in one room, adds up to a lot of years of experience and things that you wouldn't normally know yourself. Whereas, even in the school base situation, we're always in the staff room, but we never actually sit down and brainstorm about any of this kind of stuff. So, to get this amount of focus on positivity and think what the other teachers do, it's definitely helped me...When you hear about things that work for them. (FG 2)

I think I used to do some of these things before but I think as you said I was trying them out myself with my own methods in my head going "Well I'll give this a go." And sometimes this works but I think when you have the course to back it up and say "Well this is what I've learnt." And "This is how you deal with this and there's an actual study that says..." And "There's this course in place..." So I am following a plan you feel more confident in yourself. (FG 4)

Theme 3: Individual feelings and pressures

See Appendix 11.3 for additional quotes to illustrate this theme.

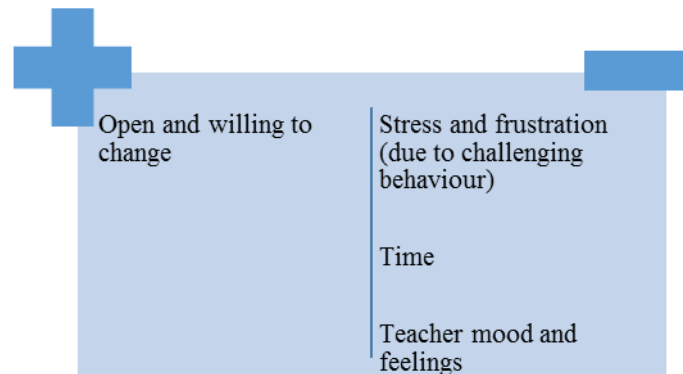


Figure 15: Individual feelings and pressures (+ supporting/ - hindering factors)

Time pressures in schools and on teachers (e.g. curriculum pressures, school self-evaluation, lesson planning/notes) were perceived as key challenges to change. In particular, teachers talked about the pressure of implementing individual behaviour plans for several children in a class. The challenging behaviour of individual children was also highlighted as a significant barrier to change. It was perceived that some students resisted the new approaches while other teachers found that negative reactions from children in response to consequences can be upsetting and difficult for the teacher. Teacher stress and frustration as a result challenging behaviour can lead them to resort to the use of negative discipline strategies. Teachers' individual feelings and mood can both enable and hinder change. They spoke about how their natural instinct was to be negative prior to the course as this was the 'norm'. The impact of the teacher's own mood (e.g. feeling tired or stressed) on consistent use of the strategies was discussed as well as teacher self-doubt whereby the reaction from colleagues to the teacher's classroom management style undermines their IY approach and makes them question their practice. A few teachers felt that they are more open and willing to change and implement the programme because they have a challenging class.

It can be very difficult when something happens and it's really testing you to the limits like a particular child and like you've tried all the positive, you've given them the rewards, everything's going fine and still she managed to do whatever, like it can be very frustrating.(FG 1)

Yourself as well, I think so much of it depends on yourself and what kind of mood you're in and if you're a bit tired like if you let anything slip at all it kind of loses the consistency...you just have to be on top of your game all the time. (FG 2)

I think if you have a challenging class with challenging behaviours you are more willing to try new things...So if you had a class that maybe like yourself weren't as challenging this year, you may find that you're not as enthusiastic about the course. Because maybe you don't need to implement it as much... So, in my case I would try anything and I am positive towards the course because I need to make changes. (FG 4)

Theme 4: Working with parents

See Appendix 11.4 for additional quotes to illustrate this theme.

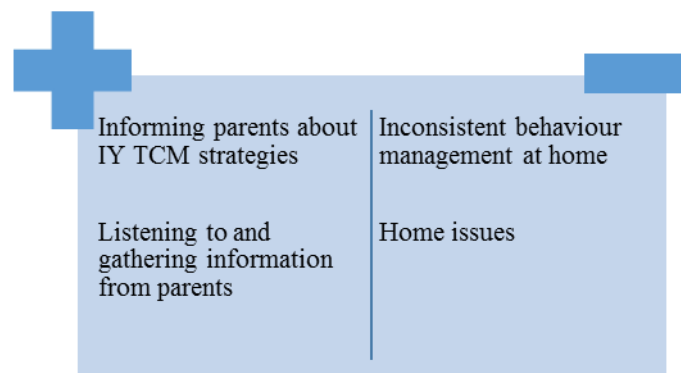


Figure 16: Working with parents (+ supporting/ - hindering factors)

Teachers identified working with parents as a factor that can both support and hinder change. Informing parents about the IY classroom management strategies facilitates change and ensures consistency across home and school, while listening to parents and gathering information from them enables teachers to better understand the child's difficulties. Issues at home and inconsistent parental behaviour management were perceived as challenges to change.

A big one for me was parents...the amount of information I got out of one parent...stuff that I didn't know that was going on, explained an awful lot of stuff...It gives you an awful lot more information and understanding about the child like you know in the classroom, had you known beforehand what was going on, you know...(FG 1)

...again for my target children, I would have noticed from parent teacher meetings, the inconsistency of the parents knowing that their show me five but it was just any old show me five. So it's about parents maybe needing training in Incredible Years as well so that the programme is consistent and it's not kind of haphazard hit and miss. (FG 2)

2.3.1.3 Research Question 1 (c): How do teachers retrospectively appraise their change in knowledge, skills, beliefs and practices as a result of participating in the IY TCM programme?

The findings from thematic analysis of teacher interview data regarding teacher perceptions of change resulted in the identification of two main themes with associated subthemes, one related to development of their professional practice, (1) Focus on the positive, and a second theme related to their personal development, (2) Teacher social-emotional competence and wellbeing (Figure 17 below).

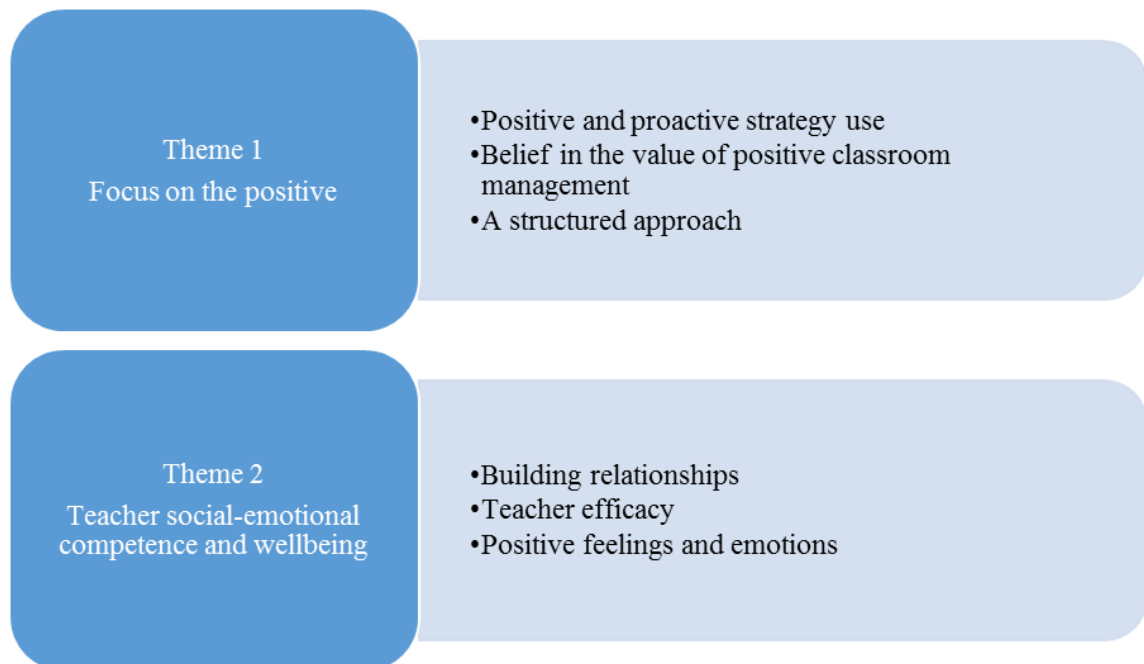


Figure 17: Teacher change themes (interview data)

Theme 1: Focus on the positive

See Appendix 12.1 for additional quotes to illustrate the following subthemes:

a) Positive and proactive strategy use

All of the teachers spoke about significant changes in their knowledge, skills and use of positive and proactive strategies (i.e. giving shorter instructions, using clear commands, clearly verbalising behavioural expectations, ignoring negative behaviour, teaching children to ignore minor attention-seeking behaviour, using nonverbal cues, giving specific praise and compliments, sending positive notes home, having both individual and group reward systems, and tailoring the programme to the child's individual needs). As a result of more positive classroom management strategies, teachers considered that there is less need for consequences. When necessary, however, implementing consequences and time-out is more structured and framed in a positive way as time to calm down.

...I'm really trying to comment and be specific rather than just saying you did this and saying well done, good work or that's great, to try and be more specific in the positive praise. I think I probably never praised the good and only commented on the bad behaviour and you shouldn't be doing that and just that shift was probably the biggest one... (T 1)

...now there's more of a purpose, everyone knows what it's [time out] for, you know whereas before oh she's down the back doing her work because she was talking, whereas now, she has some time out, she needs to go down, you know focus what she's doing, and you know just for herself, a quiet space as well. (T 2)

b) Belief in the value of positive classroom management

In talking about changes in their classroom management style, teachers consider that the course has raised their awareness of negative practice and changed their beliefs about the importance of a positive classroom management approach. Several teachers also spoke about changes in their beliefs regarding the contribution of relationships, positive behaviour and student wellbeing to learning and achievement in school.

...it just taught me that there's no need to raise the voice, there's no need to zone in on the negative, but the more positive you bring into the classroom, you know, the more rewarding it is for everybody...I think it reminded me of the importance of the relationships that you develop with the children and the importance of praise, so it's kind of an attitude change, I suppose. [And why has or how has that been significant for you?] Because in the classroom it's created a calmer environment and it's created a calmer teacher, which in turn creates calmer children. (T 11)

I suppose in a nutshell I realised after doing the course that, when the behaviour is good the teaching is easier and the learning is better... (T 2)

c) A structured approach

Teachers appraised changes in their classroom management knowledge and practice as being more consistent and structured in following the IY strategies and steps, using time-out and individual behaviour planning. Adopting a structured approach means that the teacher reacts in a calm and consistent manner. This makes them feel fairer, reduces teacher stress and is transparent for parents. Learning is not disrupted and it is easier for the teacher to manage behavioural difficulties. Several teachers mentioned that they would have been familiar with a lot of the IY content knowledge but having a structure on it as well as *how* to implement the strategies was new. In cases whereby teachers considered that the content was not new to them, they felt that it reinforced their knowledge and gave them confidence in their own practice.

I suppose it's significant because consistency is key with the children...I find children like things to be fair and they like things to run in a pattern...So it's very significant as in the learning can continue. And it's much more manageable the behaviour when you're following the programme. I am a lot calmer when something arises, I kind of go ok what step are we on and I immediately think of the steps so my approach to dealing with the scenario is - how bad is it, what level were we at. I kind of fall back all the time on the programme... (T 3)

The discipline hierarchy, the steps, yes, the procedures I suppose and the systems to have in place...Again, I suppose, it's having the system to fall back on when things are busy and when you are busy or stressed in the classroom, it's having the structure there to back you up, and having the structure to report back to parents as well and to make links with parents, and having a system to explain to them, so that it's very, what's the word, transparent yes. (T 10)

Theme 2: Teacher social-emotional competence and wellbeing

See Appendix 12.2 for additional quotes to illustrate the following subthemes:

a) Building relationships

The programme changed teachers' beliefs about the importance of working in partnership with parents and their knowledge, skills and practice as to *how* to foster positive relationships (e.g. positive communication, positive notes/phone calls, sharing information about the programme). In turn, this led to improved home-school relationships (e.g. more open and collaborative relationships) and greater consistency in behaviour management across home and school. One teacher talked about feeling more empathetic towards the child and family situation. She also spoke about the value of having positive relationships with parents in that she found them more receptive to talking about their child's behavioural difficulties. Teachers also recognised significant changes in their beliefs about the importance of relationships and social-emotional competence to positive behaviour and classroom management. Changes in skills and practice in developing positive relationships with children were identified e.g. making an effort to get to know children better and taking an interest in the children's lives. Developing more positive relationships helped teachers to understand children better. This is an example of the impact of the programme on the development of teachers' SEC.

I was really surprised by how much that those certificates meant to the children. Yes, and even to the parents. The parents were delighted to receive them and will come back in and said, 'It's amazing how much that it means to the child. It means the whole world to them.' ...And I suppose that's something that you hear a lot about, but it's knowing how to do it is sometimes difficult and knowing what exactly to do. So the Incredible Years had a really good system and those things in place, so it meant that it was a very easy system to do to create those home-school links. (T 7)

I suppose I would take the time with the kids now to be interested in their daily lives. It's important too because I notice you have to get the curriculum taught, but it's important to pay attention to their lives and what's happening to those children and what's happening. It helps you understand what is going on in the background, in that child's life and it makes you think nearly in that, as that child would think, it helps me understand better what they may be going through or how life is for them. (T 9)

b) Teacher efficacy

Teachers identified significant change in their confidence and belief in their ability to manage challenging behaviour and bring about change in their students (i.e. teacher efficacy). This was attributed to having developed knowledge, skills and practice in classroom management, receiving positive feedback at the training sessions, and seeing positive outcomes in their students. As the IY TCM programme is evidence-based, teachers spoke about trusting in it and feeling confident in their use of the strategies. Teachers believed that despite challenges and setbacks, with persistence, the strategies would work. They perceived that the training has developed their confidence and ability to problem-solve and trust in their own classroom management ability rather than “being told” what to do. An openness to change/learning, a sense of optimism, and a willingness to try new strategies was also highlighted.

I think I've mentioned it about three times now but definitely the confidence and the kind of belief that I can deal with it [negative behaviour]...I suppose I'm more open to trying different things. Like behaviour wise this was my strategy whereas this is now, I tried different things and just I might be a bit more confident to try other things and to say that didn't work or it did and having the confidence to find that. (T 1)

I feel I have the kind of, I'm trying to think of the right word, I feel I have the correct approaches, I can't think of the right word to describe it but I feel like I have the right skills or I just have the knowledge to know I have the right steps to follow that I'm able to pull it out of the bag when something presents itself if you know what I mean...Knowing as well the programme that it is ok and it is acceptable to have time out in the classroom so if you were to implement that yourself off your own initiative you might question yourself is this a reasonable thing to ask a child to do, is this appropriate for a school setting. So to have the confidence of the course behind you and the knowledge of each step, that you're following it correctly and that you're not doing it to the detriment of the child. (T 3)

I suppose that, well not that I thought the children couldn't change, but I suppose you can see the effectiveness when you see something through, and I suppose, you may, I may have tried different things before and if they don't work after a while, you can tend to slack off or leave them, but I suppose this has shown me to believe that if you follow through with something, that the child will respond... (T 10)

c) Positive feelings and emotions

Several positive outcomes regarding teachers' personal wellbeing were noted in relation to changes in their general classroom management style to a more positive and proactive approach.

For example, teachers talked about feeling calmer, more in control and less anxious, stressed or worried when managing difficult behaviour. They feel fairer, are more consistent, and sense that they do not give out as much. Furthermore, they have more patience and do not react impulsively. The programme also appears to have had a positive impact on teachers' self-esteem. Knowing that other teachers were in similar situations with regards to challenging behaviour in their classes seemed to normalise the difficulties and reinforce that they were not "failing as a teacher". Teachers also talked about feeling hopeful and optimistic after the training sessions. Change in terms of developing coping skills to manage children's difficult behaviour were also identified e.g. not taking the negative behaviour personally or letting it impact upon their personal life.

Yeah, I'm not giving out as much and I'm not as stressed when I'm not giving out and the children respond better when it's a calmer environment. And like there's been such a huge change between January and now. Huge. And the children are enjoying much more. I get more done because the behaviour has come on so much...At the start of the year, I was very anxious about the class and I was worried about individuals in that class and was I going to be able to handle it? And now I feel that I have...I've found ways to cope with all the children...(T 5)

It's a great way to see that you're normal, first and foremost. You go out and you think, 'Am I doing everything right?' And then you get to meet more teachers and it's good to learn from their experiences also. But it's great to see that you're human first and foremost and that, you know... (T 11)

I think I leave a little bit less frazzled than I would have before...I think as well I'm a bit less inclined to take it personally and go home in bad form because he's had a bad day. But definitely had I have had this class that I have this year in another year, I think I probably would have gone insane, do you know. I think I'm kind of a bit more, I'm able to let it go a bit more and not kind of take it home with me...Which is a kind of measure of it. (T 4)

2.3.1.4 Research Question 1(d): Following participation in the IY TCM programme, what factors are perceived as supporting or hindering teacher change?

Three themes emerged from thematic analysis of teacher interview data with associated subthemes relating to factors which were perceived as supporting or hindering change: (1)

Whole school approach and support, (2) IY TCM programme, and (3) Individual feelings, beliefs and pressures (Figure 18 below).

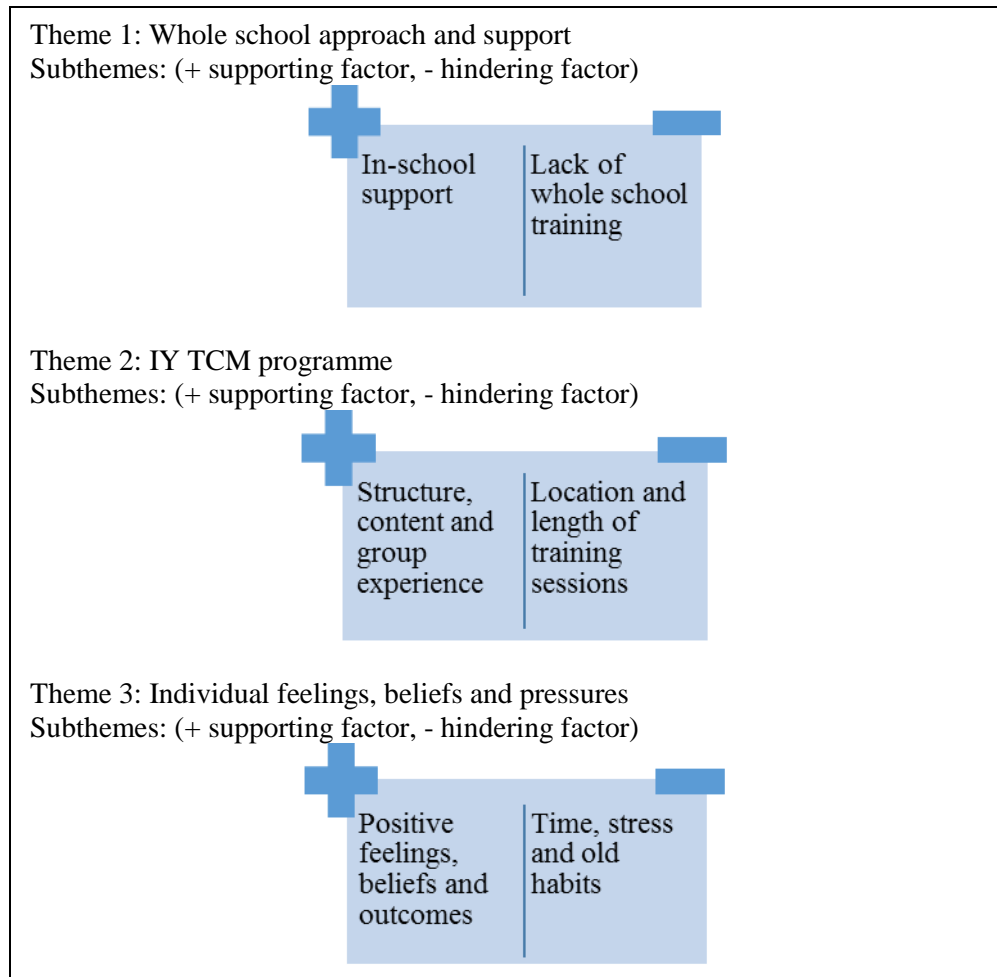


Figure 18: Themes and subthemes of factors which support/hinder change (interview data)

Theme 1: Whole school approach and support

See Appendix 13.1 for additional quotes to illustrate the following subthemes:

a) In- school support

Almost every teacher spoke about the support they received by having another colleague from their school participate in the IY TCM course at the same time. This enabled discussion and implementation of the strategies in between training sessions. Although working in a school

which has already received whole school IY TCM training was perceived as a supporting factor, teachers spoke about the benefits of receiving support from other colleagues in implementing the strategies in a consistent manner in schools which have not had training. The support of the principal was considered important in facilitating the teacher to partake in the programme. Furthermore, some teachers found that the principal was more willing to listen to and trust them in their decisions and actions regarding classroom management approaches as a result of their participation.

I do have another staff member in the room with me, an SNA and she was very much on board with the programme too and we both followed the same steps so when I came back from each month I would have shown her the pack and would have went through as much as possible and then I would have tried to model it for her as best I could and then she would try to carry it on. (T 3)

...the Principal was quite supportive...like she would always listen to your opinion and would know that you know children better, and she would always take your ideas on board. But when she could see on paper format that I had a behaviour plan, and that I was doing this, because it came from IY programme, she was more willing to let me decide what was going to happen...(T 2)

b) Lack of whole school training

Lack of a whole school IY TCM approach was repeatedly identified as a significant barrier to implementation of the strategies and lasting change. Having all staff trained would ensure consistency throughout the school and from year to year. Several teachers spoke about the difficulties which arise when other teachers' and SNAs' responses to misbehaviour are not consistent with their IY TCM approach and undermine progress. In such circumstances, teachers felt torn between the pressure to agree and support a colleague in their response to the misbehaviour while being cognisant of the possible negative impact on their relationship with the child.

The odd time you might have somebody on a good path and something happens on a corridor or in the hall and another adult might intervene...and all the hard work done that morning can just be taken away in a few short seconds and you can come back to a scenario where maybe you had been working. So that's something that might hinder it, another adult. Even though they're aware that my classroom is definitely an Incredible Years classroom, just their approach might be different. (T 3)

Something I would have ignored would have been picked up on in the yard and a huge drama made of it...And I think that was really difficult sometimes because an adult might be really upset by the way he spoke to them in the yard and you want to be seen to correct him, but at the same time don't ruin all of the work that was done. (T 4)

Theme 2: IY TCM programme

See Appendix 13.2 for additional quotes to illustrate the following subthemes:

a) Structure, content and group experience

Most of the teachers identified the structure of the programme as a supporting factor. The step-by-step approach and monthly training sessions enabled them to implement the strategies in between sessions and gave them time to absorb the content. Even though the vignettes were considered dated and American, the majority of teachers found the modelling of the strategies helpful. Some mentioned that it would have been better if some of the vignettes had examples of older children and were more representative of the Irish context in terms of larger class sizes and lack of SNA support. Listening, sharing experiences, learning from, and supporting each other as a group at the training sessions was identified as a key factor in facilitating change. Teachers particularly valued the time allocated to group discussion and found it reassuring listening to other teachers in similar situations. The supportive group atmosphere meant that teachers did not feel anxious about speaking out. Other aspects of the IY TCM programme which were perceived as supporting change included having the support of the two EPs as facilitators, the large volume of resources in the textbook, and ease of applicability of the strategies to the classroom situation.

The programme itself, just the way it was spread out as well, I found it was helpful because you come back every day after you had a day out, a day on the course, you'd come back and you'd be so Incredible Years and then it would start to wear off after three or four weeks, and then you'd be right back in again and you'd be like, 'Ok, I can do this. I can do this.' (T 5)

I loved the ideas that were discussed. I loved...I suppose each...each strategy that was brought in was very interesting, because I mean, we can all relate to each and every one of them as a teacher every day. It was also interesting, as I say, to listen to other people's experiences from various schools and to put things into play and to come back in a month's time and see, 'Yes, well, this works' or 'This doesn't work' and try and do it again. I think...I'd love to continue doing it, you know... (T 11)

I found myself happy enough to speak out. Maybe it's just the group we are in, there was nobody who was very overpowering or you know everybody was allowed to say their bit and didn't feel, you know, in any way intimidated or whatever about it...(T 12)

b) Location and length of training sessions

The location and length of the training sessions were perceived as challenging factors. The afternoon sessions were considered particularly long and teachers felt that training should occur during school hours only. Other teachers liked the fact that the training did not take place in the school.

...first we were driving to another location, so that was on top of finishing at a later time...it was quite intense in the afternoon from one to four was a long period of time...in an ideal world the programme to be delivered in the school to everybody at the same time would be the perfect solution. (T 2)

Theme 3: Individual feelings, beliefs and pressures

See Appendix 13.3 for additional quotes to illustrate the following subthemes:

a) Positive feelings, beliefs and outcomes

Teachers considered that their interest in upskilling as well as their openness and willingness to reflect on and change their practice were key enabling factors. Having a positive attitude towards the programme as well as a commitment to implement the strategies in a consistent way and to persist in the face of challenge was also considered important. Seeing the positive impact of

programme - for themselves, children, parents and the classroom environment – was regarded as a key factor which supports change.

But again, you have to be open and you have to be able to reflect. And know that you went wrong... Not all teachers are as open to that. You have to be open. (T 8)

What is it about me? Just that I can see that it really works and it's worth doing and the children love the fact of using the puppets and the parents love the feedback, and the rules, they show me five rules, it's just everything is just really positive and a happy feeling in the class and a happy environment. (T 6)

b) Time, stress and old habits

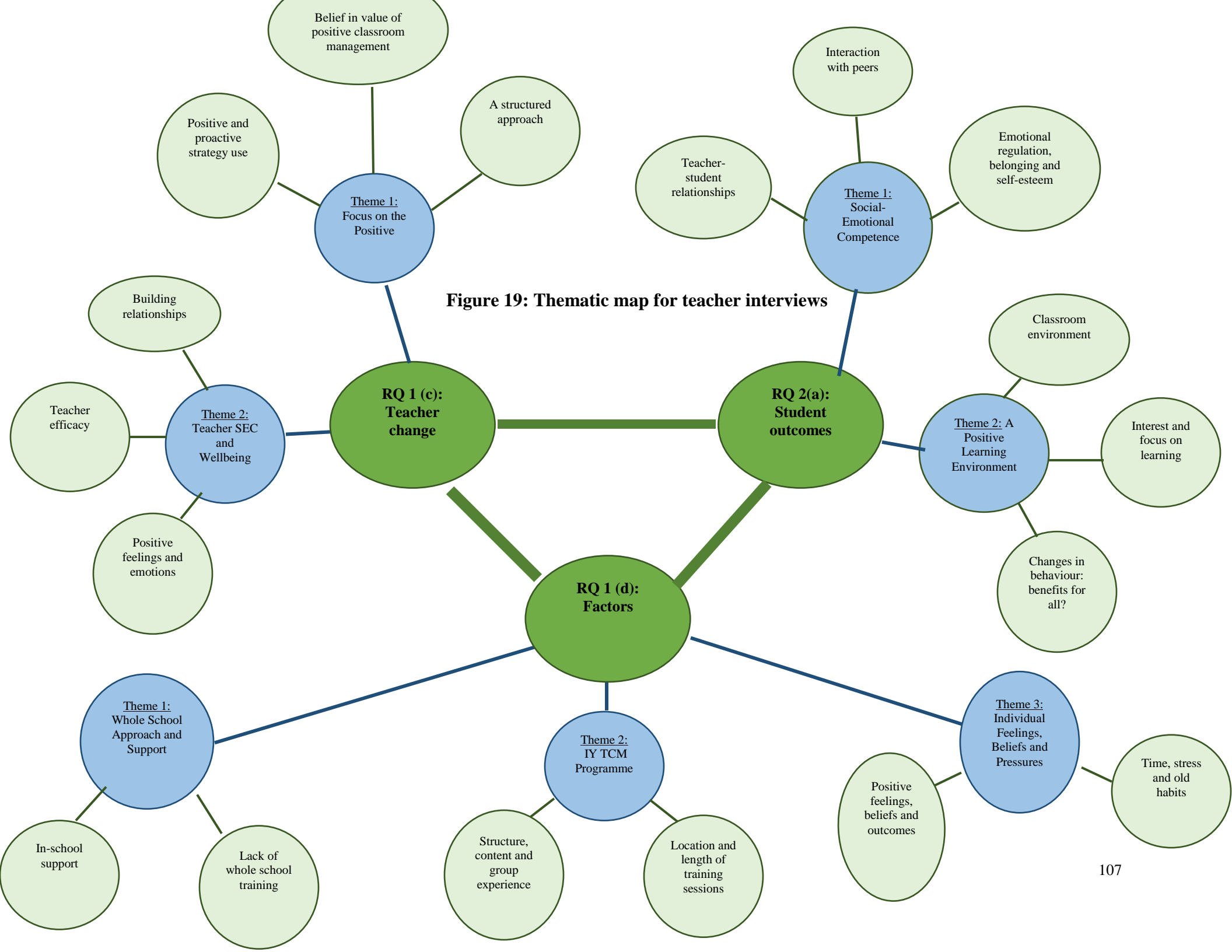
On the other hand, stress arising from the pressures of daily classroom life can make it difficult to change and be consistent in one's classroom management. In particular, stress arising from the challenging behaviour of individual children combined with a lack of parental support when the programme did not work, were identified as barriers to change. Teachers spoke about the pressures arising from the breadth of course content and the difficulties associated with trying to implement all the strategies amidst daily classroom challenges, curriculum demands, and having individual behaviour plans for several children. Some teachers also noted that it can be difficult to change one's mindset and old habits.

I suppose your own personal mood some days would hinder change. You know, and there can be a lot going on from week to week as well that can throw you... You're going to have bad days as well. You're not going to be able to follow through... (T 5)

I know myself, I can be, I can find it very hard sometimes to adjust to change... when I went to the course it was, it really, really dawned on me, you're going to have to change your own mindset, things aren't always black and white. (T 9)

2.3.1.5 Thematic Map (Teacher Interview Findings)

A thematic map illustrating the findings from teacher interviews with regard to perceived changes in themselves and their students, as well as the factors which influence change, is presented below in Figure 19:

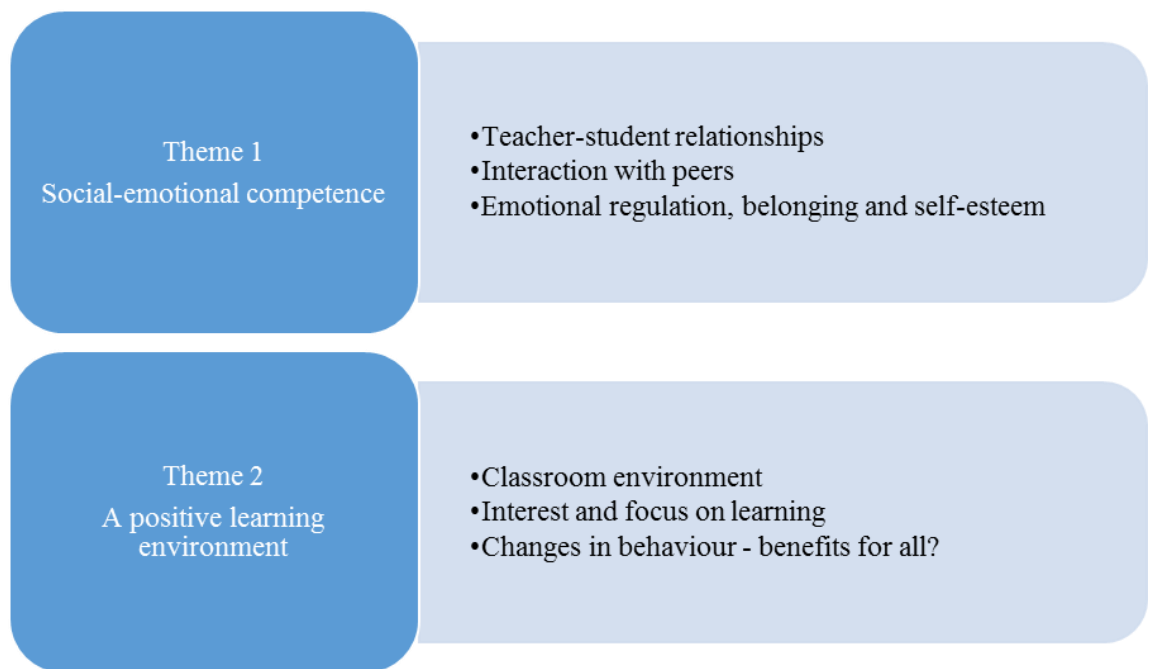


2.3.2 Research Question 2: What student outcomes were perceived by teachers as a result of their participation in the IY TCM programme?

2.3.2.1 Research Question 2(a): How do teachers retrospectively appraise changes in their students' social, emotional and behavioural functioning as a result of participating in the IY TCM programme?

Two main themes with associated subthemes emerged from thematic analysis of teacher interview data with regard to perceived outcomes for students: (1) Social-emotional competence, and (2) A positive learning environment (Figure 20).

Figure 20: Student outcomes themes (interview data)



Theme 1: Social-emotional competence

See Appendix 14.1 for additional quotes to illustrate the following subthemes:

a) Teacher-student relationships

Teachers perceived significant improvements in their relationships with children. They spoke about closer and more personal relationships whereby the children know that the teacher cares about them. Positive outcomes identified as a result of improved relationships include that the children want to please the teacher, trust the teacher, are less anxious about school, and more willing to share their problems with them.

...we chatted together, she kind of got to know me a bit, and I got to know her a bit. It meant then that she had a reason I suppose for being well behaved, because she kind of didn't want to let me down then because we had that time together, you know. (T 2)

And it does help the relationship between the child and teacher and a positive relationship with being in school, even the way they look at school and the way they think about school and looking forward to coming to school this year rather than other years maybe. Certain pupils would have been probably maybe afraid or they didn't know what was going to happen. (T 8)

b) Interaction with peers

Several teachers spoke about significant improvements in the children's social interaction skills and peer relationships. They talked about the children being closer as a class group and more supportive of each other e.g. look out for each other, encourage and praise each other, give compliments, remind their peers of the rules, take turns and listen to one another. This has had a positive impact on friendships in the class as well as the children's self-esteem. Teachers also considered that the children are better at working together, taking responsibility, and problem-solving amongst themselves.

...we've become more outgoing and we're more positive with each other, and we encourage each other also to do better and to be more positive...and I find they're all helping as a team and trying to encourage the positive relationship in the class. (T 11)

...so they are kind of taking charge now to an extent of how to solve the problem instead of always coming to me and then if it's still not solved, they will come back to me and say, well teacher we tried this but it didn't work. (T 9)

c) Emotional regulation, belonging and self-esteem

Highlighting children's strengths, praising them, and sending positive notes home (happygrams) were associated with perceived improvements in their self-esteem, confidence, motivation and behaviour. Several teachers also referred to the children's sense of belonging and feeling happy and secure in school which has had a positive impact on learning and behaviour. Teachers considered that the children are better at talking about their feelings and have developed strategies to manage their emotions (e.g. turtle technique).

I see a lot of them have a lot more confidence this year. When you build on the things that they're good at and pinpoint things that they're good at...they seem to flourish. (T 8)

...so we are using the puppets and just dealing with feelings and how to talk to their friends and acceptable things to say to their friends, how to deal with their emotions on the yard. We had a lot of incidents at the start of the year with children hitting each other and children getting so frustrated. It was frustration and they didn't really know how to deal with it, so we've been using Tiny Turtle and giving them strategies of three deep breaths, how to use it and it has gone down. It hasn't completely gone away, but they're aware of how to handle these situations now, so that's down to Incredible Years as well. (T 5)

Because I just felt that they were happy and I think that's the most important thing, and I think that when the children are happy, they are likely to be on task and engaged... (T 7)

Theme 2: A Positive Learning Environment

See Appendix 14.2 for additional quotes to illustrate the following subthemes:

a) Classroom environment

Teachers noted a calmer and more positive classroom atmosphere. The children were perceived as calmer because there are consistent strategies in place - children know what is expected as well as the consequences for misbehaviour.

...now how do I describe this, it's, it's, I think it's just for all parties involved, it creates this nice working atmosphere and a calming atmosphere for everyone, and isn't that what we want, you know, that's ideal, the ideal situation to work in, so that's definitely, I think, it's the atmosphere that this programme, the positivity, if you implement it really creates. (T 12)

Calmer, yeah. I think they know what to expect. I think then there's really clear guidelines in place. There's clear systems...(T 4)

b) Interest and focus on learning

Several teachers identified a positive impact on children's learning as a result of a calmer classroom environment and clearer behavioural expectations. It was stated that children stay in their seat, listen, focus on their work, and get more work done. Using visual cues, proximity and ignoring means that there is less interruption to lessons, more learning and smoother transitions.

Well, obviously there's more learning going on in the classroom. When there's less behavioural issues, there's more learning going on. My instructions have changed as well, so for that reason, they know what they're supposed to do. So there's more learning going on. I'm clearer in what I expect of them and for that reason, there's less confusion and more understanding, which means more learning... (T 5)

Their learning is not as disrupted as it would have been before because I'm ignoring a good bit more. I'm not stopping every time. I'm kind of using maybe the visual cues or my kind of physical, my place. Proximity, yes...So just standing beside somebody instead of stopping the whole lesson... (T 4)

c) Changes in behaviour – benefits for all?

Significant improvements in children's behaviour with the result of fewer instances of negative behaviour, increased learning and more positive relationships were noted by several teachers. There were varied perceptions of change, however, in terms of students whom teachers perceived as presenting with high levels of behavioural difficulties. Some teachers considered that these students were resistant to change while others perceived a great deal of change in their behaviour. Furthermore, some teachers considered that the IY TCM programme better equips teachers for dealing with severe behavioural incidents whereas low level disruptive behaviour is more difficult to change.

Well, some of the children in question, I'm thinking of ones with behavioural problems. There was outbursts at the start of the year. There was children thrown out of the classroom. There was standing on chairs and tables, underneath tables. There was everything going on in the class. And now I have none of it, which is a huge improvement, and they've matured. In first class, they mature anyway, but a lot of it is down to Incredible Years. (T 5)

...so there was just the high children in particular, the ones I was really trying to focus on, I found they kind of fought against it... (T 3)

2.3.2.2 Quantitative Results

Analysis of descriptive statistics was undertaken for all variables to assess the distribution of the sample. The results indicated that a large number of the variables were positively skewed towards low levels of difficulty and high levels of strengths (see Appendix 15 for results of descriptive statistics and normality tests). However, Field (2013, p. 172) maintains that for sample sizes of at least around 30, the central limit theorem can be applied meaning that the sampling distribution of the mean is normally distributed even if the original population of scores is not. This can be applied to the overall sample (N=89) and for the groups for level of challenging behaviour (high = 29, medium = 30, low = 30). However, the size of the self-perceived teacher change groups are uneven and less than the widely accepted sample size of 30 in some cases ('just a little change'=9, 'quite a lot of change' = 45, 'significant change' = 35). Therefore, the results regarding self-perceived teacher change should be interpreted with caution. Due to the violation of the assumption of normality, non-parametric techniques were used, where possible, to test the robustness of the results from the ANOVAs.

A series of mixed-model ANOVAs were used to test for main effects and any interaction of the independent variables (time, level of challenging behaviour and self-perceived teacher change) upon the dependent variable (mean total difficulties and subscale scores of the SDQ). Although the assumption regarding homogeneity of variance was violated as indicated by Levene's test for equality of variances ($p < .05$), Pallant (2013) maintains that ANOVA is reasonably robust to violations of this assumption when the group sizes are similar. Pallant (2013) recommends that the largest group is no more than 1.5 times bigger than the smallest. In the present study, the groups for level of challenging behaviour are roughly similar (high = 29, medium = 30, low = 30) and therefore it can be assumed that ANOVA is robust in this case. However, the size of the self-perceived teacher change groups are uneven, especially for the N = 9 showing 'just a

little change' ('quite a lot of change' = 45, 'significant change' = 35). Therefore, the results regarding self-perceived teacher change should be interpreted with caution.

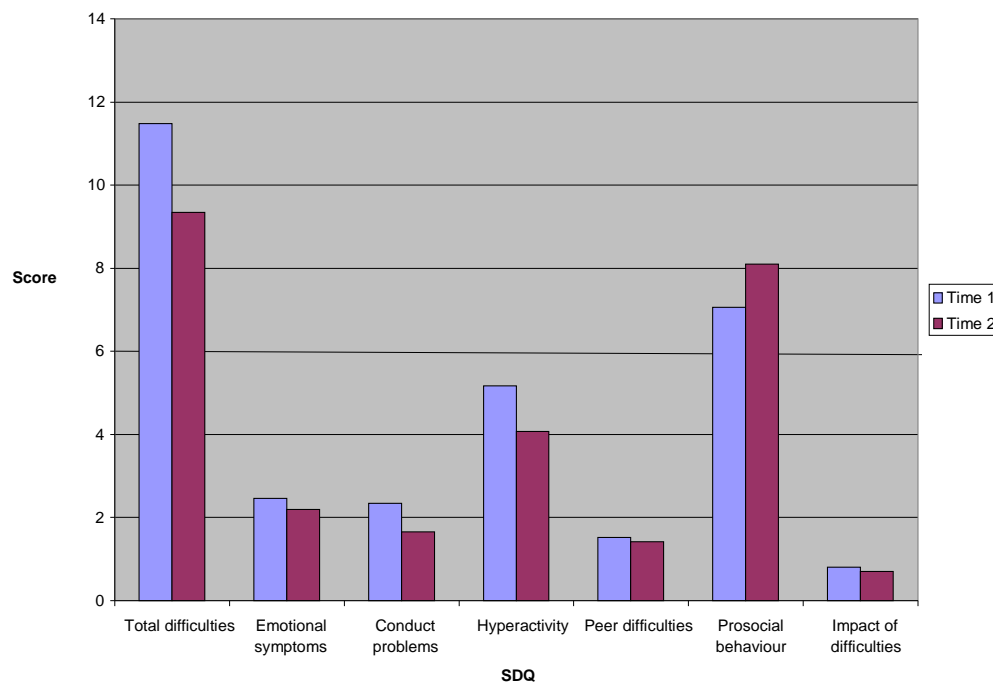
2.3.2.2.1 Hypothesis 1: There will be significant before and after change in teachers' perceptions of their students' social, emotional and behavioural functioning as indicated by change in SDQ scores, across all students rated.

The means and standard deviations of the total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2) are shown in Table 3.

Table 3: Mean SDQ total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2)

SDQ	Mean	Time 1			Time 2			SDQ Change
		SD	N	Mean	SD	N		
Total difficulties	11.48	7.92	89	9.34	6.95	89	-2.14	
Emotional symptoms	2.46	2.71	89	2.20	2.45	89	-0.26	
Conduct problems	2.34	2.53	89	1.65	2.13	89	-0.69	
Hyperactivity	5.17	3.81	89	4.07	3.23	89	-1.10	
Peer difficulties	1.52	1.67	89	1.42	1.88	89	-0.10	
Prosocial behaviour	7.06	2.71	89	8.10	2.21	89	+1.04	
Impact of difficulties	0.81	1.23	89	0.71	1.44	89	-0.10	

Figure 21: Mean SDQ scores pre- (Time 1) and post-intervention (Time 2)



As Table 4 below indicates, the mixed-model ANOVAs revealed significant main effects for total difficulties, conduct problems, hyperactivity and prosocial behaviour scores over time. Using the guidelines proposed by Cohen (1988, p. 284-7), these results indicated moderate effect sizes (.01 = small effect, .06 = moderate effect, .14 = large effect). For the total difficulties, conduct problems and hyperactivity scales, this means that there was a significant decrease in scores post-intervention. The prosocial behaviour subscale is classed as a ‘strength’ and therefore, in contrast to the other subscales, an increase in scores over time represents an improvement. The mean score for prosocial behaviour significantly increased. No significant main effects over time were found for emotional symptoms, peer difficulties or impact of difficulties.

Table 4: Main effects for time

SDQ	F (1, 80)	p	η
Total difficulties	7.85	.006*	.09
Emotional symptoms	1.34	.25	.02
Conduct problems	6.88	.01*	.08
Hyperactivity	7.79	.01*	.09
Peer difficulties	1.09	.30	.01
Prosocial behaviour	9.52	.003*	.11
Impact of difficulties	0.13	.72	.00

The Wilcoxon Signed Rank Test is the non-parametric alternative to a repeated measures t-test. It was used to test the robustness of the results of the mixed model ANOVAs with regards to the main effects for time. Consistent with the results of the mixed-model ANOVAs, a series of Wilcoxon Signed Rank Tests (Table 5) revealed significant differences in scores between Time 1 and Time 2 for the total difficulties, conduct problems, hyperactivity and prosocial behaviour scales. No significant differences over time were found for emotional symptoms, peer difficulties or impact of difficulties. Using the guidelines proposed by Cohen (1988, p. p. 79-81), these results indicated small to medium effect sizes (.1 = small effect, .3 = medium effect, .5 = large effect).

Table 5: Results of Wilcoxon Signed Rank Tests for main effects for time

SDQ	Z	p	r
Total difficulties	-3.40	.001*	.25
Emotional symptoms	-1.00	.316	.07
Conduct problems	-3.22	.001*	.24
Hyperactivity	-3.92	<.001*	.29
Peer difficulties	-.812	.417	.06
Prosocial behaviour	-4.00	<.001*	.30
Impact of difficulties	-.700	.484	.05

2.3.2.2.2 Hypothesis 2: There will be a significant difference in SDQ scores according to level of challenging behaviour from Time 1 (pre-intervention) to Time 2 (post-intervention). Children with high levels of challenging behaviour will show greater SDQ change compared to children with middle or low levels of challenging behaviour.

The means and standard deviations of the total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2) according to level of challenging behaviour (high, medium, low) are presented in Table 6 below.

Table 6: Mean SDQ total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2) by level of challenging behaviour

SDQ	Challenging behaviour	Mean	Time 1 SD	N	Mean	Time 2 SD	N	SDQ Change
Total difficulties								
	High	17.90	5.28	29	14.34	6.08	29	-3.56
	Medium	13.50	5.40	30	10.90	5.60	30	-2.60
	Low	3.27	4.39	30	2.93	3.05	30	-0.34
Emotional symptoms								
	High	2.97	2.88	29	2.59	2.72	29	-0.38
	Medium	3.27	2.95	30	2.80	2.66	30	-0.47
	Low	1.17	1.72	30	1.23	1.59	30	+0.06
Conduct problems								
	High	4.31	2.62	29	2.93	2.34	29	-1.38
	Medium	2.47	1.93	30	1.87	2.05	30	-0.60
	Low	0.30	0.95	30	0.20	0.61	30	-0.10
Hyperactivity								
	High	8.21	1.95	29	6.69	2.24	29	-1.52
	Medium	6.17	2.61	30	4.60	2.69	30	-1.57
	Low	1.23	2.69	30	1.00	1.62	30	-0.23
Peer difficulties								
	High	2.41	1.92	29	2.14	2.05	29	-0.27
	Medium	1.60	1.48	30	1.63	1.97	30	+0.03
	Low	0.57	1.01	30	0.50	1.17	30	-0.07
Prosocial behaviour								
	High	5.59	2.81	29	7.07	2.42	29	-1.48
	Medium	6.53	2.39	30	7.90	2.17	30	-1.37
	Low	9.00	1.60	30	9.30	1.37	30	-0.30
Impact of difficulties								
	High	1.76	1.27	29	1.55	1.84	29	-0.21
	Medium	0.60	1.19	30	0.57	1.33	30	-0.03
	Low	0.10	0.40	30	0.03	0.18	30	-0.07

As indicated in Table 7 below, the mixed-model ANOVAs revealed no significant interaction effects for time and level of challenging behaviour for any of the SDQ scores. This means that contrary to the hypothesis, there was no significant difference in teacher perceptions of SDQ change for children with high, medium or low levels of challenging behaviour.

Table 7: Interaction effects for time and level of challenging behaviour

SDQ	F (2, 80)	p	η
Total difficulties	1.40	.25	.03
Emotional symptoms	.49	.61	.01
Conduct problems	1.29	.28	.03
Hyperactivity	2.79	.07	.07
Peer difficulties	.79	.46	.02
Prosocial behaviour	1.85	.16	.04
Impact of difficulties	.02	.98	.00

Figure 22 Mean SDQ total difficulties scores pre- (Time 1) and post-intervention (Time 2) by level of challenging behaviour

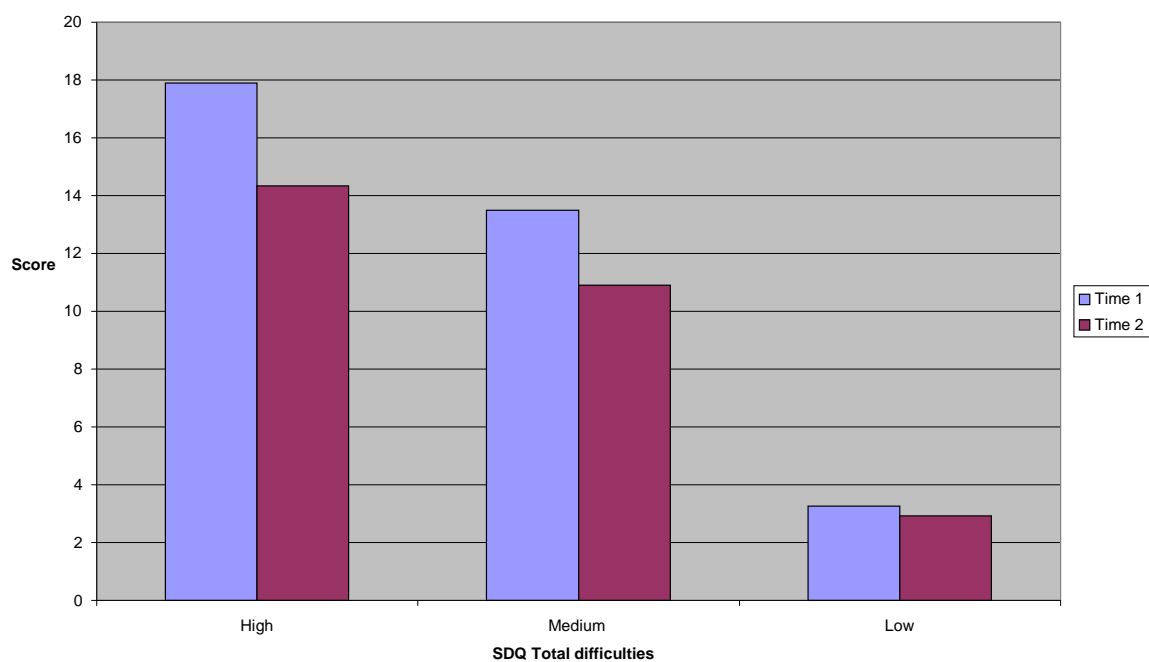


Figure 23 Mean SDQ emotional symptoms scores pre- (Time 1) and post-intervention (Time 2) by level of challenging behaviour

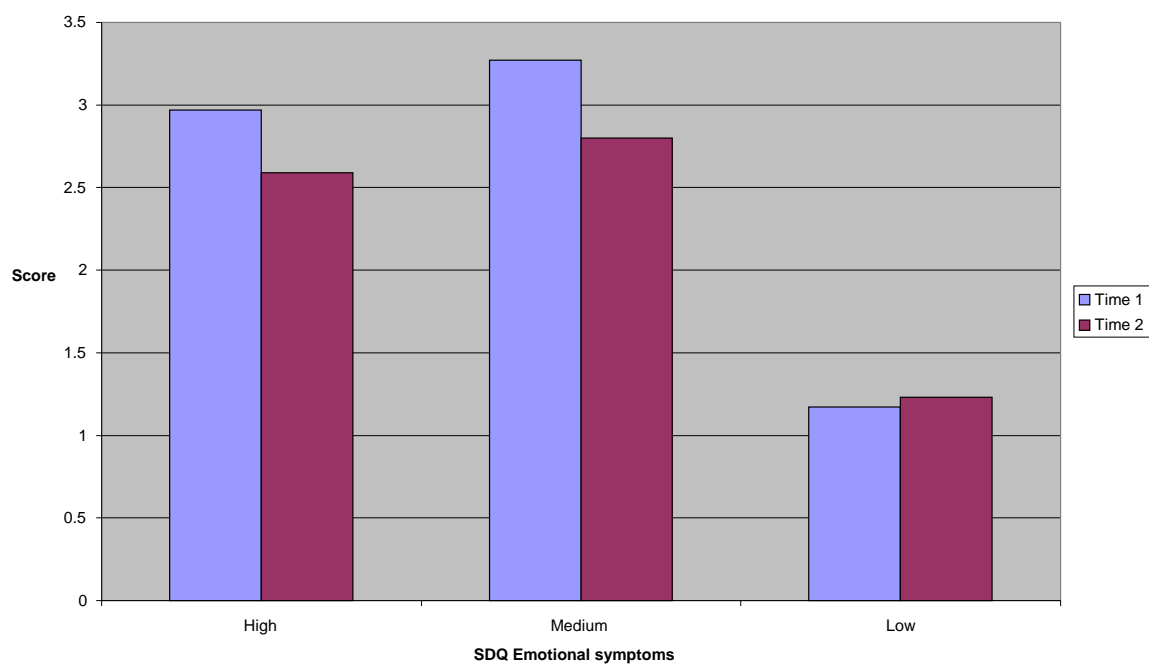


Figure 24 Mean SDQ conduct problems scores pre- (Time 1) and post-intervention (Time 2) by level of challenging behaviour

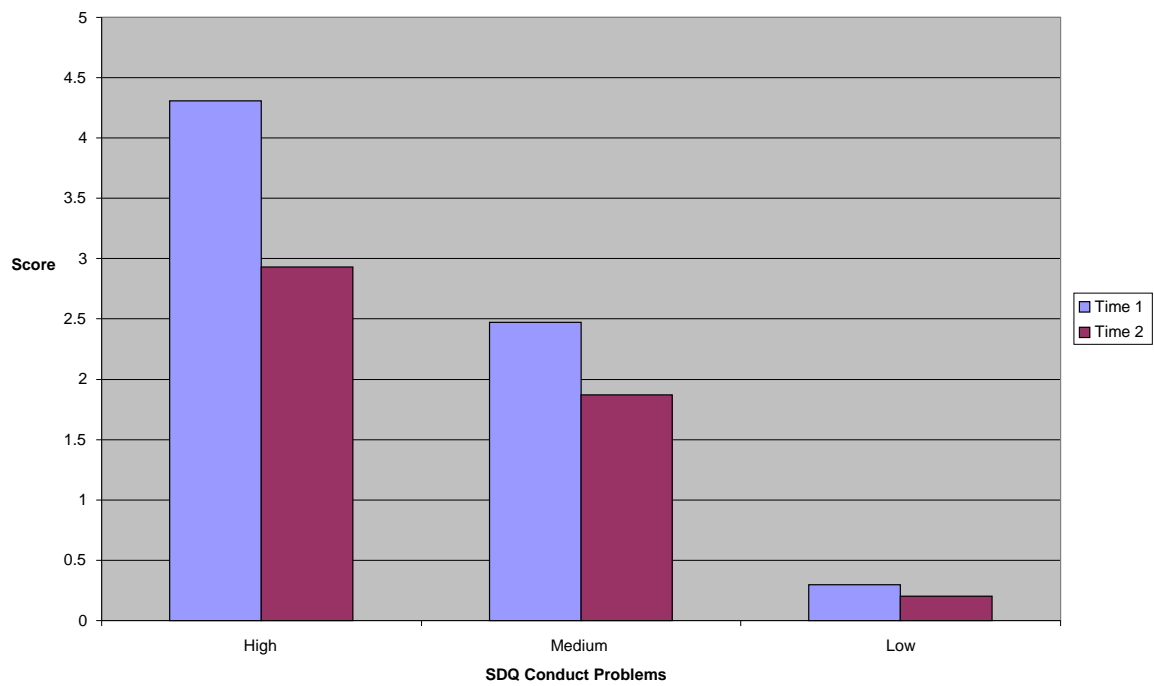


Figure 25 Mean SDQ hyperactivity scores pre- (Time 1) and post-intervention (Time 2) by level of challenging behaviour

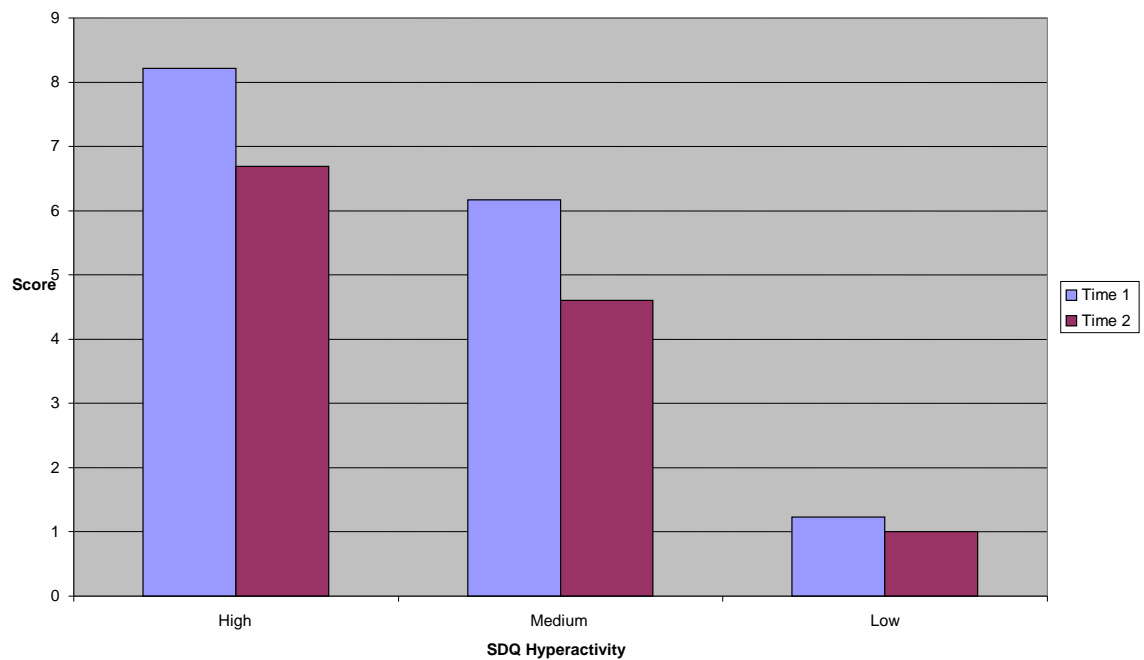


Figure 26 Mean SDQ peer difficulties scores pre- (Time 1) and post-intervention by level of challenging behaviour

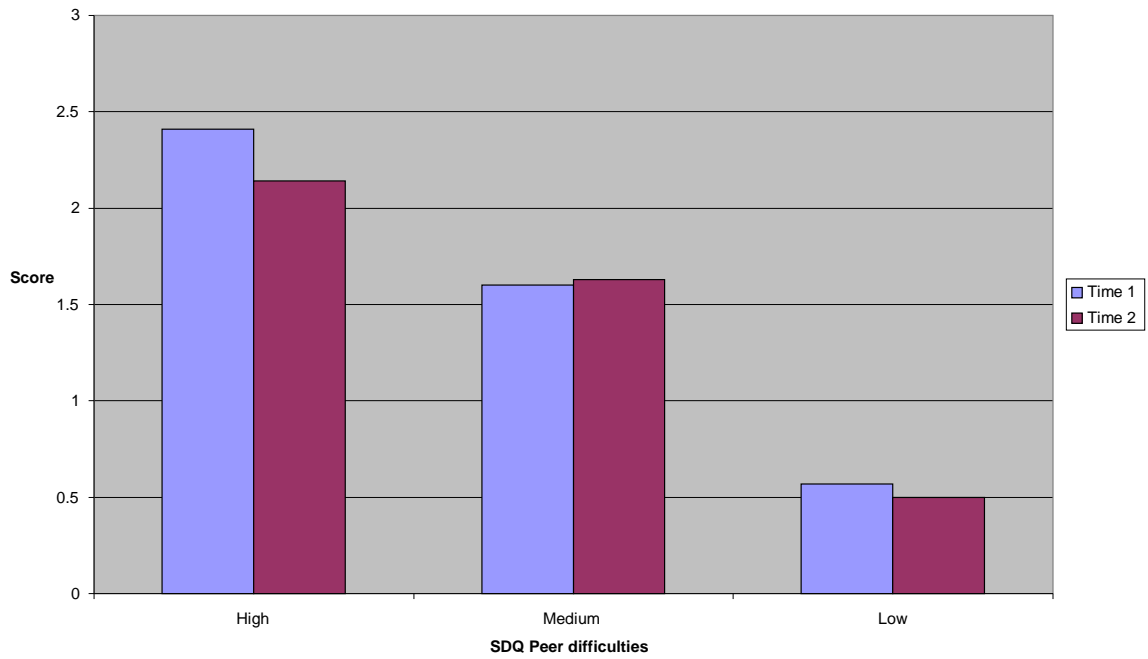


Figure 27 Mean SDQ prosocial behaviour scores pre- (Time 1) and post-intervention (Time 2) by level of challenging behaviour

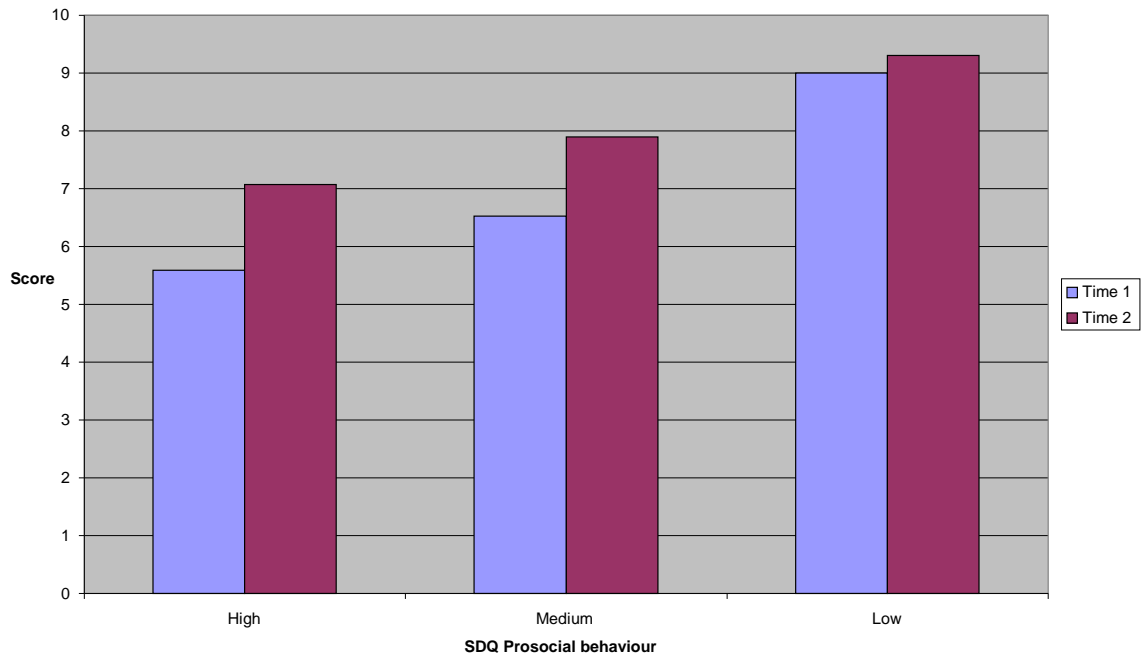
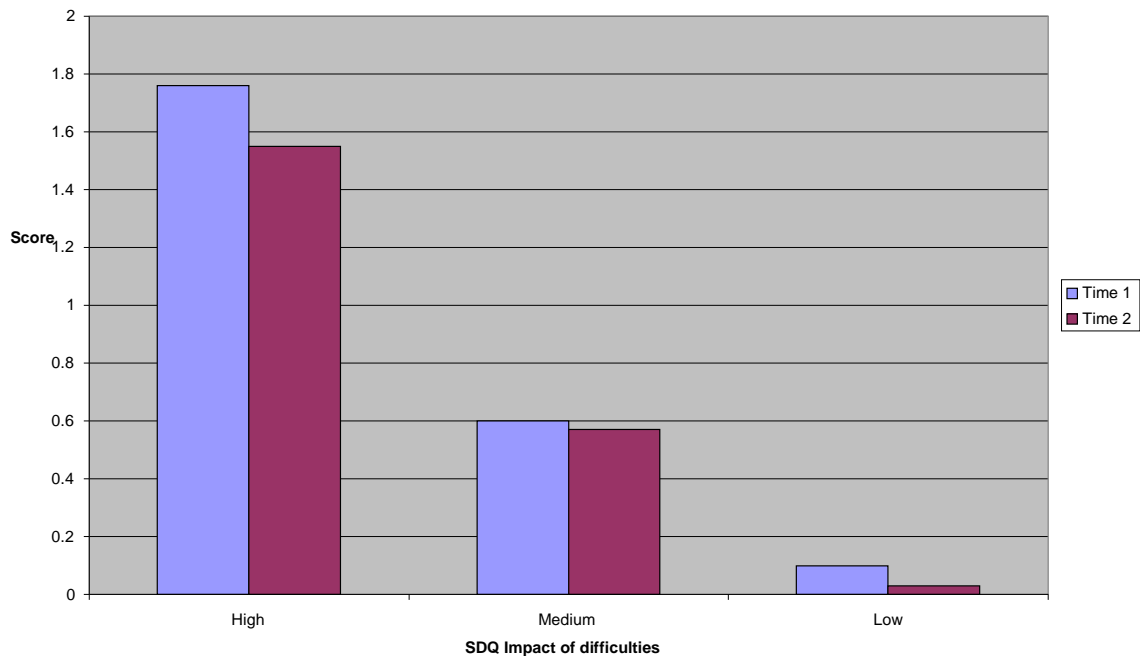


Figure 28 Mean SDQ impact of difficulties scores pre- (Time 1) and post-intervention (Time 2) by level of challenging behaviour



There were significant main effects according to children's level of challenging behaviour for the total difficulties and all SDQ subscale scores (Table 8 below). This means that there were significant differences in scores for children with different levels of challenging behaviour. There were large effect sizes (i.e. greater than .14 according to Cohen, 1988, p. 284-7) calculated for all the subscales. The ANOVAs confirm the score differences between groups and therefore the quality of intuitive teacher judgement relating to level of challenging behaviour. Inspection of the mean scores indicate that, for the scales associated with total difficulties, conduct problems, hyperactivity, peer difficulties and impact of difficulties, children with high levels of challenging behaviour demonstrated the highest scores and those with low levels of challenging behaviour had the lowest scores. For the subscale associated with emotional symptoms, children with medium levels of challenging behaviour had the highest scores. The prosocial behaviour

subscale is classed as a ‘strength’ and therefore, in contrast to the other SDQ subscales, children with low levels of challenging behaviour demonstrated highest scores for prosocial behaviour and those with high levels of challenging behaviour had the lowest scores for prosocial behaviour.

Table 8: Main effects for level of challenging behaviour

SDQ	F (2, 80)	p	η
Total difficulties	65.28	<.001*	.62
Emotional symptoms	12.35	<.001*	.24
Conduct problems	24.33	<.001*	.38
Hyperactivity	52.18	<.001*	.57
Peer difficulties	7.58	.001*	.16
Prosocial behaviour	11.63	<.001*	.23
Impact of difficulties	21.17	<.001*	.35

Due to the violation of the assumption of normality, the Kruskal-Wallis Test, which is the non-parametric alternative to a one-way between-groups ANOVA, was used to test the robustness of the results for main effects for level of challenging behaviour using Time 1 scores (there is no non-parametric alternative for a two-way between groups ANOVA). These results are presented in Table 9 below. Consistent with the results of the mixed ANOVAs outlined in Table 8 above, a series of Kruskal-Wallis Tests revealed statistically significant differences in baseline SDQ scores for children with different levels of challenging behaviour for the total difficulties and all SDQ subscale scores.

Table 9: Results of Kruskal-Wallis Test for main effects for level of challenging behaviour

SDQ	χ^2 (2, n=90)	p
Total difficulties	54.13	<.001*
Emotional symptoms	12.68	.002*
Conduct problems	45.45	<.001*
Hyperactivity	48.56	<.001*
Peer difficulties	21.01	<.001*
Prosocial behaviour	27.17	<.001*
Impact of difficulties	33.72	<.001*

2.3.3 Research Question 3: What is the relationship between self-perceived teacher change and teachers' perception of change in their students' social, emotional and behavioural functioning as a result of participation in the IY TCM programme?

2.3.3.1 Hypothesis 3: There will be a significant relationship between self-perceived teacher change and SDQ change scores, such that the higher the rating of self-perceived teacher change, the greater the change in SDQ scores.

The means and standard deviations of the SDQ scores pre- (Time 1) and post-intervention (Time 2) according to self-perceived teacher change are presented in Table 10 below.

Table 10: Mean SDQ total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2) by self-perceived teacher change

SDQ	Teacher change	Mean	Time 1		Mean	Time 2		SDQ Change
			SD	N		SD	N	
Total difficulties	Just a little	14.89	9.41	9	12.78	8.66	9	-2.11
	Quite a lot	10.24	8.41	45	8.00	6.77	45	-2.24
	Significant	12.20	6.67	35	10.17	6.47	35	-2.03
Emotional symptoms	Just a little	5.89	4.29	9	5.00	3.81	9	-0.89
	Quite a lot	2.02	2.51	45	1.44	2.00	45	-0.58
	Significant	2.14	1.77	35	2.46	2.02	35	+0.32
Conduct problems	Just a little	2.89	2.85	9	2.56	2.30	9	-0.33
	Quite a lot	1.84	2.58	45	1.27	1.98	45	-0.57
	Significant	2.83	2.33	35	1.91	2.22	35	-0.92
Hyperactivity	Just a little	3.56	3.88	9	3.33	3.64	9	-0.23
	Quite a lot	5.13	4.00	45	4.00	3.20	45	-1.13
	Significant	5.63	3.52	35	4.34	3.22	35	-1.29
Peer difficulties	Just a little	2.56	1.81	9	1.89	2.37	9	-0.67
	Quite a lot	1.24	1.77	45	1.29	1.78	45	+0.05
	Significant	1.60	1.42	35	1.46	1.92	35	-0.14
Prosocial behaviour	Just a little	7.89	2.26	9	8.22	1.92	9	-0.33
	Quite a lot	7.36	2.66	45	8.09	2.17	45	-0.73
	Significant	6.46	2.81	35	8.09	2.38	35	-1.63
Impact of difficulties	Just a little	1.33	1.50	9	1.33	2.24	9	-0
	Quite a lot	0.69	1.08	45	0.47	0.94	45	-0.17
	Significant	0.83	1.34	35	0.86	1.68	35	+0.03

As Table 11 below shows, the mixed-model ANOVAs indicate that there were no significant interaction effects for time and self-perceived teacher change for any of the SDQ scores. This means that there was no significant relationship between teachers' perceptions of change in themselves (self-perceived teacher change) and their perception of change in their students' social, emotional and behavioural functioning as a result of the intervention (SDQ change scores). It is important to note that these results are exploratory and cannot be interpreted with reliability because the assumption regarding homogeneity of variance has been violated as indicated by Levene's test for equality of variances ($p < .05$). According to Pallant (2013), analysis of variance (ANOVA) is reasonably robust to violations of this assumption when the group sizes are similar. Pallant (2013) recommends that the largest group is no more than 1.5 times bigger than the smallest. In the present study, the size of the self-perceived teacher change groups are uneven, especially for the $N = 9$ showing "just a little change". Therefore, these results should be interpreted with caution and this hypothesis should be replicated in future research.

Table 11: Interaction effects for time and self-perceived teacher change

SDQ	F (2, 80)	p	η
Total difficulties	.01	.99	.00
Emotional symptoms	1.55	.22	.04
Conduct problems	.62	.54	.02
Hyperactivity	.74	.48	.02
Peer difficulties	.57	.57	.01
Prosocial behaviour	2.29	.11	.05
Impact of difficulties	.41	.66	.01

The mixed-model ANOVAs revealed significant main effects according to self-perceived teacher change for total difficulties, emotional symptoms and conduct problems scores (outlined in Table 12 below).

Table 12: Main effects for self-perceived teacher change

SDQ	F (2, 80)	p	η
Total difficulties	6.99	.002*	.15
Emotional symptoms	16.45	<.001*	.29
Conduct problems	3.80	.027*	.09
Hyperactivity	2.59	.081	.06
Peer difficulties	2.05	.14	.05
Prosocial behaviour	1.00	.371	.02
Impact of difficulties	2.64	.078	.06

As Table 12 indicates, large effect sizes (i.e. greater than .14 according to Cohen, 1988, p. 284-7) were calculated for the total difficulties and emotional symptoms scales, while a moderate effect (greater than .06) was found for the conduct problems scale. There were no significant main effects for hyperactivity, peer difficulties, prosocial behaviour or impact of difficulties according to self-perceived teacher change. For the total difficulties, emotional symptoms and conduct problems scales, for pre- and post-scores combined, across all challenge groups, self-perceived teacher change was related to the difficulty score on the SDQ. Inspection of the mean scores for these scales indicated that teachers who rated ‘just a little change’ in themselves had highest SDQ scores, followed by those who rated ‘significant change’ and teachers who rated ‘quite a lot of change’ in themselves had the lowest SDQ scores. This means that if a teacher judged there was little change in themselves, he/she tended to perceive a higher degree of difficulty in pupils (across all pupil groups) when using the SDQ.

Due to the violation of the assumption of normality, the Kruskal-Wallis Test, which is the non-parametric alternative to a one-way between-groups ANOVA, was used to test the robustness of the results for main effects for self-perceived teacher change using Time 1 scores (there is no non-parametric equivalent for a two-way between groups ANOVA). These results are presented in Table 13 below. Consistent with the results of the mixed ANOVAs described in Table 12 above, the Kruskal-Wallis Tests revealed statistically significant differences in baseline SDQ scores according to self-perceived teacher change for the emotional symptoms subscale. A significant difference was also found for peer difficulties, which had not been identified in the

mixed model ANOVAs. Contrary to the results of the mixed model ANOVAs, no significant differences were found for the total difficulties or conduct subscales. As noted above, these results should be interpreted with caution due to the violation of the assumption of homogeneity of variance and the uneven sizes of the self-perceived teacher change groups.

Table 13: Results of Kruskal-Wallis Test for main effects for self-perceived teacher change

SDQ	χ^2 (2, n=90)	p
Total difficulties	4.158	.125
Emotional symptoms	6.711	.035*
Conduct problems	5.667	.059
Hyperactivity	2.573	.276
Peer difficulties	7.061	.029*
Prosocial behaviour	3.810	.149
Impact of difficulties	1.829	.401

2.4DISCUSSION

The findings will be discussed below in relation to each of the research questions. In line with Creswell and Plano Clark's (2011) description of an embedded mixed methods design, quantitative and qualitative data will be discussed separately.

2.4.1 Research Question 1: What are teachers' perceptions of the process of change as a result of their participation in the IY TCM programme?

2.4.1.1 Research Question 1 (a): How do teachers' knowledge, skills, beliefs and practice develop over the course of the IY TCM programme in relation to outcomes for students?

In Focus Group 1, teachers identified significant change in their knowledge and beliefs regarding the importance of positive behaviour and SEC to wellbeing and learning in school. Changes in teachers' skills and practice in terms of developing better relationships with parents and children, and their use of positive and proactive behavioural management strategies, resulted in perceived improvements in the classroom environment as well as children's self-esteem, social-emotional

competence, and sense of belonging. In line with Guskey's (1986; 2002) and Clarke and Hollingsworth's (2002) models of teacher change, these findings suggest that it was the teachers' experience of implementing the IY TCM strategies (relationship-building and positive and proactive teaching approaches) and their reflection on the outcomes which contributed to the significant change in their beliefs regarding the importance of promoting children's social, emotional and behavioural functioning.

The overall theme of Focus Group 2 involved change in teachers' skills and practice regarding their use of praise, coaching and compliments, with positive effects on children's motivation, peer relationships, co-operative working, learning and compliance. Similar to McGilloway *et al.*'s (2011) finding, teachers perceived that it was the changes in their use of behaviour-specific praise as well as explicitly modelling and teaching prosocial behaviours which contributed to student outcomes. In spite of these changes, there was also general consensus that change can be difficult and slow due to the challenging behaviour of some children. Similarly, Guskey (2002) highlighted that change is a gradual and difficult process for teachers which requires time, effort and often an additional workload. Guskey (2002) also indicated that teachers often feel anxious or threatened by change and can be reluctant to adopt new strategies unless they feel sure they can make them work. It is likely that teachers in the present study considered that the IY TCM strategies would work with time as they articulated the need to persist despite challenges and setbacks.

During Focus Group 3, teachers highlighted many positive outcomes as a result of their use of proactive teaching strategies which are in line with previous IY TCM research, including reductions in conduct problems, decreases in off-task behaviour, and a calmer, more co-operative and positive classroom environment. At this stage in the training, teachers were increasingly reflective of their practice and were insightful as to the changes they were

experiencing. This finding can be explained with reference to Clarke and Hollingsworth's (2002) model and the reflective connections between the domains of practice, consequence, and the personal domain. As well as reflecting on the changes in their general classroom management style, teachers were reflective of the impact of the proactive strategies on their students and the general classroom environment. In relation to changes in the teachers' knowledge, beliefs and attitudes in the personal domain, teachers reported that IY TCM has become 'a way of life' and that it has significantly changed their teaching and thinking. This finding can be illustrated by Guskey's (2002, p. 388) assertion that, "If a new program or innovation is to be implemented well, it must become a natural part of teachers' repertoire of teaching skills". These findings are also consistent with Guskey's (2002) theory of teacher change whereby changes in teachers' beliefs and attitudes occurs when there is evidence of improved student learning. Accordingly, this is an example of Bandura's (1997) successful 'mastery experience' which has been found to be the most salient contributor to efficacy beliefs among teachers (Tschannen-Moran & Woolfolk Hoy, 2007).

The overall theme of Focus Group 4 was a belief in the value of change and use of the IY TCM strategies combined with a sense of frustration when they did not work. Previous research has indicated that when teachers experience stress and burnout, they often feel less effective and struggle to actively engage in teaching practices, thereby reducing the quality and fidelity with which they implement programmes (Tsouloupas *et al.*, 2010; Han & Weiss, 2005). Similarly, some teachers talked about feeling overwhelmed by the level of challenging behaviour of some students which led them to abandon the new approaches. Feelings of frustration when strategies were ineffective are in line with research which has identified an 'implementation dip' in self-efficacy as teachers begin to implement a change initiative (Ross, 1994; Stein & Wang, 1988; Woolfolk Hoy & Burke-Spero, 2005). Despite these negative feelings and setbacks, teachers acknowledged the need to persist and other members of the group offered support by sharing

their experiences, which can be considered an example of collaborative problem-solving in a community of practice (Lave & Wenger, 1991). Teachers were increasingly reflective about the changes in their skills and practice and were insightful as to why strategies were ineffective in the past. Theories of teacher change have consistently highlighted the importance of reflection as a key learning process.

The general sense of teachers feeling more confident in their classroom management practice emerged as the main theme during the final focus group and is indicative of change in teacher efficacy for classroom management. Teachers reported feeling more confident, calmer, less stressed and fairer as a result of their use of the IY TCM strategies – all positive indicators of teacher wellbeing. Research indicates that self-perceiving a high level of classroom management skill can act to buffer against stress by enabling teachers to better handle challenging behaviour, while simultaneously reducing the occurrence of misbehaviour thereby increasing wellbeing (Dicke *et al.*, 2014; Brouwers & Tomic, 1999. Evers *et al.*, 2004; Skaalvik & Skaalvik, 2007). In line with Ross and Bruce's (2007) model of teacher self-assessment, it appears that teachers engaged in self-assessment (observed the effects of their use of the IY TCM discipline hierarchy and time out on student achievement and made judgements about how well they implemented the strategies) which contributed to heightened teacher efficacy and in turn, calmer, fairer and more consistent classroom management practice.

2.4.1.2 Research Question 1(b): What factors support or hinder teacher change during participation in the IY TCM programme?

A key theme throughout the focus groups was the need for the IY TCM programme to be embedded within a whole school approach to support effective implementation of the strategies, facilitate ongoing change, ensure consistency of behavioural management throughout the school, and ultimately further enhance student outcomes. This finding can, however, be explained by the

research sample as the training was delivered to a cluster of teachers from seven schools. Past researchers (Kam *et al.*, 2003; Ransford *et al.*, 2009) have revealed that the strongest intervention effects occur when principal support and implementation quality are high. Despite this, having the support of the principal was only mentioned by one teacher during the focus groups. This could possibly be due to the public nature of focus group methodology in which participants may not have wanted to personally identify their principals' leadership style. It was identified as a factor which supported change during individual interviews.

Consistent with the features of effective PD (Garet *et al.*, 2001; Loucks-Horsley *et al.*, 1998; Borko, 2004), the training methods of collaborative group discussion and problem-solving, modelling of strategies in the vignettes, and classroom practice assignments were perceived as programme factors which supported change. Similar to Hutchings *et al.* (2007) and McGilloway *et al.*'s findings (2011), sharing experiences and strategies with other teachers was considered a particularly valuable component. Teacher collaboration and problem-solving during the training can be considered an example of teacher learning or change through participation in a community of practice (CoP) (Lave & Wenger, 1991; Borko *et al.*, 1997). Van Horn (2006) suggests that when teachers have opportunities to collaboratively solve problems they are more likely to take risks, sustain attempts to make changes and develop, and/or apply new approaches in their classrooms. In line with Butler *et al.*'s (2004) assertion, collaborative inquiry in a CoP provided teachers with structured opportunities for reflection not typically available to them in their schools. Teachers felt that it was reassuring when they listened to other teachers who were experiencing similar difficulties and spoke about feeling hopeful as a consequence of the group discussions, another example of the impact of the programme on teacher wellbeing.

Consistent with previous research, challenging behaviour was identified as a significant barrier to change (Brophy, 1999). Teachers noted the emotional impact (stress, frustration, upset) of

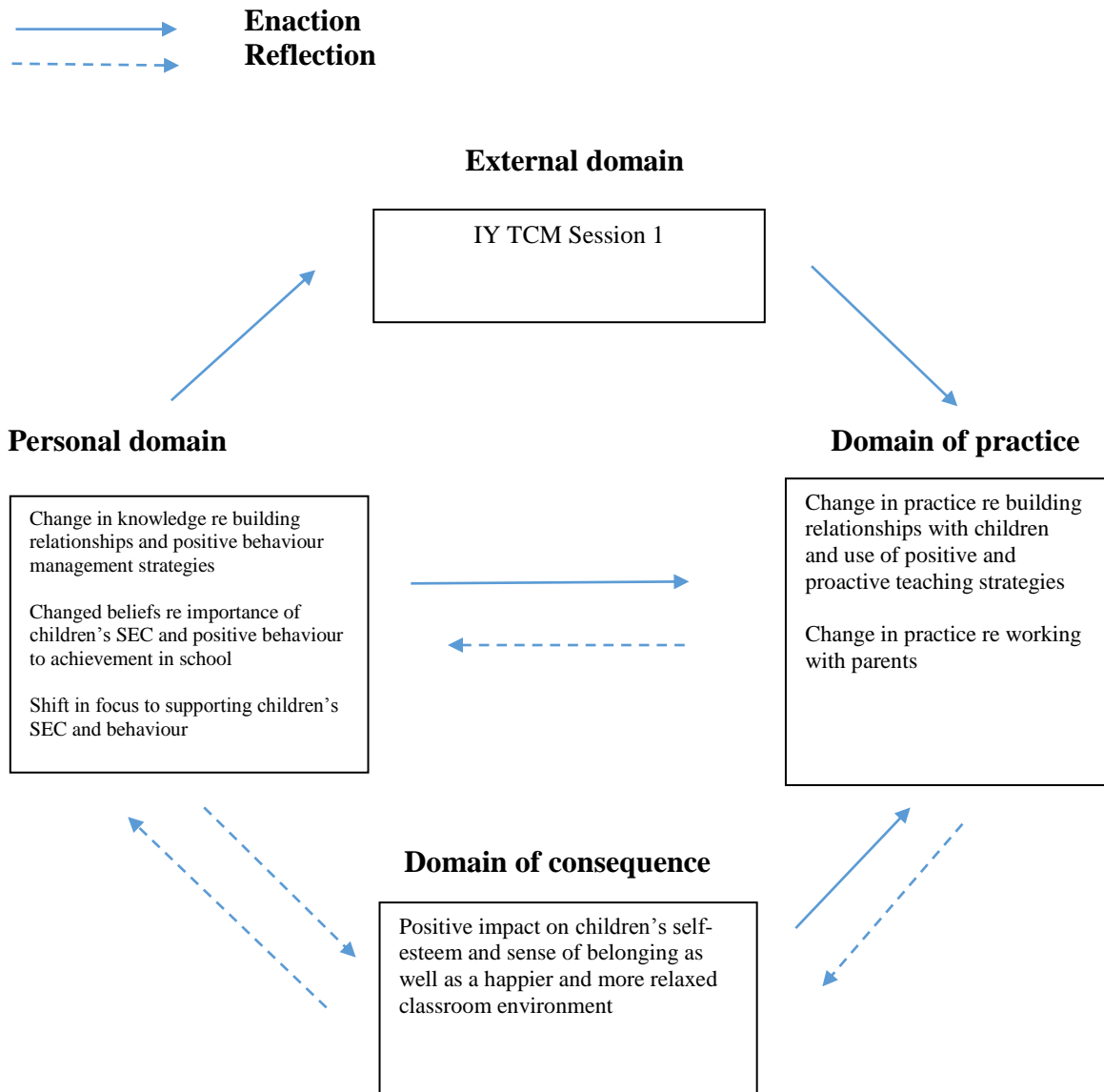
negative reactions from children which can result in their use of negative discipline strategies. The impact of the teacher's own mood on the consistent use of positive behavioural management strategies is in line with research which has found that when teachers experience stress and burnout, they feel less effective and struggle to actively engage in teaching practices, thereby reducing the quality and fidelity with which they implement programmes (Han & Weiss, 2005). Time pressures in schools and on teachers (e.g. curriculum pressures, school self-evaluation, lesson planning/notes) were identified as key challenges. Lack of time was cited by Buchanen *et al.* (2009) as a key barrier to teacher implementation of SEL programmes.

Although strengthening parent-teacher relationships is a key objective of the IY TCM programme, previous research (e.g. Hutchings *et al.*, 2007) found limited impact in this regard. In the present study, a positive outcome is the value teachers ascribed to listening to parents and gathering information which helps them to better understand the child's difficulties. Sharing information with parents about the strategies was perceived as supporting change and ensuring consistency across home and school.

2.4.1.3 Models of Teacher Change through IY TCM

The findings from the focus groups can be mapped onto Guskey's (1986, 2002) model of teacher change in that training in IY TCM led to changes in teachers' practice which resulted in improved student outcomes, and ultimately led to changes in teachers' beliefs and attitudes, especially in terms of teacher confidence and self-efficacy. It is evident that it was the teachers' experience of successful implementation of the IY TCM strategies and improved student outcomes that changed their attitudes and beliefs. In line with the criticisms of Guskey's (1986, 2002) model for presenting teacher change as a linear process, the current findings would support this assertion in that teachers appear to have passed through several cycles of this model (i.e. IY TCM training – change in practice – improved student outcomes – increase in confidence/efficacy – IY TCM training – further changes in practice etc.) over the course of the intervention.

Although Guskey's (1986, 2002) model explains the sequence or phases of teacher change through PD, it does not explain how this change or learning occurs, nor does it consider the factors which impact upon change. For these reasons, Clarke and Hollingsworth's (2002) interconnected model may be more useful in explaining the current findings. Their model suggests that change occurs in recurring cycles through the mediating processes of reflection and enaction in the four domains of change. In each of the focus group sessions, there was evidence that teachers engaged in experimentation with IY TCM strategies in their classrooms (enaction) and reflected upon the knowledge gained through the programme, their new skills and practice, as well as the outcomes of these changes for both themselves and their students (reflection). The findings from each of the focus group sessions could therefore be mapped onto Clarke and Hollingsworth's (2002) model (see Figure 29 below for example using the findings from Focus Group 1):



Change environment

Factors which support/hinder change:

Whole school approach
IY TCM programme
Challenging behaviour
Working with parents
Individual feelings and pressures

Figure 29: Model of teacher change from focus group 1

A strength of applying this model is that it recognises the complexity of teacher change through the identification of multiple and cyclic movements between the domains of change. Although the non-linear structure enables identification of particular ‘change sequences’ (when change in one domain leads to change in another through enaction or reflection) and ‘growth networks’ (defined as evidence of lasting change), these pathways cannot be defined in the current study as the teachers were not asked to specify the sequence of change. What is clear from the data, however, is that change took place in each of the domains. Another strength of Clarke and Hollingsworth’s (2002) model is that growth or change occurs within the constraints and affordances of the developing change environment, in other words the identified factors which support or hinder change (i.e. whole school approach, IY TCM programme, challenging behaviour, working with parents, individual feelings and pressures).

2.4.1.4 Research Question 1 (c): How do teachers retrospectively appraise their change in knowledge, skills, beliefs and practices as a result of participating in the IY TCM programme?

Consistent with qualitative IY TCM research by Baker-Henningham and Walker (2009) and McGilloway *et al.* (2011), teachers identified significant changes in their beliefs and practice regarding the use and importance of positive and proactive classroom management strategies. In the context of a more positive classroom environment, teachers perceived improved learning and behavioural outcomes for students. The structured approach to classroom management gave teachers confidence in their practice, made them feel less stressed, and made it easier to handle misbehaviour.

Only two previous studies have referred to the impact of IY TCM training on teacher wellbeing (Baker-Henningham & Walker, 2009; Shernoff & Kratochwill, 2007). Jennings and Greenberg’s (2009) prosocial classroom model hypothesised that teachers’ social and emotional competence

(SEC) and wellbeing are important components in creating and maintaining optimal relationships with students, successful classroom management and effective SEL implementation, which in turn impact the classroom environment and student outcomes. On the other hand, the model also demonstrates that these mediators (effective classroom management, positive teacher-student relationships, effective SEL implementation) can have an impact on teacher SEC and wellbeing. Although teachers were not directly asked about the impact of the programme on their own SEC, the findings suggest that participation resulted in changes in teachers' SEC as indicated by their perception of their ability to create a positive social and emotional classroom environment, their understanding and responsiveness to individual students' needs, their recognition of the importance of positive teacher-student relationships and enhanced skills in developing relationships with students and parents, as well as their ability to manage disruptive behaviour in a calmer and more structured manner. Changes in teachers' SEC led to improved teacher-parent relationships, home-school links and teacher-child relationships. Improved relationships also resulted in a more positive classroom environment.

A significant outcome for teachers related to perceived changes in their confidence and belief in their ability to effectively manage challenging behaviour and bring about change in their students i.e. teacher self-efficacy. This finding supports previous IY TCM research by Shernoff and Kratochwill (2007) and Baker-Henningham and Walker (2009) which also reported increases in teacher confidence. The benefits of the programme are therefore more wide-reaching in terms of psychological benefits for teachers than facilitation of improved classroom management. Increases in teacher efficacy can be explained by Bandura's (1997) assertion that it develops through reflection on the sources of efficacy information. Changes in teachers' self-efficacy can also be mapped onto Tschannen-Moran *et al.*'s (1998) cyclical model of teacher efficacy. Mastery experiences, whereby teachers put the new skills into practice and experienced success, played a powerful role in developing efficacy beliefs in this study. Collaborative group

discussion enabled teachers to reflect on their practice and provided them with feedback on same (verbal persuasion). Watching teachers in the vignettes modelling effective classroom management strategies was also considered to be a supporting factor (vicarious experience). Several consequences of increases in teachers' efficacy beliefs are in line with research findings and Tschannen-Moran *et al.*'s (1998) model. For example, teachers believed that, despite setbacks, the strategies would work and reported persisting in the face of challenges. They considered themselves to be more open to change and willing to try new strategies. There were also reports of increased collaboration with parents. The cyclical nature of teacher efficacy (Tschannen-Moran *et al.*, 1998) suggests that the IY TCM programme resulted in increases in teachers' efficacy beliefs which led to increased levels of effort and persistence, which in turn resulted in improved teacher classroom management performance and positive student outcomes, and further increases in teacher efficacy. These findings are consistent with several researchers who found that PD and training activities involving mastery experiences, social persuasion and vicarious experience have been found to increase teachers' beliefs in their professional role, responsibility, and efficacy (Tschannen-Moran & Woolfolk Hoy, 2007; Stanovich & Jordan, 2004; Tschannen-Moran & McMaster, 2009).

Research indicates that low levels of teacher wellbeing are in large part caused by student misbehaviour (Bakker *et al.*, 2007; Evers *et al.*, 2004; Friedman, 2006). Teachers may experience significant stress and an increased risk of burnout resulting from perceived misbehaviour when perceptions of efficacy are low (Betoret, 2006; Brouwers *et al.*, 2001; Brouwers & Tomic, 2000; Hastings & Bham, 2003; Yoon, 2002). Conversely, teachers in the present study reported increases in their classroom management self-efficacy as well as range of positive feelings and emotions which are indicative of improvements in teachers' sense of wellbeing. For example, teachers reported feeling calmer, less stressed, and more confident in their classroom management practice. They felt more in control, had increased patience, and

were less anxious or worried about managing challenging behaviour. Teachers had developed coping skills to manage children's difficult behaviour e.g. not taking the negative behaviour personally or letting it impact upon their personal life. In particular, knowing that other teachers were in similar situations with regards to challenging behaviour in their classes normalised the difficulties they were experiencing and alleviated a sense of failure. Consistent with the research literature, increases in teacher efficacy appears to have a protective function that plays an important role in mediating the relationship between perceived student misbehaviour and teacher burnout (Tsouloupas *et al.*, 2010). Training teachers in effective classroom management through IY TCM seems to have enabled them to handle challenging behaviour more effectively, and in effect, has improved their sense of wellbeing.

2.4.1.5 Research Question 1(d): Following participation in the IY TCM programme, what factors are perceived as supporting or hindering teacher change?

Several school level factors were identified as supporting change during individual interviews. This included attending the training with a colleague, working in a school which has already received whole school training, having the support of the school principal, and receiving regular EP support. Similar to the findings from the focus groups and McGilloway *et al.*'s (2011) Irish study, lack of whole school IY TCM training was cited as one of the most significant barriers to implementation of the strategies and lasting change, a finding which will be discussed below in relation to implications for EP service delivery.

Consistent with the focus group findings, several aspects of the IY TCM programme (structured approach, modelling in vignettes, EP facilitator support, textbook resources) were identified as supporting factors, most notably the positive group experience which facilitated collaborative discussion and problem-solving. Sharing their experiences and listening to other teachers in

similar situations not only contributed to teacher change but meant that teachers did not feel alone when managing challenging behaviour.

Individual teacher feelings and beliefs were identified in the interviews as supporting or hindering change, thus highlighting the importance of taking account of the subjective realities of teachers when delivering training. Having a positive attitude towards the programme, being open to reflect on one's practice, as well as a willingness and commitment to change and try new ideas, were noted. It is possible that teachers in the present study came to the training with what Huber (1995, p. 2) calls an 'uncertainty' orientation: 'uncertainty-oriented' teachers are eager to adopt new methods ("Well, let's give it a try") and learn from their mistakes ("It's not the method but the manner in which I applied it"). On the other hand, the pressure and stress of daily classroom life combined with lack of parental support can make it difficult to implement the IY TCM strategies with consistency. In line with research which has highlighted the powerful role of mastery experiences in the development of efficacy beliefs (Ross & Bruce, 2007), teachers reported that seeing the positive outcomes of the programme (in the children, in themselves, for the parents) supports change.

2.4.1.6 Most Significant Change Technique

Originally designed as a tool for evaluating social development programmes, the Most Significant Change Technique (MSC) (Davies & Dart, 2005) typically involves participants talking about or writing stories about what they perceive to be 'significant change' as a result of their involvement in a programme/intervention, and engaging in a process of discussion and selection to identify those stories that are considered to be most illustrative of significant change. Although not all stages in the MSC process (see Davies & Dart, 2005) were followed in this study, the 'kernel' of the MSC technique (Davies & Dart, 2005, p. 11) involves posing a question similar to the one used in focus groups and interviews: "Looking back over the last

month, what do you think was the most significant change for you as a result of your participation in the IY TCM programme? Why is this significant for you?”. Strengths associated with using the MSC question in this study include its focus on individual perception/judgement of change, and that it created a space for teachers to reflect on and evaluate their learning. It allowed for the collection of personal stories of change as well as teacher interpretations of the significance of the changes in the domains identified in the teacher change literature (knowledge, skills, beliefs, practice), both at regular intervals during IY TCM training (focus groups) and post-intervention (interviews). Furthermore, teachers seemed to enjoy the focus group sessions and often responded to a change story with one of their own which made it a flexible tool for collecting change information and facilitating dialogue. Information elicited using the MSC question during the focus groups provided indicators of programme impact at various stages of the training. Using the MSC question in interviews allowed the researcher to collect information about changes in more depth than during focus groups. A limitation of the MSC technique which has been identified in the literature is that of bias towards stories of success. Despite the largely positive examples of change documented by teachers in the present study, there were also several examples of negative change identified by teachers when they tried to implement new strategies.

2.4.2 Research Question 2: What student outcomes were perceived by teachers as a result of their participation in the IY TCM programme?

2.4.2.1 Research Question 2(a): How do teachers retrospectively appraise changes in their students’ social, emotional and behavioural functioning as a result of participating in the IY TCM programme?

Consistent with the findings of other qualitative IY TCM research (Hutchings *et al.*, 2007; McGilloway *et al.*, 2011), teachers considered that their participation in the programme had a

positive impact on children's social and emotional competence. Improved teacher-student relationships were associated with increases in children's sense of belonging and feelings of trust and safety in school. Teachers perceived the programme as having a positive effect on children's prosocial behaviour, social interaction skills and peer relationships. Improvements in their emotional regulation, self-esteem, confidence, and motivation were also noted. Consistent with the literature, teachers reported that improvements in children's social and emotional competence and pupil-teacher relationships were associated with increased learning and positive behaviour (Zins *et al.*, 2007a; Zins *et al.*, 2007b; Hamre & Pianta, 2001).

Teachers consistently referred to the impact of the programme on the creation of a calmer and more positive classroom environment. This finding is in line with Jennings and Greenberg's (2009) prosocial classroom model which proposes that effective classroom management, healthy teacher-student relationships and effective SEL implementation contribute to a positive classroom environment which in turn impacts student outcomes. Improvements in children's learning were attributed to increases in attention, on-task behaviour, and motivation which resulted from a calmer and more positive learning environment. Consistent with the results of quantitative (Baker-Henningham *et al.*, 2012) and qualitative research (McGilloway *et al.*, 2011), teachers reported a general reduction in negative behaviour as well as time spent managing misbehaviour. However, there were some mixed perceptions in this regard, which have not been illustrated in the quantitative IY TCM literature. It was interesting that some teachers felt that children whom they perceived as presenting with high levels of challenging behaviour were resistant to change and their use of the new techniques. On the other hand, some teachers considered that the programme better equips teachers for dealing with severe behavioural incidents while low level disruptive behaviour can be more difficult to change. There were also varied perceptions of change in terms of students whom teachers perceived as not presenting with behavioural difficulties. Some teachers considered that these students

demonstrated little change compared to children with higher levels of challenging behaviour. This finding is consistent with Hutchings *et al.* (2013) whereby children with low levels of challenging behaviour demonstrated no change post-intervention. This was attributed to a decrease in teacher interaction with these children because the teachers were spending considerably more time managing the behaviour of children with higher levels of difficulty.

2.4.2.2 Quantitative Results

The quantitative results indicated positive changes in teachers' perceptions of children's behaviour and social-emotional competence which support the qualitative findings from focus groups and teacher interviews.

2.4.2.2.1 Hypothesis 1: There will be significant before and after change in teachers' perceptions of their students' social, emotional and behavioural functioning as indicated by change in SDQ scores, across all students rated.

Results indicated significant decreases in teacher ratings for total difficulties, conduct problems and hyperactivity, and a significant increase for the prosocial behaviour 'strength' subscale. Although one cannot unequivocally attribute these changes to the IY TCM programme due to the possible effects of time and maturation, it is likely that teachers perceived themselves to be more confident and effective in managing students' behaviour and promoting prosocial skills resulting in teacher perceived improvements in children's skills in these areas. Teacher perceptions of improved student outcomes, as evidenced by improved SDQ scores, could be an example of positive mastery experiences, thus contributing to teacher efficacy. These findings lend support to the research regarding the effectiveness of the IY TCM programme as a stand-alone intervention (e.g. Hutchings *et al.*, 2007). It is interesting that, despite an increase in teacher ratings for prosocial behaviour, no significant differences were found for emotional

symptoms or peer difficulties. Webster-Stratton *et al.* (2004) investigated the additive effects of teacher training to child and parent training, and found that only the conditions that included child training demonstrated significant effects on children's social competence. They considered that direct instruction with children is necessary for learning the skills needed to improve peer interaction.

2.4.2.2.2 Hypothesis 2: There will be a significant difference in SDQ scores according to level of challenging behaviour from Time 1 (pre-intervention) to Time 2 (post-intervention). Children with high levels of challenging behaviour will show greater SDQ change compared to children with middle or low levels of challenging behaviour.

The lack of interaction effects meant that there was no support for hypothesis 2. Despite not reaching statistical significance, the greatest difference in scores did occur for children with high levels of challenging behaviour for the scales associated with total difficulties, conduct problems, peer difficulties, prosocial behaviour and impact of difficulties. Previous research has suggested that the IY TCM programme is most beneficial for children who demonstrate the highest levels of behavioural difficulties (McGilloway *et al.*, 2011; Hutchings *et al.*, 2013). The results of the present study, however, provide support for the IY TCM programme as a universal intervention of benefit to all children regardless of level of challenging behaviour. There were, however, main effects for level of challenging behaviour for the total difficulties and all SDQ subscale scores. Teacher ratings for children whom they considered to display 'high' levels of challenging behaviour had the most difficulties and those they perceived to have 'low' levels of challenging behaviour presented with the least difficulties. In a similar way, children they considered to have 'high' levels of challenging behaviour had the lowest scores for prosocial behaviour and those with 'low' levels of challenging behaviour had better developed skills in this area. These results support the quality of the teachers' perception of level of challenging

behaviour. However, for emotional symptoms, children whom teachers perceived as having ‘medium’ levels of challenging behaviour had the highest scores. One possible explanation is a methodological weakness in the wording of the instructions for SDQ completion using ‘high levels of challenging behaviour’, and the fact that defining which student behaviours were perceived as ‘challenging’ was left to the teachers themselves. This is consistent with the idea that teachers often do not perceive children with emotional or internalising problems as presenting with problematic or challenging behaviour, and hence these students tend to be overlooked in the classroom (Alter *et al.*, 2013; Gresham & Kern, 2004; Forness *et al.*, 2012).

2.4.3 Research Question 3: What is the relationship between self-perceived teacher change and teachers’ perception of change in their students’ social, emotional and behavioural functioning as a result of participation in the IY TCM programme?

2.4.3.1 Hypothesis 3: There will be a significant relationship between self-perceived teacher change and SDQ change scores, such that the higher the rating of self-perceived teacher change, the greater the change in SDQ scores.

There was no support for this hypothesis; teachers did not seem to relate the perceived changes in their own behaviour to the level of change they considered in their students. Miller’s (1995) study attempted to describe the range of causal attributions made by teachers in respect of difficult pupil behaviour and for improvements that had taken place through behavioural intervention. Miller (1995) found that when teachers feel they are unsuccessful in managing children’s behaviour, they are likely to attribute the cause of the misbehaviour to sources outside their direct control. Conversely, when teachers were successful in managing behaviour, they were likely to attribute the success to their own efforts. As there is some evidence of teacher perceived improvements in children’s behaviour as indicated by significant pre- post-change in

SDQ scores, it is surprising that teachers did not relate these positive student changes to self-perceived change in their own practice. However, these results are exploratory and should be interpreted with caution as the assumption regarding the comparable size of the groups was not satisfied. There were, however, some significant main effects according to self-perceived teacher change. Results from the ANOVAs suggest that, whereby a teacher judged that there was little change in themselves, he/she tended to perceive a higher degree of difficulty in students' total difficulties, emotional symptoms and conduct problems on the SDQ. Although the Kruskal-Wallis analysis did not support the ANOVAs in relation to total difficulties, the raw data suggests that those teachers reporting little change perceived difficulties more readily. An obvious explanation is that teachers attributed the limited change in themselves to the difficulties posed by high levels of social, emotional and/or behavioural problems in the children. This explanation is supported by the qualitative findings whereby teachers cited high levels of challenging behaviour as a barrier to change and the research literature which indicates that managing students with high levels of disruptive behaviour can lead to increased stress (Greene *et al.*, 2002) and the likelihood of burnout (Brouwers & Tomic, 2000). These findings can also be understood in relation to research on teacher attributions (e.g. Poulou & Norwich, 2002) which has found that teachers generally attribute emotional and behavioural difficulties to elements external to themselves.

2.4.4 Limitations

There are a number of limitations in the current study which will be discussed in detail in the critical appraisal (Section 3). Of particular note is the small sample size (12 teachers) and sample characteristics which limit the representativeness and generalisability of the findings. Teachers who took part can be considered willing participants who volunteered to attend because they were interested in developing their classroom management skills. Volunteering to participate is

likely to have resulted in a group of highly motivated and diligent teachers who were open to change.

As the researcher was responsible for facilitating the training and gathering and analysing the data, there is the issue of possible bias on account of the positive relationship she developed with the participants. This may have led to teachers enhancing the benefits and minimising the difficulties associated with the intervention during the focus groups and interviews. Conversely, the researcher acknowledges that prolonged engagement with the participants over the course of the training (approximately nine months in total) might have lessened reactivity and respondent bias. It is also possible that the researcher's own bias and assumptions could have impacted upon the findings. A number of strategies were therefore employed to minimise bias and enhance validity and are outlined in detail in the critical appraisal section. In particular, methodological triangulation (Denzin, 1978), involving the use of multiple methods of data collection was employed to counter threats to validity.

Consistent with Robinson's (1999) outline of some of the advantages of using focus groups, group dynamics helped to maintain focus on the topic, the teachers appeared to enjoy the experience, and were stimulated by the thoughts and comments of others. However, given the relevance of reflection in the models of teacher change, it is acknowledged that participation in the research activities, especially the focus groups, may have contributed to the largely positive findings. The focus groups did promote reflection by the teachers over and above that which is normally facilitated in the programme.

2.4.5 Implications

There are several implications of the research which will be discussed in detail in the critical appraisal (Section 3). This study has contributed to an understanding of the process of teacher change through participation in the IY TCM programme and highlighted the critical roles of enaction and reflection throughout this process. It is also necessary to consider factors at the individual, school and programme/intervention level when attempting to understand the process and outcomes of change. Findings related to the process of teacher change also have implications for EPs in the area of change management in general. Working at a systemic or individual level, EPs need to take account of the complexity of teacher change and the many factors which have been found to affect change. Most notably, an understanding by EPs that change is a gradual and often difficult process for teachers which requires both time and effort.

The findings have also contributed to an understanding of the development of teacher efficacy through participation in the IY TCM programme. A number of researchers (e.g. Tschannen-Moran *et al.*, 1998; Wheatley, 2005) examining teacher efficacy have highlighted the need for more diverse methodological approaches and, in particular, more qualitative studies involving an interpretive focus on teachers' efficacy beliefs. The focus group findings can be considered an example of qualitative research which illustrates the process of the development of teacher efficacy through IY TCM and demonstrates the powerful role of mastery experiences in this regard.

The research has implications for IY TCM training as part of EPS service delivery. Whole school training by EPs would facilitate the development of communities of practice (Lave & Wenger, 1991) and ongoing learning through a professional learning community (Stoll *et al.*, 2006) to sustain and embed a whole school approach. In order to ensure changes are maintained, teachers need structured opportunities for reflection and feedback. This could be achieved by

integrating coaching or group consultation by the EPS into the training and continuing post-intervention or through peer mentoring among teachers themselves.

Findings indicate that the IY TCM programme has wide ranging benefits in addressing both classroom management behaviours as well as psychological factors for teachers working with students with SEBD e.g. teacher wellbeing, efficacy and social-emotional competence (SEC). This is in line with the growing need for the delivery of stress management programmes as part of teacher training (Jennings & Greenberg, 2009). EPs have a key role to play in promoting psychological wellbeing and are in an ideal position to support schools and teachers in this regard. Enhancing the capacity of teachers to meet the needs of students with SEBD through evidence-based classroom management training programmes such as IY TCM is likely to reduce the numbers of students requiring more intensive support from EPs.

2.4.6 Conclusion

Promoting social and emotional learning and preventing conduct problems in early childhood through evidence-based interventions such as the IY TCM programme can have lifelong benefits for enhancing children's success in school, in their relationships, and in their adult lives. This study explored teacher perceptions of the process and impact of teacher change through participation in the IY TCM programme in relation to outcomes for students and the factors which influence this change. Significant changes in teacher classroom management practice, efficacy, wellbeing and social-emotional competence were perceived in conjunction with positive outcomes for students' learning, behaviour and social-emotional wellbeing. Despite the limitations of this study, the findings have implications for understanding and knowledge of the process and factors which influence teacher change through participation in the IY TCM programme in relation to theoretical models of change through professional development. There are implications for EP service delivery in IY TCM training as well as in the area of change

management in general. The findings have highlighted a role for EPs to use the IY TCM programme to address teacher classroom management behaviours as well as teacher psychological factors to enhance their capacity for working with students with SEBD.

3 CRITICAL APPRAISAL

This paper presents a critical appraisal of the study that was undertaken for this doctoral thesis. The underlying epistemological perspective will be outlined followed by a rationale for the research design and methods of data collection and analysis. Strengths and limitations of the study will be considered as well as implications for understanding and knowledge of the IY TCM programme and professional practice in educational psychology. Further research directions are suggested. The paper concludes with a personal reflection on the process of completing a Doctorate in Educational Psychology.

3.1 EPISTEMOLOGICAL PERSPECTIVE

Epistemology is the area of philosophy concerned with how individuals interpret their knowledge of the world and how they know things to be true (Sayer, 2000). It attempts to provide answers to the question: How, and what, can we know? (Willig, 2001). The researcher's epistemological position affects the research design applied, the questions that they seek to answer, and the interpretation of the findings (Robson, 2002).

There are a number of paradigms in the social sciences. A paradigm is a "set of basic beliefs (or metaphysics)...a worldview that defines, for its holder, the nature of the world, the individual's place in it, and the range of possible relationships to that world and its parts" (Guba & Lincoln; 1994, p. 105-17). Guba and Lincoln (1994) consider that a paradigm can be defined with reference to beliefs about ontology, epistemology and methodology. These characteristics create a holistic view of how knowledge is viewed, how a person sees themselves in relation to this knowledge and the methodological strategies that are used to discover it. Mertens (1998) suggests that the following three paradigms have been applied in educational and psychological research: the emancipatory paradigm; the interpretive/constructivist paradigm; positivism/post-

positivism. The emancipatory paradigm, which stresses the influence of social, political, economic, ethnic, gender, and disability in the construction of reality was not appropriate for this research. According to Mertens (1998), researchers who adopt an interpretive/constructivist paradigm conceive knowledge and reality as multiple, subjective and socially constructed. Although the qualitative aspects of the present study could have been considered using an interpretive/constructivist paradigm, the quantitative component could not. Adopting a social constructionist position would have enabled the researcher to consider more deeply the way in which teacher change and the meaning of challenging behaviour was constructed by participants and how this changes through their use of language. It would also have allowed for a focus on the 'discourses' prevalent in the different schools, and in Ireland more generally, regarding challenging behaviour. However, a social constructionist approach was not followed on account of a commitment to critical realism and the wish to explore causality and the causal mechanisms that underpin change and which can be generalised across a larger group of teachers.

Positivism/post-positivism is the dominant paradigm which has guided educational and psychological research (Mertens, 1998). The underlying assumptions of positivism include the belief that the social world can be studied in the same way as the natural world; that there is a method for studying the social world that is value free; and that explanations of a causal nature can be provided (Guba & Lincoln, 1994). Positivism has been criticised for a 'naïve realism' in which reality is apprehendable and knowledge can easily be captured and generalised in a context-free form such as through experimental design (Guba & Lincoln 1994). Post-positivism, however, accepts that the theories, hypotheses, background knowledge and values of the researcher can influence what is observed. It assumes that a reality exists but considers that it can only be known imperfectly because of the researcher's limitations and possible biases (Robson, 2002).

A number of post-positivist theoretical perspectives have emerged that attempt to address the ontological and epistemological flaws of positivism. Among the most prominent of these is critical realism which was established by the writings of Bhaskar (1975, 1989). Critical realism is seen as providing a particularly appropriate framework for designing real world studies and is the theoretical perspective that lies behind the methodology chosen for the present study. The distinctive feature of critical realism is that it denies that one has any objective or certain knowledge of the world, and accepts the possibility of alternative valid accounts of any phenomenon. Theories are grounded in a particular perspective or worldview, and all knowledge is partial, incomplete, and fallible (Sayer, 2000). Critical realists retain an ontological realism (there is a real world that exists independently of one's perceptions, theories, and constructions) while accepting a form of epistemological constructivism and relativism (one's understanding of the world is inevitably a construction from their own perspective and standpoint). Critical realists maintain that there can be no separation of the researcher and the researched. The knower and the known are interdependent and fused together in such a way that the 'findings' are the creation of the process of interaction between the two. Our values, practices, hypotheses, and background knowledge, all shape what we come to know.

Critical realism does not commit to a single type of research but rather endorses an extensive variety of methods which are chosen according to the type and aims of the study. Adopting a critical realist perspective in the present study therefore accommodates the use of a mixed methods design. Despite this, many critical realists, including Sayer (2000), would argue that realist, process-oriented qualitative investigations deserve a more prominent place in social research, including experimental research, complementing regularity-based quantitative research. Although the present study involved a mixed methods design, the researcher adopted a predominantly qualitative approach involving focus groups and interviews to investigate teacher

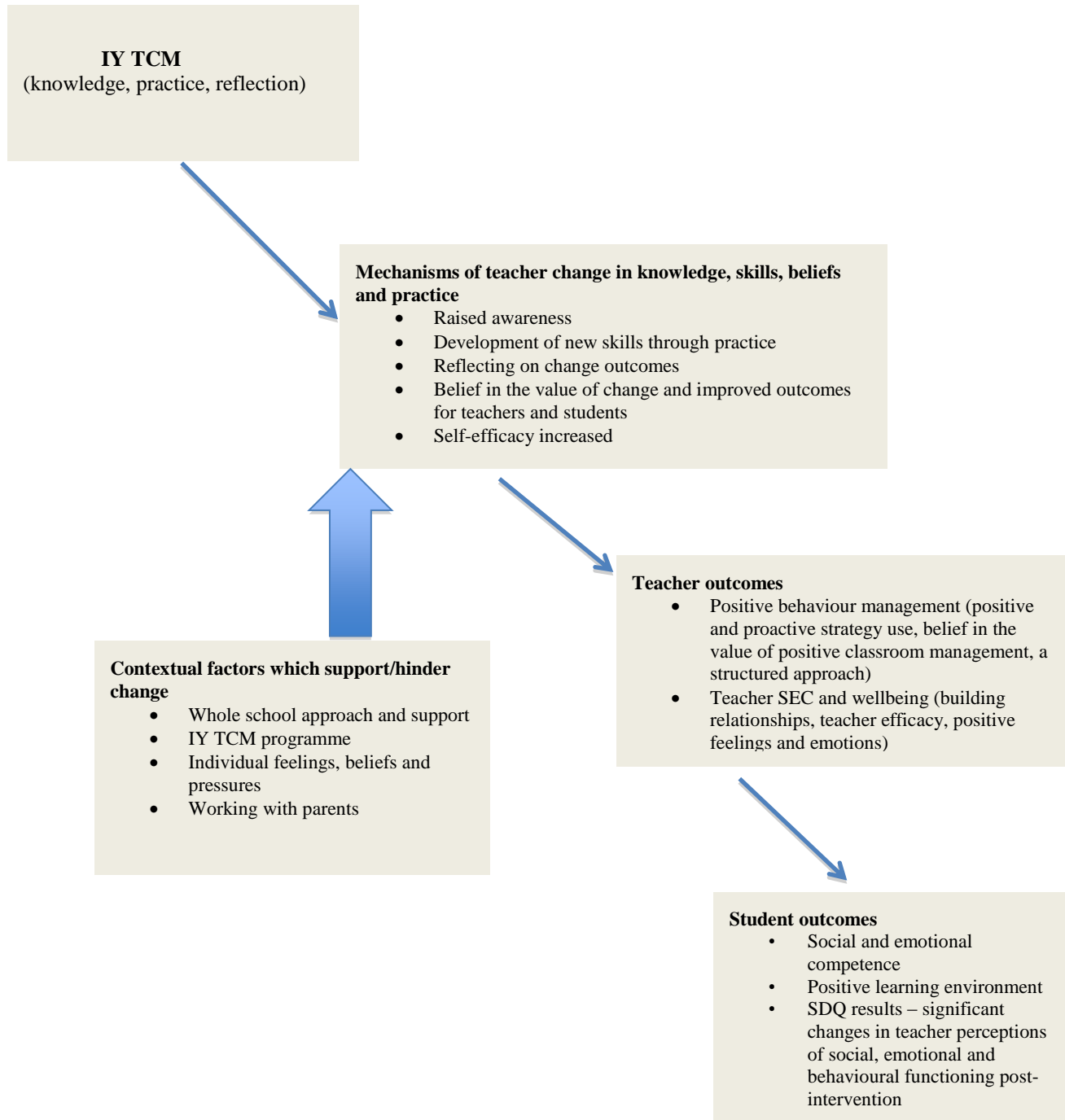
perceptions of change in themselves and their students over the course of IY TCM training and the factors which influence change.

One of the most significant premises of critical realism is its understanding of causality and its criticism of the ‘regularity’ view of causation that was typical of positivism (Maxwell, 2004a). Critical realists accept the reality of mental states and attributes, and the importance of these for causal explanation in the social sciences, positions rejected by traditional positivism. Maxwell (2004a, 2004b) argues that a critical realist model of causality recognises the explanatory importance of the social and cultural context of the phenomena studied. It relies fundamentally on an understanding of the causal mechanisms and processes by which an event or situation occurs and it legitimates a concern with understanding particular situations and events, rather than addressing only general patterns (e.g. Sayer, 2000; Huberman & Miles, 1985). For example, Pawson and Tilley’s (1997) formula “mechanism + context = outcome” (p. xv) maintains that “the relationship between causal mechanisms and their effects is not fixed, but contingent” (p. 69); it depends on the context within which the mechanism operates. A process theory of causation does not require abandoning quantitative, variance-based methods for investigating causality; it simply requires recognition that process-based approaches are as legitimate as, and often complementary to, variance-based ones.

One area in which realist perspectives have had a major influence on mixed method studies is in programme evaluation. The work of Tilley (described in Pawson & Tilley, 1997) and Mark *et al.* (2000), much of which combined qualitative and quantitative approaches, has provided a realist alternative to traditional ways of conceptualising programme evaluation. A realist approach to evaluation is applicable when the concern is for the ‘how’ and the ‘why’ of programme effectiveness (Henry *et al.*, 1998; Pawson & Tilley, 1997). Realist evaluation seeks to identify how an intervention works (i.e. the underlying causal mechanisms) and the conditions that are

needed for a particular mechanism to work (i.e. contextual elements that generate the observed effects) (Pawson & Tilley, 2004). In other words, it seeks to identify what works for whom, in which contexts particular programmes do and do not work, and what mechanisms are triggered by what programmes in what contexts (Pawson & Tilley, 1997). As such, the researcher investigated how and under what circumstances teachers change as a result of IY TCM training. In realist terms, the outcome of an action follows from mechanisms acting in particular contexts (Sayer, 2000). In the case of the present study, the action involved teacher training in the IY TCM programme; the mechanism included a series of changes in teachers' knowledge, skills, beliefs and practices regarding effective classroom management over the course of the training through enaction and reflection; the outcomes were teacher perceptions of changes in their own social-emotional competence and wellbeing, and students' learning, behaviour and social-emotional competence; and the context involved those factors which supported/hindered change (see Figure 30 below).

Figure 30: Process, outcomes and factors underpinning teacher change through IY TCM
(adapted from Sayer, 2000)



3.2. RATIONALE FOR MIXED METHODS RESEARCH DESIGN

Johnson *et al.* (2007, p. 123) provide the following definition of mixed methods research: “Mixed methods research is the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches (e.g. use of qualitative and quantitative viewpoints, data collection, analysis, inference techniques) for the purposes of breadth and depth of understanding and corroboration.”

Creswell and Plano Clark (2011) identified a number of research problems suited to mixed methods, for example, when one data source may be insufficient, results need to be explained, exploratory findings need to be generalised, a second method is needed to enhance a primary method, a theoretical stance needs to be employed, or when an overall research objective can be best addressed with multiple phases. Similarly, Greene *et al.* (1989) identified five broad reasons for the use of mixed methods (triangulation, complementarity, development, initiation, expansion). In the present study, the researcher adopted a mixed methods design involving methodological triangulation (Denzin, 1978) to corroborate and validate the quantitative SDQ results with qualitative findings from interviews and focus groups. Bryman (2006) provided a recent description of researchers’ reasons for using mixed methods research which have added to Greene *et al.*’s (1989) work. Of these, the present author employed mixed methods research for completeness i.e. to bring together a more comprehensive account of teacher perceptions of change in themselves and their students by using quantitative and qualitative methods. The historical argument for the use of mixed methods research (e.g. Jick, 1979) has been that the strength of one method may offset the weakness of the other. Using mixed methods therefore provides more evidence for studying a research problem than using a single method and can help answer research questions that cannot be answered by either quantitative or qualitative research alone (Creswell & Plano Clark, 2011). Employing both quantitative and qualitative methods in

the present study made it possible for the researcher to address a range of research questions as well as enhancing the integrity of the findings.

There has been extensive discussion in the mixed methods literature on classifying different designs (e.g. Creswell *et al.*, 2003; Creswell & Plano Clark, 2011). Creswell and Plano Clark (2011) present a number of mixed methods designs (convergent, explanatory, exploratory, embedded, transformative, or multiphase) that provide a useful framework for collecting, analysing, mixing, interpreting, and reporting quantitative and qualitative data to best address specific types of research purposes.

An embedded mixed methods design (Creswell & Plano Clark, 2011) was used in this study. This involves the researcher collecting and analysing both quantitative and qualitative data within a traditional quantitative or qualitative design which can be either qualitative or quantitative dominant (Greene, 2007). The embedded design is appropriate when the researcher has different questions that require different types of data in order to enhance the application of a quantitative or qualitative design to address the primary purpose of the study (Creswell & Plano Clark, 2011). In the current study, the researcher adopted a predominantly qualitative design involving focus groups and interviews to address the primary purpose of the study i.e. to investigate teacher perceptions of the process of change in themselves and their students as a result of their participation in the IY TCM programme. An embedded quantitative strand involving questionnaires (SDQs) was used to examine teacher perceptions of change in their students' social, emotional and behavioural functioning as a result of participation in the IY TCM programme and its relationship with self-perceived teacher change. Hence, the purpose for including the quantitative data was tied to but different from the primary purpose of the study which was to qualitatively investigate the process of teacher change through participation in the IY TCM programme. This distinguishes the embedded design from a convergent design in

which the researcher uses both methods to address a single overarching question (Creswell & Plano Clark, 2011). According to Sandelowski (1996), the collection and analysis of the second set of data can take place before, during, and/or after implementation of the data collection and analysis associated with the larger design. Quantitative and qualitative data were collected separately in the present study. Teachers completed the SDQs pre- and post-intervention. A series of five focus group sessions were conducted at the monthly training sessions and individual teacher interviews took place six to eight weeks post-intervention. According to Creswell and Plano Clark (2011), researchers using an embedded design can keep the two sets of findings separate in their reports. In the present study, analysis of the quantitative and qualitative data was separate and findings were only integrated during the final stages of interpretation.

As noted above, in evaluation research, it is not only important to ascertain whether something is effective, but also how it works (or does not work). This study involved both outcome and process evaluation with the emphasis on the latter (Robson, 2002). Outcome evaluation is traditionally concerned with measuring how far a programme or practice meets its stated objectives and goals, while process evaluation is concerned with answering the ‘how’ or ‘what is going on’ questions. Outcomes investigated in the current study included teacher perceptions of change in themselves and their students as a result of their participation in the IY TCM programme. Process evaluation involved examining teachers’ perceptions of the process of change in themselves and their students over the course of the training and the factors which supported and hindered these changes. Study of these intervening processes can help shed light on the ‘black box’ (Timperley *et al.*, 2007) between a programme and its outcomes and help determine the causal links involved.

3.3 RATIONALE FOR METHODS OF DATA COLLECTION

3.3.1 Focus Groups

A series of five focus group interviews were used as an efficient technique for qualitative data collection at the monthly IY TCM training sessions. Conducting focus groups facilitated examination of the process of teacher change and factors which influence this change over the course of the training which has not been investigated in previous studies. Furthermore, it enabled exploration of a group perspective of the programme which also has not been evaluated in the literature. The group perspective on change could then be compared to individual perceptions of change explored through interviews post-intervention. Consistent with Robinson's (1999) outline of some of the advantages of using focus groups, the author of the present study found that group dynamics helped to focus on the topic, teachers seemed to enjoy the experience, and appeared to be stimulated by the thoughts and comments of others.

Although the size of the focus group was determined by the sample, the fact that there were a total of 12 teachers is in line with literature describing the optimum group size as 8 to 12 (Stewart & Shamdasani, 1990). The researcher endeavoured to manage the focus group so that certain individuals did not dominate and to ensure that everybody's views were articulated. There is debate in the literature as to whether or not the participants should form a homogenous or heterogeneous group (Brown, 1999). In the present study, the group can be considered homogenous in that all the participants were primary school teachers. This facilitated communication and promoted exchange of ideas and experiences, while also creating a sense of safety to express concerns or conflicts. At the same time, the group were heterogeneous in that the teachers were from different schools, therefore group dynamics, such as hierarchies or existing relationships, were not well established so as to influence contributions. Having teachers from several schools inspired them to look at topics in a different light by shedding insight into practices in other schools. As recommended by Sim (1998, p. 347), the researcher was required

to strike a balance between an active and a passive role when moderating the focus groups: “The moderator has to generate interest in and discussion about a particular topic, which is close to his or her professional or academic interest, without at the same time leading the group to reinforce existing expectations or confirm a prior hypothesis”. To address this, the researcher sought to create a permissive environment in which to ask open ended questions that did not lead the participants but encouraged discussion and differing points of view. At the same time, she was careful not to talk too much or over-prompt. The researcher also had to be sensitive to teachers’ emotions when one teacher became a little upset during the focus group. The amount of time given to the questions was not constrained by the researcher. This modality allowed participants to talk about specific experiences whilst allowing the researcher to focus on the research questions with flexibility and to note other novel insights (Willig, 2001).

3.3.2 Teacher Interviews

Individual teacher interviews were conducted six to eight weeks after completion of the training. This facilitated exploration of individual teacher perceptions of change in knowledge, skills, beliefs and practices as a result of IY TCM, their perceptions of teacher and student outcomes as well as the factors which supported/hindered change. The use of a semi-structured interview format including a proposed sequence of questions with prompts and follow-up questions promoted flexibility of response and gave the researcher the freedom to give attention to, and follow up on, interesting responses. The use of open-ended questions meant that the researcher could explore topics in depth as appropriate.

3.3.3 Strengths and Difficulties Questionnaire (SDQ)

The teacher-rated version of the Strengths and Difficulties Questionnaire (SDQ) (Goodman, 1997) was used to investigate the impact of IY TCM training on teachers’ perceptions of change in their students’ social, emotional and behavioural functioning. It is a brief, valid and reliable

measure of the occurrence of particular behaviours that have been associated with emotional and behavioural problems in children. The SDQ is widely used internationally and has also been standardised using a representative national British sample (Meltzer *et al.*, 2000). An advantage of the SDQ over other child behaviour measures is that it includes positive items and a prosocial behaviour scale that is considered purely as a ‘strength’. The IY TCM programme was designed to prevent and reduce behavioural difficulties and promote social-emotional competence in young children (Webster-Stratton, 2006). These aims clearly map onto the domains of the SDQ (conduct problems, emotional symptoms, hyperactivity, peer problems, prosocial behaviour). The SDQ was also used in Irish research on IY TCM by McGilloway *et al.* (2011), thus allowing for comparison with the present study. While it was used to examine teachers’ perceptions of change in their students’ social, emotional and behavioural functioning as a result of participation in IY TCM, any measure of change examined using a teacher questionnaire of student behaviour can reflect both a possible actual change in this behaviour but also a change in the conceptual framework deployed by the teacher.

3.4 RATIONALE FOR METHODS OF DATA ANALYSIS

3.4.1 Statistical Analysis

A series of mixed-model analyses of variance (ANOVA) (also known as mixed between-within subjects ANOVA; Tabachnick & Fidell, 2013) were used to test for main effects and any interaction of the independent variables (time, level of challenging behaviour and self-perceived teacher change) upon the dependent variable (mean total difficulties and subscale scores of the SDQ). This is the appropriate analysis to use when there are between-subjects (level of challenging behaviour and self-perceived teacher change) and within-subjects (time) independent variables, each with two or more levels. Non-parametric tests were used to test the robustness of the ANOVAs on account of the violation of normality assumptions.

3.4.2 Thematic Analysis

Focus group and interview data were separately analysed using thematic analysis. As defined by Braun and Clarke (2006; p. 79) thematic analysis is “...a method for identifying, analysing and reporting patterns (themes) within data. It minimally organises and describes your data set in (rich) detail...and interprets various aspects of the research topic”. The advantage of using thematic analysis as a research tool is its flexibility, in that it can be applied across a range of theoretical and epistemological approaches and research questions, to provide a rich and detailed, yet complex, account of data. It is most often framed as a realist method in the reporting of experiences, meanings and realities of participants (Braun & Clarke, 2006). Themes or patterns within data can be identified in two ways using thematic analysis: inductive or ‘bottom up’ (e.g. Frith & Gleeson, 2004), or in a theoretical or deductive or ‘top down’ way (e.g. Boyatzis, 1998). A ‘theoretical’ thematic analysis was used for the purpose of this study. This approach is driven by the researcher’s theoretical interest in the area, is more explicitly analyst-driven, and involves coding the data for specific research questions. Braun and Clarke’s (2006) six stage step-by-step guide to undertaking thematic analysis in a deliberate and rigorous way was followed for the purpose of analysing focus group and interview data in this study. The analytic process involved a progression from description of the data to interpretation, where there was an attempt to theorise the significance of the patterns and their broader meanings and implications in relation to previous literature on teacher change through professional development and the IY TCM programme.

3.5 STRENGTHS OF STUDY

There are several strengths associated with the present study:

- *Programme effectiveness*

The findings of this study clearly indicate that the IY TCM programme had a largely positive impact on the teachers and their students. In this way, the research is similar to what

Borko (2004) called an ‘existence proof’, in that it provides evidence that under certain conditions, significant changes in teacher classroom management practice, teacher efficacy, teacher wellbeing and teacher SEC are possible through IY TCM, with positive outcomes for students’ learning, behaviour and SEC. As Shulman (1983) noted regarding existence proofs, they "evoke images of the possible...not only documenting that it can be done, but also laying out at least one detailed example of how it was organized, developed, and pursued" (p. 495). The fact that the training was facilitated by the researcher meant that she was able to ensure fidelity of training methods.

- *Distinctive contribution*

The current study makes a distinctive contribution to the IY TCM literature in that no other research has specifically investigated teacher perceptions of change and the factors which support/hinder change through participation in the programme. Furthermore, this study is the first to examine teachers’ views over the course of IY TCM training through monthly focus group discussions. In addition, both group and individual perceptions of change were examined, thus providing a ‘multifocal lens’ (Borko, 2004). This study involved in-depth qualitative research on IY TCM which is extremely limited in the literature. A limitation of the research on teacher change through PD has found that teacher change is often not related to student outcomes. In the present study, however, teacher perception of change in themselves was examined in relation to perceptions of student outcomes.

- *Use of mixed methods*

As all methods have their limitations and validity threats, a danger of using only one method is that the findings may be an artefact of the method (Bannister *et al.*, 1994). As noted above, methodological triangulation (Denzin, 1978) involving focus groups, interviews and questionnaires enhanced the validity and integrity of the findings, and enabled corroboration

of quantitative results and qualitative findings, while also allowing the researcher to address different research questions using different methods. The fact that the study involved both outcome and process evaluation made it possible to examine the ‘black box’ between teacher PD and student outcomes (Timperley *et al.*, 2007). The use of focus groups and semi-structured interviews allowed for deeper exploration of issues that were not direct questions e.g. impact of IY TCM on teacher wellbeing.

3.6 LIMITATIONS OF STUDY

The current study has a number of limitations which should be addressed through future research:

- *Sample*

There are several limitations relating to the research sample. The recommended number of participants in IY TCM training is 16 (Webster-Stratton, 2006) which had obvious implications for the limited sample size. It is also important to note that the teachers who took part in the study can be considered willing participants. Most of the teachers had volunteered to attend the training because they were interested in developing their classroom management skills. The integrated research element may have kept away teachers who might otherwise have participated in the training. Volunteering to participate is likely to have resulted in a group of highly motivated, diligent and open individuals, and this was certainly the researcher’s own impression of the participants. However, these sample characteristics limit the representativeness and generalisability of the findings, which are likely to have been very different if teachers had been mandated to attend the course. There is also the issue of possible bias towards the researcher on account of the positive relationship which developed between her and the participants, which may have led to teachers maximising the benefits of the programme. On the other hand, it can be argued that the more collaborative the relationship between the two, the lower the likelihood of

respondent bias, the lower the resistance to implementing the programme and the greater the chances the programme will be implemented as prescribed.

- *Researcher/facilitator role*

As the researcher was responsible for facilitating the intervention and gathering and analysing the data, her own bias and assumptions could have impacted upon the findings. There was also a danger of being too involved or having too close a rapport with the participants to such an extent that objectivity is lost. Furthermore, the researcher and co-facilitator are both EPs working in the schools where the participants work. Consequently, it is possible that teachers enhanced the benefits and minimised the difficulties associated with the intervention during the focus groups and interviews. To minimise this, the researcher emphasised to the participants that information was required to critically examine and therefore improve the IY TCM intervention and teachers' accounts were rich with specific examples of how they used the strategies and specific details of the reported behavioural changes. A number of strategies were employed to minimise researcher bias and enhance validity and rigour during data collection and analysis (Padgett, 1998). The researcher engaged in critical self-reflection about her own potential biases and predispositions. Her personal background as a primary school teacher as well as her current role as an EP meant that she brought two different perspectives to the research. Having worked as a teacher in the past meant that she could empathise with the participants' experiences of working with children with SEBD and the inherent challenges associated with effective classroom management. On the other hand, her professional training as an EP has taught her to remain objective in her work, a skill which she endeavoured to bring to this research. The researcher could be classified as a 'participant-observer' (Robson, 2002) and acknowledges that prolonged engagement with the teachers over the course of the training (approximately nine months in total) might have lessened reactivity and respondent bias. By developing a

trusting relationship with the teachers over time, it is possible that they were less likely to withhold truthful information (Robson, 2002). Perceived strengths of this type of research is that the researcher could understand the issues, pressures, and influences that might support or hinder change. Focus groups and interviews were recorded using a digital voice recorder to ensure accuracy and completeness of data. The researcher also sought accuracy in transcribing the data. However, it was not possible to identify the example quotes by focus group member, and in retrospect, the researcher acknowledges that she should have asked each participant to state their name before speaking. Methodological triangulation (Denzin, 1978) involving the use of multiple methods of data collection (i.e. questionnaires, focus groups, interviews) was employed to counter threats to validity. Theoretical triangulation (Denzin, 1978) was also used to enhance validity and to help interpret and explain the process of teacher change through IY TCM using theoretical models of teacher change through professional development. Throughout the data collection and analysis phases, the researcher kept notes regarding interesting aspects of the data, things that she considered relevant to the research questions, and any problems that arose. Records of the stages of thematic analysis were also maintained (see Appendix 7 for sample). The researcher was also mindful of searching for negative or deviant cases. After each IY TCM session, the researcher and her colleague, who was co-facilitating the training, had a debriefing session. The researcher attempted to achieve a high level of interpretive validity (Burke Johnson, 1997) by using direct quotations and low inference descriptors in reporting the findings so the reader can experience the participants' actual language and perspectives for themselves. It is acknowledged that she could have further enhanced the interpretive validity of the study through participant feedback (Padgett, 1998). Furthermore, having an independent person validate samples of the qualitative data using thematic analysis would also have enhanced the validity of the findings.

- *Perceptions of other stakeholders*

Only teacher perceptions of change in themselves and their students were explored in the current study. In the future, it would be important to ascertain the perspectives of other stakeholders including principals, parents, and the students themselves. The literature (e.g. Ransford *et al.*, 2009) indicates that the perception and support of the principal is a key factor in whether teachers have the resources and time in which they can participate in PD, as well as to implement interventions with fidelity. It would also be important to elicit parents' perceptions of the IY TCM intervention in future research including their perceptions of any changes in their child's behaviour, their views on their relationship with their child's teacher, and their perspective regarding the effectiveness of school-home partnerships.

- *Use of self-report methods*

This study shares in the weaknesses of other research using self-report methods. The interview, focus group and SDQ data were intended to represent teachers' perceptions of change in themselves and their students, as compared to actual changes in these areas measured in a more objective manner. However, teachers' responses, on the SDQ and in interviews and focus groups, might not disclose how they actually thought and felt and might not represent their actual classroom behaviour. Complementing these measures of self-reported teacher change with observations would verify the findings, enhance current understandings of how teacher change occurs, and provide further evidence of student outcomes. Past research has underscored the need for direct observation of teacher behaviour as well as teacher self-report, as teachers often report higher fidelity of implementation regarding their use of specific practices than is found through direct observation (e.g. Noell *et al.*, 2005).

- *Validity of SDQ data*

It is difficult to fully understand the complex origins of teacher's perceptions (Rimm-Kaufman *et al.*, 2000; Saft & Pianta, 2001) and is therefore important to acknowledge issues regarding the validity of the SDQ in this study. Although the SDQ was not used as a measure of actual student change but rather of teacher perception of change in their students' social, emotional and behavioural functioning, it is possible that teachers may have rated the children more positively because they view themselves as improved as a function of the training or they view children more positively. It is plausible that the IY TCM training might have improved child outcomes indirectly by enhancing teachers' perceptions about children. The findings could therefore represent change in the teachers' conceptual framework as opposed to perceived change in their students' behaviour. Despite this, the findings from the focus groups and teacher interviews provide supporting evidence that there was significant change in teacher perceptions of their students' social, emotional and behavioural skills. While teacher self-report provides important information about teachers' perceptions of children's behaviour, teacher ratings may be biased in favour of reporting positive student changes to account for participation in the intervention.

- *Process of individual teacher change*

The use of focus groups to explore the process of teacher change over the course of the training meant that it was not possible to identify the sequence of individual change processes, as outlined in Clarke and Hollingsworth's (2002) Interconnected Model. The researcher would have needed to conduct individual teacher interviews throughout the change process (over the course of the training) to identify the idiosyncratic and individual patterns of change. Using focus group methodology meant that the findings are based on the overall group perception of the process of individual teacher change.

- *Impact of focus groups*

It is acknowledged that participation in the research activities, especially the focus groups, may have contributed to the largely positive results. The focus groups did promote reflection by the teachers over and above that which is normally facilitated in the programme. It is plausible that the focus groups might have played a stress management role whereby teachers had the opportunity to explore their school-related challenges and the impact of these on their personal and professional lives. On the other hand, this could be reframed as a positive and possible implication for including increased coaching, support, relationship-building and reflection into IY TCM training in the future.

- *Statistical analysis*

Violation of the assumptions of normality and equality of variances with regard to the inconsistent size of the groups for the variable self-perceived teacher change ('just a little change'=9, 'quite a lot of change' = 45, 'significant change' = 35) meant that the results regarding self-perceived teacher change should be interpreted with caution.

- *Use of the term 'challenging behaviour'*

The researcher's use of the term 'challenging behaviour' in teacher instructions for SDQ completion (i.e. classifying children as high, medium or low levels of challenging behaviour) may have impacted the findings. Although the researcher was interested in teachers' individual perceptions of levels of challenging behaviour in their students, the literature indicates that teachers often overlook students who may be considered 'internalisers' (Gresham & Kern, 2004; Forness *et al.*, 2012). It is therefore possible that by using the term 'challenging behaviour', teachers may not have considered those with internalising or emotional difficulties as presenting with 'challenging behaviour'.

3.7 SCIENTIFIC AND PROFESSIONAL IMPLICATIONS

3.7.1 Implications for Understanding and Knowledge of IY TCM Programme

There are a number of implications arising from this research in relation to understanding and knowledge of the IY TCM programme. The study has contributed to an understanding of the complexity of the process of teacher change through participation in the programme as involving changes in knowledge, skills, beliefs and practices. Information from the focus groups has also provided indicators of programme impact at various stages of the training. Consistent with Clarke and Hollingsworth's (2002) Interconnected Model of Teacher Professional Growth, the critical roles of enaction and reflection are highlighted in relation to teacher change. The need to consider the change environment in terms of factors at the individual, school and programme/intervention level which can support or hinder change, is also significant when attempting to understand the process of teacher change. Using a community of practice (CoP) framework for understanding teacher change through IY TCM highlights the important role of group discussion and collaboration at the training sessions.

This study has also contributed to an understanding of the development of teacher efficacy through participation in the IY TCM programme. Researchers examining teacher efficacy have highlighted the need for more diverse methodological approaches and, in particular, more qualitative and longitudinal studies. For example, Tschannen-Moran *et al.* (1998, p. 242) stated that qualitative teacher efficacy research was "overwhelmingly neglected" and that case study and qualitative approaches would enable a deeper understanding of how teacher efficacy beliefs operate. Qualitative investigations are needed to refine understanding of the process of developing efficacy and interviews and observational data can provide a thick, rich description of the growth of teacher efficacy (Tschannen-Moran *et al.*, 1998). Similarly, Wheatley (2005) called for qualitative studies which emphasise an interpretive focus on teachers' efficacy beliefs. Although the IY TCM manual (Webster-Stratton, 2006) states that one of the programme

objectives is to improve teacher confidence and efficacy, no previous research has examined this area in detail apart from using the Teacher Strategies Questionnaire (e.g. Carlson *et al.*, 2011). The focus group findings in the present study can be considered an example of qualitative research which illustrates the process of the development of teacher efficacy through IY TCM and demonstrates the powerful role of mastery experiences in this regard.

This research has demonstrated that the IY TCM programme has more wide ranging benefits for teachers beyond improved classroom management skills and student outcomes, that is its positive impact on teacher wellbeing, teacher efficacy and teacher SEC, a consideration that deserves more attention than it currently receives. The findings can be mapped onto Jennings and Greenberg's (2009) prosocial classroom model thus illustrating the impact which IY TCM can have on teacher SEC and wellbeing, positive teacher-student relationships, and effective classroom management, which contributed to a more positive classroom environment and improved outcomes for students.

3.7.2 Implications for Educational Psychology Practice

This study has highlighted the importance and value associated with teacher training in effective classroom management as a core part of EP service delivery. Lack of specific training and support for teachers in managing challenging behaviour was articulated by participants in the current study and is also documented in the literature. There was a general consensus that their initial teacher training had not equipped them with adequate behavioural management training, which they perceived to be frustrating and worrisome enough to make them go to the trouble of getting help. Teachers, on the whole, appear to receive little specific or focused behaviour management training at any point in their careers. Ironically, it is perhaps worrying that all participants reported benefits of this training to their classroom management practice, and

repeatedly suggested that IY TCM should be made compulsory for all teachers either through initial teacher education or continuing professional development.

The research has implications for the delivery of IY TCM training at whole school level as well as the need for school wide implementation. The lack of whole school training was cited as one of the most significant barriers to change by teachers in the present study. In light of this, whole school training should be delivered by the EPS as opposed to training groups of teachers from several schools. This would facilitate ongoing learning through a professional learning community (e.g. Stoll *et al.*, 2006) to sustain and embed a whole school IY approach. There has been a strong emphasis on the role of professional learning communities as a means to overcome the shortcomings associated with episodic, decontextualised professional development conducted in isolation from practice (Webster-Wright, 2009). Teacher training in IY TCM by the EPS should therefore be part of a comprehensive school improvement and professional support package. This study also highlights the importance of adopting evidence-based interventions (EBIs) in schools. The EPS in which the author works currently facilitates IY teacher training only but the evidence for multi-component interventions points to the need for IY TCM training to be facilitated in conjunction with the IY parent and child programmes.

Of all aspects of professional development, sustaining change is often the most neglected. It is clear that, to be successful, professional development must be seen as a process, not an event (Loucks-Horsley *et al.*, 1998). Therefore, a further implication of this study is the need for ongoing support for teachers during and after IY TCM training. In order to ensure changes in practice are maintained, teachers need to receive regular feedback on the effects of their efforts. When teachers gain this evidence and see that a new programme or innovation works well in their classrooms, change in their attitudes and beliefs can and will follow (Guskey, 2002). Successful actions are reinforcing and likely to be repeated while those that are unsuccessful

tend to be diminished. Therefore, specific procedures to provide feedback on results are essential to the success of any professional development effort e.g. coaching or consultation to give teachers feedback on the effectiveness of the strategies and positive student outcomes. This could be achieved by integrating coaching or group consultation by the EPS into the training and continuing post-intervention or through peer mentoring among teachers themselves. Guskey (2002) maintains that support and pressure are essential for continuing educational improvement post training. Support allows teachers tolerate the anxiety of occasional failure during implementation, while pressure provides the encouragement and motivation that many require to persist in the challenging tasks that are intrinsic to all change efforts.

The findings related to the process of teacher change through participation in the IY TCM programme have implications for EPs in the area of change management in general. Working at a systemic or individual level, EPs needs to take account of the complexity of teacher change and the many factors which have been found to affect this process. Most notably, an understanding by EPs that change is a gradual and often difficult process for teachers which requires both time and effort. Providing teachers with structured opportunities to reflect on their practice appears to be crucial to the success of any change initiative. This study has also highlighted the need to address both behavioural and psychological factors for teachers working with students with SEBD through professional development. It is evident that IY TCM has the potential to address teacher classroom management behaviours as well as teacher psychological factors e.g. teacher wellbeing, efficacy and teacher social-emotional competence (SEC). This is in line with the growing need for the delivery of stress management programmes as part of teacher training for working with students with SEBD (Jennings & Greenberg, 2009). EPs have the skills to work at a preventative and systemic level. They have a key role to play in promoting psychological wellbeing and are in an ideal position to support schools and teachers in this regard. Enhancing the capacity of teachers to meet the needs of students with challenging

behaviour through evidence-based classroom management training programmes such as IY TCM is likely to reduce the numbers of students requiring more intensive support from EPs for social, emotional and behavioural difficulties. At a broader level, the findings have important implications for inclusion and how teachers in mainstream schools can be supported to effectively include students with complex and challenging needs.

3.8 FUTURE RESEARCH

Future research with a larger sample would enhance the validity and generalisability of the findings as well as enable more robust analysis of the relationship between self-perceived teacher change and teacher perception of change in their students' social, emotional and behavioural skills. Combining teacher interviews with observations of teachers' practice would allow for direct comparison between teacher perceived change and actual or observed change. The use of parent report measures in a future study would provide another perspective on perceived teacher change. Considering the lack of whole school training was regularly cited as a barrier to change, it would be useful to compare the outcomes of whole school training versus training individual teachers, as was the case in the present study. Employing a case study design would enable examination of the individual process of teacher change over the course of the IY TCM programme through individual teacher interviews at several points in the training. As noted above, research on teacher efficacy has identified the need for more diverse methodological approaches and, in particular, more qualitative and longitudinal studies (Tschannen-Moran *et al.*, 1998). Future research should directly assess the impact of IY TCM on teacher wellbeing, efficacy and SEC, as well as the effects of integrating a coaching element.

3.9. PERSONAL REFLECTION

In reflecting on the process of pursuing a part-time Doctorate in Educational Psychology, the author notes several problems which proved challenging. Firstly, deciding upon a research topic

and specifying the research questions was difficult as there were several areas of interest to the researcher. In the end, not only was she very interested in examining an aspect of the IY TCM programme, but she had a post of regional responsibility in this area. In writing the review paper, the research literature on teacher change through PD was extensive which proved time-consuming and difficult to elicit relevant articles. The researcher had to keep a tight focus on specific models of teacher change through PD and/or adoption of an intervention. Obtaining ethical approval from the EPS in which the researcher works was another stumbling block which limited the final sample size. The EPS would not allow the researcher to advertise the IY TCM programme as a research study, which meant that out of a total of 16 teachers who attended, only 12 participated in the research. The logistics of conducting the focus groups at the sessions, whereby four teachers were not involved, meant that the researcher had to have two rooms in the education centre. Another challenge was the time taken to gather and analyse the data especially analysis of the qualitative data. As the researcher's personal orientation and familiarity is with qualitative data analysis, she struggled with analysis of the quantitative data using SPSS. The author is also reflective of the difficulties which arose from having several research questions as well as the use of mixed methods, which meant that keeping to the word count was extremely challenging. She felt that she lost focus with the large amount of qualitative data and the difficulties associated with summarising same. Having one's first baby at the write-up stage was perhaps the most stressful and challenging aspect of all. The researcher wanted to conduct a follow-up focus group with teachers eight months post-intervention to ascertain further change and maintenance of change. Although she had obtained additional ethical approval for this purpose, the pressures of maternity leave meant it was not feasible.

Despite the many challenges, the author found the process of completing this doctoral thesis highly rewarding in terms of the positive impact it has had on her knowledge and professional practice in educational psychology. Most importantly, she has significantly enhanced her

research skills in several areas e.g. performing literature searches, conducting focus groups and interviews, analysing data using SPSS and thematic analysis. The process of conducting this research has also modified the author's views of the IY TCM training. For example, she was largely unaware of the significant teacher outcomes associated with the programme and the insight which she has gained into the process of teacher change through PD and in particular, the importance of successful mastery experiences, will inform the facilitation of teacher professional development in her role as an EP.

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5 APPENDICES

Appendix 1: Table of IY TCM Research

Author (year)	Sample	Design	Intervention/conditions	Measures	Data analysis	Results and findings
Webster, Reid & Hammond (2001)	272 mothers and children 61 teachers	Randomised controlled design	Experimental condition: IY parent and teacher training Control condition: regular Head Start program	<p>Teacher and parent reports of child behaviour pre- and post-intervention:</p> <p>Independent observations at home and in school pre- and post-intervention</p> <p>Parenting positive and negative constructs (Parenting Practices Inventory, Coder Impressions Inventory, Dyadic Parent-Child Interactive Coding System – Revised, Parent Involvement Questionnaire)</p> <p>Parent-teacher bonding construct (Teacher Involvement Questionnaire – parent and teacher versions)</p> <p>Child conduct problems at home construct (Eyberg Child Behavior Inventory and Child Behavior Checklist, Dyadic Parent-Child Interactive Coding System – Revised)</p>	Analysis of covariance (ANCOVA)	<p>Negative and positive parenting constructs: Experimental mothers had significantly lower negative parenting and higher positive parenting scores than controls</p> <p>Parent-teacher bonding construct: Experimental mothers and teachers showed significantly higher levels of bonding than controls</p> <p>Child conduct problems at home construct: Experimental children exhibited fewer conduct problems at home than control children</p> <p>Child conduct problems at school construct: Experimental children had significantly fewer conduct problems at school and more social competence than control children</p> <p>Teacher classroom management: Experimental teachers demonstrated</p>

				<p>Child conduct problems at school construct (ADHD rating scale, Social Competence and Behavior Evaluation, Multiple option observation system for experimental studies - MOOSES)</p> <p>Teacher classroom management style and classroom atmosphere construct (MOOSES, Teacher Coder Impression Inventory)</p>		<p>significantly better classroom management skills than control teachers</p> <p>Children at 'highest' risk at baseline showed more clinically significant decreases in behaviour than high risk control children</p>
Webster-Stratton, Reid & Hammond (2004)	Families of 159 children with ODD	Randomised controlled design	<p>IY Parent training (PT)</p> <p>IY Parent plus teacher training (PT+TT)</p> <p>IY Child training (CT)</p> <p>IY Child plus teacher training (CT+TT)</p> <p>IY Parent, child plus teacher training (PT+CT+TT)</p> <p>Wait list control</p>	<p>Assessments completed at baseline, posttreatment and 1 year follow-up (parent and teacher reports of behaviour, independent observations at home and school)</p> <p>Positive and negative parenting composite score (Parenting Practices Interview, DPICS-R, Coder Impressions Inventory- Parenting Style, Parent Daily Discipline Inventory)</p> <p>Child social competence with peers composite score (Teacher Assessment of School Behavior, Perceived</p>	<p>Six-group analysis of covariance (ANCOVA) with pre-test scores as covariates for corresponding post-test scores</p> <p>Planned comparisons contrasting each treatment with the control condition</p>	<p>Following 6 month intervention, all treatment conditions resulted in significantly fewer conduct problems with mothers, teachers, and peers, compared to controls</p> <p>Children's negative behaviour with fathers was lower in the PT conditions than in control</p> <p>Children demonstrated more prosocial skills with peers in the CT conditions than in control</p> <p>All PT conditions resulted in less negative and more</p>

				<p>Competence Scale for Young Children, Social Health Profile, Dyadic Peer Interaction Scale)</p> <p>Child conduct problems at home composite score (ECBI, DPICS-R, Coder Impressions Inventory-Child)</p> <p>Child conduct problems at school and with peers composite score (Teacher Assessment of School Behavior, Perceived Competence Scale for Young Children, MOOSES, Social Health Profile, Dyadic Peer Interaction Scale)</p> <p>Negative classroom management and atmosphere composite score (MOOSES, Teacher Coder Impressions Inventory, Classroom Atmosphere Measure)</p>		<p>positive parenting for mothers and less negative parenting for fathers than in control</p> <p>Mothers and teachers were less negative than controls when children received CT</p> <p>Adding TT to PT or CT improved treatment outcomes in terms of teacher behaviour management and reports of behaviour problems</p>
Webster-Stratton, Reid & Stoolmiller (2008)	153 teachers and 1,768 students	Randomised controlled trial	Intervention condition: IY TCM programme in combination with IY Child Training - Dinosaur Curriculum	Pre- and post-assessments measured social and emotional competencies, conduct problems, teacher competencies, teacher efforts to involve parents,	Multi-level modelling ANCOVA Chi-square analyses Mixed design ANOVA	Teachers in intervention classrooms used more positive classroom management strategies, fewer critical statements and more specific teaching

			Control condition: Usual school curriculum	and classroom environment, using both teacher questionnaires (Teacher-Parent Involvement Questionnaire; Teacher Satisfaction Questionnaire) and independent observations (Multiple Option Observation System for Experimental Studies; Teacher Coder Impressions Inventory; Classroom Atmosphere Measure) of teachers and children in classrooms		<p>strategies that addressed social and emotional skills than control teachers</p> <p>Intervention teachers demonstrated significantly greater levels of responsiveness, engagement, cooperativeness and teacher supportive behaviour than controls</p> <p>Students in intervention classrooms displayed significant improvements in social competence, emotional self-regulation, school readiness skills, off-task behaviour and conduct problems compared to controls</p>
Herman, Borden, Reinke & Webster-Stratton (2011)	Families of 159 children with ODD	Randomised controlled design	<p>Parent training (PT)</p> <p>Parent plus teacher training (PT+TT)</p> <p>Child training (CT)</p> <p>Child plus teacher training (CT+TT)</p> <p>Parent, child, plus teacher training (PT+CT+ TT)</p> <p>Wait list control group</p>	Child Behavior Checklist (CBCL) – parent and teacher ratings of the Internalising factor	<p>Analysis of covariance (ANCOVA)</p> <p>Mixed design ANOVAs</p>	<p>Children who received a single or multi-component intervention had significantly lower mother-rated child internalising symptoms at post-treatment compared to controls</p> <p>Teacher ratings of internalising symptoms did not reveal statistically significant differences</p>

Shernoff & Kratochwill (2007)	8 teachers 13 students	Multiple probe randomised design	<p>Condition 1: Self-administered videotape modelling (VM) (adapted IY TCM)</p> <p>Condition 2: self-administered videotape modelling plus consultation (VMC) (adapted IY TCM)</p>	<p>Teacher Strategy Questionnaire (TSQ)</p> <p>Observation system (adapted from the Early Screening Project)</p> <p>Social Competence and Behaviour Evaluation-Preschool Edition</p> <p>Treatment Evaluation Inventory</p> <p>Professional Development Evaluation Survey</p> <p>Best Practices Interview (semi-structured teacher interview)</p>	Non-parametric tests	<p>Statistically significant between-groups differences in teacher confidence ratings, use of positive instructional practices, and acceptability favoured use of the VMC approach</p> <p>No significant between-group differences were found regarding students' disruptive behaviour</p> <p>Significant increases in social competence for VMC students</p>
Williford & Shelton (2008)	96 children, their teachers and primary caregivers	Quasi-experimental design	<p>Intervention group: teachers received mental health consultation re use of behavioural strategies (adaptation of IY TCM for use within a consultation model) and parents received IY parent training</p> <p>Comparison control group: comprehensive behavioural assessment, access to typical treatment, and increased support staff</p>	<p>Parent and teacher questionnaires completed at baseline, after completion of the project, and one year post-treatment.</p> <p>Parent questionnaires (ADHD Rating Scale; Behavior Assessment System for Children; Parenting Stress Index-Short Form; Parenting Scale; Child Behavior Management Questionnaire)</p>	<p>Composite variables created for caregiver and teacher report of child disruptive behaviour</p> <p>Hierarchical linear modelling used to examine change over time</p>	<p>Treatment approach was more effective in decreasing child disruptive behaviour and increasing the use of appropriate teacher strategies and parenting practices</p>

				Teacher questionnaires (Teacher Strategies Questionnaire; Behavior Assessment System for Children)		
Raver <i>et al.</i> (2008)	94 teachers and 602 children	Randomised controlled design	Treatment condition: IY TCM and weekly coaching (mental health consultation) Control condition	Pre- and post-observations using the Classroom Assessment Scoring System (CLASS) and the Early Childhood Environment Rating Scales	Hierarchical linear modelling analyses Post hoc repeated measures MANCOVAs	Intervention classrooms were found to have statistically significantly higher levels of positive classroom climate Increases in teacher sensitivity, proactive behaviour management and less use of negative discipline practices in intervention classrooms
Baker- Henningham & Walker (2009)	3 preschools (15 classrooms)	Qualitative design	IY TCM and IY Dina Dinosaur Classroom Curriculum	Semi-structured individual teacher interviews post- intervention: Teachers' opinions of programme and perceptions of its benefits for children and themselves Use of the strategies, most and least useful components, difficulties encountered Teachers' views re how the intervention led to teacher and child outcomes Recommendations for	Qualitative data analysis using the framework approach	Benefits to teachers (increased understanding of children, increased use of appropriate behaviour management strategies, less use of negative strategies, better relationships with children and parents, other benefits) Benefits to children (improved child behaviour and social skills, increased emotional competence, other benefits) Difficulties encountered (e.g. strategies do not work, difficult to implement, need

				future implementation		<p>to practice a lot, misunderstanding of strategies)</p> <p>Recommendations for future (e.g. train all teachers, trained teachers to share strategies with other teachers/parents, supplement programme with Jamaican videos)</p>
Baker-Henningham <i>et al.</i> (2009)	5 preschools (27 classrooms)	Randomised design (pre/post measures)	<p>Intervention condition (15 classrooms): IY TCM programme and the IY Dinosaur Classroom Curriculum and monthly in-class consultation</p> <p>Control condition (12 classrooms): regular school curriculum</p>	<p>Structured observations of teacher behaviour (baseline and follow-up) using the Dyadic Parent Child Interaction Schedule and the Teacher-Pupil Observation Tool (T-POT)</p> <p>Rating scales of child behaviour and classroom atmosphere were devised by researchers</p> <p>Teacher Satisfaction Questionnaire (TSQ) (post-intervention)</p>	Multilevel multiple regression analysis	<p>Intervention teacher benefits: increased positive behaviour, reduced negative behaviour, increased promotion of social-emotional skills, no significant reduction in number of teacher commands</p> <p>Intervention benefits for children: increase in appropriate behaviour, interest and enthusiasm</p> <p>Classroom atmosphere benefits: increased opportunities for sharing and helping each other and teacher warmth</p>
Baker-Henningham <i>et al.</i> (2012)	24 preschools 225 children	Cluster randomised controlled trial	<p>Intervention condition: IY TCM training and monthly coaching</p> <p>Control condition</p>	<p>Pre- and post-intervention measures:</p> <p>Observations of in-class child behaviour: Dyadic</p>	Multilevel multiple regression models	<p>Significant reductions in observed conduct problems</p> <p>Significant decrease in teacher-reported and parent-</p>

				<p>Parent–Child Interaction Coding System (DPICS) and Multi-Option Observation System for Experimental Studies (MOOSES)</p> <p>Teacher reports: Sutter-Eyberg Student Behavior Inventory (SESBI), Connor’s Global Index, Strengths and Difficulties Questionnaire (SDQ), Preschool and Kindergarten Behavior Scales (PKBS): Social Skills Scale.</p> <p>Parent reports: Eyberg Child Behavior Inventory (ECBI) and Strengths and Difficulties Questionnaire (SDQ)</p>		<p>reported behaviour difficulties</p> <p>Significant increase in observed friendship skills and teacher-reported social skills and attendance</p>
Hutchings <i>et al.</i> (2007)						
Study 1	23 teachers	Mixed methods	IY TCM training	<p>Teacher Satisfaction Questionnaire (TSQ) (post-intervention)</p> <p>Individual semi-structured teacher interviews (post-intervention)</p>	<p>Mean response scores</p> <p>Thematic content analysis</p>	Teachers reported satisfaction with the programme and considered that the strategies were effective and improved pupils’ conduct
Study 2	21 teachers	Quantitative	IY TCM training (10	Blind observation of	Mann Whitney U tests	IY TCM trained teachers

			teachers) No IY TCM training (11 teachers)	teacher behaviour (Teacher-Pupil Observation Tool; TPOT)		gave clearer instructions to children and allowed more time for compliance Children in classrooms of trained IY TCM teachers were more compliant than children in untrained teachers' classrooms
McGilloway <i>et al.</i> (2011)	11 schools (22 teachers and 217 children)	Clustered randomised controlled trial	Intervention condition: IY TCM training Wait list control condition	Baseline and 6 months post-baseline Observation in classroom: Teacher-Pupil Observation Tool (TPOT) Teacher report measures: Teacher Strategies Questionnaire Teacher Satisfaction Questionnaire Strengths and Difficulties Questionnaire (SDQ) – teacher version Conners Abbreviated Teacher Rating Scale	Independent samples t-tests and analysis of covariance (ANCOVA)	Significant decrease in observed teacher negative classroom management strategies, and significant increases in teacher reported frequency of use and perceived usefulness of positive classroom management strategies No significant intervention effects on child behaviour found during observations SDQ 'emotional symptoms' subscale showed a significant improvement for intervention group children when compared with the control group No significant differences in teacher reports of SDQ total difficulties, hyperactivity, peer problems and prosocial behaviour from baseline to follow-up

				Teacher Workshop Satisfaction Questionnaire (post-intervention)	Mean percentage responses (re-coded to produce a 4-point scale)	Teacher reported high levels of satisfaction with aspects of programme (over 90% of teachers provided positive ratings for overall programme, usefulness of teaching strategies, specific teaching techniques, workshop leaders)
Hutchings <i>et al.</i> (2013)	12 teachers 107 children	Randomised controlled trial	Intervention condition: IY TCM training Control condition	Independent classroom observation (Teacher-Pupil Observation Tool; TPOT)	Hierarchical linear modelling analyses	Significant reductions in classroom off-task behaviour, teacher negatives towards target children, target child negatives towards teacher and target child off-task behaviour

Appendix 2: Table of Theoretical Models of Teacher Change through Professional Development

Author/year	Model/theory of teacher change	Underlying theory/perspective/assumptions	Process of teacher change in model/theory	Factors which support/hinder change
Guskey (1986; 2002)	<u>Stage model of teacher change</u>	Change is a developmental and primarily experientially based learning process. It is the experience of successful implementation of a programme/innovation and improved student outcomes that changes teachers' attitudes and beliefs.	PD changes teachers' practices which impact upon student outcomes which in turn leads to changed teacher beliefs and attitudes	Not considered
Clarke & Hollingsworth (2002)	<u>Interconnected model of professional growth</u>	<p>Change as an individual and continuous process of learning or growth</p> <p>Recognises situated and cognitive nature of teacher growth</p> <p>Importance of reflection and enaction: it is the teacher's interpreted change that is considered crucial to subsequent change</p>	Change occurs in recurring cycles through the mediating processes of 'reflection' and 'enaction' in four domains which encompass the teacher's world (the external domain, domain of practice, domain of consequence, personal domain). The alternate pathways give recognition to the idiosyncratic and individual nature of teacher professional growth.	Teacher change occurs within the constraints and affordances of the change environment e.g. opportunities to participate in PD programmes, administrative support to implement innovative teaching strategies, collegial discussion, structured opportunities to share and reflect on each other's practice
Desimone (2009)		Non-recursive interactive pathways among the basic components (PD, knowledge, practice, student outcomes)	Teachers experience effective professional development which alters their knowledge, skills, beliefs, and practice. Changed practice	Moderating and mediating elements:

			subsequently influences student achievement.	(a) student characteristics (b) individual teacher characteristics (c) contextual factors at the classroom, school, and district levels (d) policy conditions
Opfer & Pedder (2011)	<u>Complexity theory framework of teacher change</u>	Change as a complex system	Three subsystems (the teacher, the school, the learning activity) interact and combine in different ways and with varying intensities to influence teacher learning and change	Considers individual and school-level influences that mediate teacher learning and change
Butler <i>et al.</i> (2004)	<u>Model of self-regulated learning</u>	Collaboration as a context for teacher change Community of practice framework Models of self-regulated learning	Teacher change occurs within a collaborative PD initiative through teachers identifying best practices, enacting changes in their classrooms, reflecting on outcomes, and adapting approaches.	Participating in a collaborative learning community enabled teachers to share ideas and problem-solve with others as well as to sustain momentum when faced with challenges.
Ross and Bruce (2007)	<u>Efficacy-based theory of teacher change</u>	Social cognition theory (teacher efficacy) Research on self-assessment	Teacher change occurs through reflection on experience and self-efficacy beliefs mediate the influence of self-assessment on teacher practice and subsequent outcomes for students	Level of teacher efficacy, in concert with information on

				innovative instruction, influences goal setting and effort expenditure, which contribute to instructional practice, and ultimately student outcomes
Hall & Loucks (1978)	<u>Concerns-based adoption model: Stages of concern framework</u>	<p>Concept of "concern" refers to the personal experiences that teachers have when they are involved in a change, including the feelings, questions, uncertainties, and possible resistance they may have in response to new situations and/or changing demands</p> <p>Consideration of teachers' concerns during PD and the process of adopting evidence-based interventions may serve to reduce the likelihood of passive or active resistance to new practices, and provide useful information for evaluating and supporting intervention and programme implementation</p>	Teachers' perceptions, feelings and motivations about the innovation and change process differ at various stages throughout a change initiative. Teachers move through seven stages of Concern (Awareness, Informational, Personal, Management, Consequence, Collaboration, Refocusing).	<p>Individual teacher perceptions - three clusters of concern:</p> <p>a)self (concerns about personal ability)</p> <p>b)task (concerns about the performance of the task)</p> <p>c)other or impact (concerns about cooperation among colleagues and concerns about the progress and results for students)</p>

Appendix 3: Letter of Ethical Approval

UCL RESEARCH ETHICS COMMITTEE
GRADUATE SCHOOL OFFICE



Dr Roger Booker
Educational Psychology Department
26 Bedford Way
UCL

1 July 2013

Dear Dr Booker

Notification of Ethical Approval
Project ID: 4734/001: An investigation of teacher change through participation in the Incredible Years Teacher Classroom Management Programme

I am pleased to confirm that in my capacity as Chair of the UCL Research Ethics Committee I have approved your study for the duration of the project i.e. until July 2014.

Approval is subject to the following conditions:

1. You must seek Chair's approval for proposed amendments to the research for which this approval has been given. Ethical approval is specific to this project and must not be treated as applicable to research of a similar nature. Each research project is reviewed separately and if there are significant changes to the research protocol you should seek confirmation of continued ethical approval by completing the 'Amendment Approval Request Form'.

The form identified above can be accessed by logging on to the ethics website homepage: <http://www.grad.ucl.ac.uk/ethics/> and clicking on the button marked 'Key Responsibilities of the Researcher Following Approval'.

2. It is your responsibility to report to the Committee any unanticipated problems or adverse events involving risks to participants or others. Both non-serious and serious adverse events must be reported.

Reporting Non-Serious Adverse Events

For non-serious adverse events you will need to inform Helen Dougal, Ethics Committee Administrator (ethics@ucl.ac.uk), within ten days of an adverse incident occurring and provide a full written report that should include any amendments to the participant information sheet and study protocol. The Chair or Vice-Chair of the Ethics Committee will confirm that the incident is non-serious and report to the Committee at the next meeting. The final view of the Committee will be communicated to you.

Reporting Serious Adverse Events

The Ethics Committee should be notified of all serious adverse events via the Ethics Committee Administrator immediately the incident occurs. Where the adverse incident is unexpected and serious, the Chair or Vice-Chair will decide whether the study should be terminated pending the opinion of an independent expert. The adverse event will be considered at the next Committee meeting and a decision will be made on the need to change the information leaflet and/or study protocol.

On completion of the research you must submit a brief report (a maximum of two sides of A4) of your findings/concluding comments to the Committee, which includes in particular issues relating to the ethical implications of the research.

With best wishes for the research.

Yours sincerely

Professor John Foreman
Chair of the UCL Research Ethics Committee

Cc:
Yvonne Kennedy, Applicant
Professor Peter Fonagy

Appendix 4: Information Sheet and Consent Form

Information Sheet for Teacher Participation in Research Study

Title of Project: *An investigation of teacher change through participation in the Incredible Years Teacher Classroom Management Programme*

This study has been approved by the UCL Research Ethics Committee (Project ID Number): **4734/001**

Name	Yvonne Kennedy
Work Address	National Educational Psychological Service, Donore Road Industrial Estate, Drogheda, Co. Louth, Ireland.
Contact Details	yvonne_kennedy@education.gov.ie 041-9876972

Details of Study: My name is Yvonne Kennedy and I am an Educational Psychologist working with the National Educational Psychological Service (NEPS) in the Louth/Meath area. I would like to invite you to participate in a research project which I am undertaking as part of a part-time CPD Doctorate in Educational Psychology in University College London (UCL). It is up to you to decide whether to take part or not. If you do decide to take part, you are still free to withdraw at any time and without giving a reason.

My research will investigate teacher professional development training using the Incredible Years Teacher Classroom Management (IY TCM) programme. This is a programme which trains teachers in the use of evidence-based effective classroom management skills including the use of teacher attention, encouragement and praise, proactive teaching approaches, use of incentives, strategies for building teacher-child relationships, positive parent-teacher collaboration, behaviour planning for individual students, and ways to promote students' emotional regulation, social and problem-solving skills. As part of NEPS work in the area, psychologists regularly deliver training in this programme to teachers. This is an evidence-based programme which research has been found to be effective in improving child behaviour, classroom environment and teacher classroom management skills in the US, Wales, Jamaica and Ireland. However, there is limited research available which has examined the process of teacher change through participation in the IY TCM programme and the factors which influence this change.

The aim of my research is to investigate teacher's experiences of participation in the IY TCM training and their perception of how it changes their knowledge, beliefs, skills and practice in relation to outcomes for students. I would also hope to examine the process of teacher change and factors which influence this change. It is hoped that the findings of my research can be used to enhance future IY TCM training and programme implementation.

I am hoping to recruit primary school teachers, preferably classroom teachers, for my study. Your participation in the research will involve attending professional development training in the IY TCM programme. This training will be facilitated by my colleague, Tom Murphy, and I in Navan Education Centre for one day (6 hours training) per month between October 2013 and March 2014. We are both qualified Educational Psychologists who have received training in the facilitation of the programme and have delivered the programme with groups of teachers in the past.

If you agree to take part in the research, you will be asked to complete the teacher version of the Strengths and Difficulties Questionnaire (SDQ) for nine children in your class prior to and at the end of the IY TCM training. As

part of the feedback and review element which takes place at the start of each training session, you will be asked to participate in a short focus group discussion (approximately 20 minutes) to examine your perception of any change in your approach to classroom management since the last session. This focus group discussion will be recorded using a digital voice recorder. At the end of the training, I will ask you to participate in an individual interview with me which should take approximately 45 minutes. This interview can take place in your school or in the NEPS office, whichever is most convenient for you. During the interview, I would like to ask you about your experiences of the programme and the ways in which you may have changed as a result of participation. I will also ask about your perceptions of any factors which have supported or hindered this change. With your consent, I will record the interview using a digital voice recorder.

All data will be collected and stored in accordance with the Data Protection legislation in Ireland and the UK. Any information you provide will be treated confidentially. The recorded focus group discussions and individual interviews will be transcribed (written up) and the tape will then be wiped clear. The data will be anonymised and securely stored in a locked filing cabinet and on a password-protected computer. You will not be personally identifiable in any report or written findings of my study. I will not be asking for the names or any personal details of the children in your class for whom you will be asked to complete questionnaires for. Instead, I will ask you to code the questionnaires using numbers. I will provide you with a summary of the findings of my study upon completion of the project. I hope to publish the findings of my study in an academic peer-reviewed journal article. When my research is complete, all information from the project will be destroyed no later than December 2016.

To summarise, partaking in this research study will involve the completion of the Strengths and Difficulties Questionnaire (SDQ) for nine children in your class, participation in a focus group discussion at the start of the training sessions, and an individual interview following completion of the course. Please read, sign and return the attached consent form in the prepaid envelope if you would like to participate in my research study. If you have any further questions, would like more information, or if there is anything that is not clear about my study, please contact me by email at yvonne_kennedy@education.gov.ie or by phone on 041-9876972.

Informed Consent Form for Teacher Participation in Research Study

Please complete this form after you have read the Information Sheet and/or listened to an explanation about the research.

Title of Project: *An investigation of teacher change through participation in the Incredible Years Teacher Classroom Management Programme*

This study has been approved by the UCL Research Ethics Committee (Project ID Number): **4734/001**

Thank you for your interest in taking part in this research. Before you agree to take part, the person organising the research must explain the project to you. If you have any questions arising from the Information Sheet or explanation already given to you, please ask the researcher before you to decide whether to join in. You will be given a copy of this Consent Form to keep and refer to at any time.

Participant's Statement

I _____

- have read the Information Sheet, and understand what the study involves.
- understand that if I decide at any time that I no longer wish to take part in this project, I can notify the researchers involved and withdraw immediately.
- consent to the processing of my personal information for the purposes of this research study.
- understand that such information will be treated as strictly confidential and handled in accordance with the provisions of the Data Protection Act 1998.
- understand that my participation in the focus groups and interviews will be taped and I consent to use of this material as part of the project.
- am assured that the confidentiality of my personal data will be upheld through the removal of identifiers.
- understand that the information I have submitted will be published as a report and I will be sent a copy. Confidentiality and anonymity will be maintained and it will not be possible to identify me from any publications.
- agree that the research project named above has been explained to me to my satisfaction and I agree to take part in this study.

Signed: _____

Date: _____

Appendix 5: Focus Group Questions

Stimulus to thinking:

Ask teachers to think about the most significant change for them over the past month as result of their participation in the IY programme e.g. any changes in their knowledge, skills, beliefs and practice. Also remind teachers that any specific examples in relation to pupils would be welcome, bearing in mind the use of a pseudonym so that the child is not identifiable.

Part 1

- 1) *“Looking back over the last month, what do you think was the most significant change for you as a result of your participation in the IY TCM programme? Why is this significant for you?”*

Prompt questions:

- *“What **difference** has this made now or will it make in the future?”*
- *“What do you think was the most significant change in your **knowledge/skills/beliefs/practice** as a result of your participation in the IY TCM programme?”*

Part 2

- 2) *“In your opinion, what factors have supported or hindered these changes for you?”*

Prompt questions:

- *“What **individual** factors have supported or hindered these changes for you?”*
- *“What **school/organisational** factors have supported or hindered these changes for you?”*
- *“What **programme** factors have supported or hindered these changes for you?”*
- *“Are there any **other** factors which you consider have supported or hindered change?”*

Appendix 6: Teacher Interview Questions



Background Information:

1. Gender: Male ☐ Female ☐
2. Category: Mainstream Class Teacher ☐ Learning Support/Resource Teacher ☐
- 3a. Number of Years Teaching: 1-3 ☐ 4-8 ☐ 9-15 ☐ >15 ☐
- 3b. How many years have you been teaching in your present school? _____
4. Class presently teaching: JI ☐ SI ☐ 1st ☐ 2nd ☐
3rd ☐ 4th ☐ 5th ☐ 6th ☐
Learning Support/Resource ☐

Introduction

5. What led you to participate in the IY TCM course?
6. Did you come on the IY TCM course
 - of your own choice
 - requested by principal
 - other
7. What were your expectations for the programme?

Teacher Change

8. What do you think was the most significant change for you as a result of your participation in the IY TCM programme? How is this significant for you?
 - 8 (a) What do you think was the most significant change in your **knowledge** as a result of your participation in the IY TCM programme? How is this significant for you?
 - 8 (b) What do you think was the most significant change in your **skills** as a result of your participation in the IY TCM programme? How is this significant for you?
 - 8 (c) What do you think was the most significant change in your **beliefs** as a result of your participation in the IY TCM programme? How is this significant for you?
 - 8 (d) What do you think was the most significant change in your **practice** as a result of your participation in the IY TCM programme? How is this significant for you?
 - 8 (e) Have you observed any other changes in yourself as a result of your participation in the programme?
 - 8 (f) On a scale of 1 to 4, how much do you think **you** have changed as a result of participating in the IY programme:
 - 1 no change
 - 2 just a little change
 - 3 quite a lot of change
 - 4 significant change

Student Outcomes

9. What impact has your participation in the IY TCM programme had on the children in your class?

- on the children's social-emotional competence?
 - their behaviour?
 - their learning?
 - on teacher-student relationships?
 - on the classroom environment?
 - on the wider school environment?
 - on home-school relationships?
10. On a scale of 1 to 4, how much change have you observed in your **students** as a result of your participation in the programme:
- 1 no change
 - 2 just a little change
 - 3 quite a lot of change
 - 4 significant change
11. Did the training change the way you filled in the SDQ forms for the children in your class?

Factors influencing Change

12. In your opinion, what has **supported** these changes for you?
- What **is it about you that** has supported these changes?
 - Is there anything **within your school that** has supported these changes?
 - What **is it about the programme that has** supported these changes?
 - Is there anything else that you think has supported these changes?
13. In your opinion, what has **hindered** these changes for you?
- What **is it about you that** has hindered these changes?
 - Is there anything **within your school that** has hindered these changes?
 - What **is it about the programme that** has hindered these changes?
 - Is there anything else that you think has hindered these changes?

Conclusion

14. Would you recommend the IY TCM programme to other teachers? Why/why not?
15. What did you like most/least about the programme?
16. Have you any recommendations for NEPS for future IY TCM training programmes?
17. Do you think there are other supports necessary in order to enable you to implement the IY strategies in your classroom/school?
18. Do you have any questions or comments to add before we end this interview?

Appendix 7: Stages of Thematic Analysis (Braun & Clarke, 2006) – Sample from Focus Group 1

Stage 1: Familiarisation with Data

This stage involved repeated reading of the transcript in searching for themes, patterns and ideas about interesting aspects of the data. The researcher made handwritten notes and ideas for coding on the printed transcript.

Stage 2: Generating Initial Codes

The next phase involved producing initial codes from the data and collating the data extracts for each code. As noted earlier, the approach to thematic analysis in this study was theory driven meaning that the researcher coded the data with the research questions in mind. For the purpose of analysis of the focus group data, the coding was therefore driven by the following research question:

Research Question 1 (a): How do teachers' knowledge, skills, beliefs and practice develop over the course of the IY TCM programme in relation to outcomes for students?

The following codes relate to teacher perception of change in their knowledge, skills, beliefs and practice in relation to outcomes for students:

-Change in beliefs and focus from academics/curriculum to children's behaviour and emotional needs – realisation of importance of social/emotional/behavioural functioning to success in school

I've tried to change my idea like you know this from talking to me as well, [name of researcher], like I'm very focused on the curriculum and what has to be covered because it's been said to us constantly now with the curriculum and so much time in English and so much time in maths, so I've tried to bring into my own head that the behaviour and how they're feeling and their experience is just as important really in school. So that's one, I don't know if that's a good thing now I'm after doing there or a bad thing but I've tried to change a little bit that way.

My beliefs kind of that it's not just a curriculum, there's other things that's very important as well. I'd agree with the girls there as well, like it makes you think about the holistic development of the child, it's not just academic, it's about their emotion and everything that is involved in that as well.

Well it seems to me, it's supposed to be a child centred programme, like being at school, at centred around the child but it seems to be based more on curriculum now than the child focuses on the curriculum so this kind of brings you back down to earth that they are only kids and think of yourself in a workplace like, if you're not in a positive atmosphere in a workplace, you're not happy. So it needs to be more like, say child centred like you know that they're happy at school. And if they're coming into a positive place like they're going to be happy and they're going to, obviously you're going to be able to teach a lot more, rather than if you were coming in being negative.

Like if look back, I'm like, I'm three years out, my first year compared to now like, programmes like these, they, you focus more on the child and you get more done with the child like if they're in a positive mood you'll get a lot more done. More rather than trying to discipline more, more positive.

...it is good to be reminded about other things that are important, other than just curriculum and what needs to be taught.

- Awareness of the importance of a positive relationship with children

I think the same, I just kind of, it's kind of brought more awareness back to interaction with the child and behaviour and how important it is to build relationships with the child. I think it's just kind of, you know, as you said earlier, you're very aware of it when you're starting to, but it kind of get caught up with curriculum and how busy you are. So it brings your focus back I think to the relationship.

The personal greeting in the morning also, I started using that and it certainly, it eases the day, you know, it gives it a good start, greeting them all and just that little acknowledgement, makes them feel important coming in.

- Practice and impact of developing positive relationships with the children

And a girl from the Roscommon, she's in another group I think, she said she told them like, you know, they were kind of like a family, so I tried that the next day or a few days after I was here and you could nearly see the visible tension disappear. You know, you could see them kind of nearly all relaxing, we all look after them like they're our own but you never tell them. But once you tell them, you could see them kind of coming down off a level and it's relaxed the whole classroom even since then, you know, a big difference, that you're looking out for them rather than.

The personal greeting in the morning also, I started using that and it certainly, it eases the day, you know, it gives it a good start, greeting them all and just that little acknowledgement, makes them feel important coming in. Like it might be the only acknowledgement a lot of them get for the day or even from home.

- Realisation/belief in the importance of children being happy at school

So it needs to be more like, say child centred like you know that they're happy at school. And if they're coming into a positive place like they're going to be happy and they're going to, obviously you're going to be able to teach a lot more, rather than if you were coming in being negative.

Yeah I think that's something that I got from it as well, how important it is to be happy and if the children aren't happy, they won't learn. And for optimum learning to take place I suppose they need to be happy.

- Use of proactive teaching strategies

And I find being proactive, it has helped me an awful lot for, because I've a couple of kids in my class that are, they have behavioural issues and if you can avoid coming to the final straw that like, that makes you just kind of give out to them and what not, it's much, the classroom, the environment is much, much better, for everyone, me and the kids.

The show me five and the human shield I found was great for being consistent so that the children know what's expected from them, and by reminding them what you're looking for so that they have an opportunity to do their best. So they do need a little bit of reminding every so often and I just found with infant classes it worked really successfully, it was a nice positive environment for them.

- Calmer classroom environment

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- Use of positive behavioural management strategies

Yeah, trying to pick the positive and praising people who are close by that are doing something good, does sometimes work as well as giving out to ones that are being bold.

I kind of found just to be more kind of like self-aware as you said over your language and how you approach a situation and the kind of positive command and not giving kind of extra additional your know, commands that aren't really necessary, just kind of keeping them short and brief and to the point.

Yeah, we were talking about that yesterday, not saying, don't, just saying like, "I'm looking for..." [3.00] rather than saying "I don't want...", and, "No talking...", and you know, trying to keep it positive.

Yeah at times it can just be easier to you know, pick out the problem and you know, and say, this is not the

behaviour we'd like to see or you know, rather than just looking at the behaviour you do want to see. Just I suppose changing your focus and to be more aware of I suppose the ninety-nine per cent that are you know, paying attention and giving me five or whatever.

Like if look back, I'm like, I'm three years out, my first year compared to now like, programmes like these, they, you focus more on the child and you get more done with the child like if they're in a positive mood you'll get a lot more done. More rather than trying to discipline more, more positive.

- Continued use of familiar negative discipline strategies

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Yeah at times it can just be easier to you know, pick out the problem and you know, and say, this is not the behaviour we'd like to see or you know, rather than just looking at the behaviour you do want to see.

There's, I have a very lively class and like, they're very needy of me. And I go in in the morning and after lunch sometimes, they're exhausted, I'm drained by the time we get in after lunch and it's, you've told them three times, you've told them four times, and they still are messing and clicking and you've tried four different things to try and get them on track and you've done your rhyme and they do the rhyme and then they go back exactly doing what they were doing. And then you just, I let a roar and that does, it does get them on track again but like sometimes that's the only way I can get them back because they're, they don't, like there's times when they could have a conversation across the classroom like, and I've spoken to them, I've, like I had behavioural plans in place, so yeah, it's not all the time like it does work to a certain extent but sometimes like it's not all airy fairy in the classroom either.

-Some progress but not perfect

...we did it on the first day and the puppets were just after leaving and one of the kids had hit like, it was ten to three and one of the kids had already hit one of the other kids twice before, just after us doing, you can't hit children. So we had to bring in Dina, the other puppet again, with one of the other teachers again and we revised back over it. So it did, it eventually it's getting there.

- Raised awareness of use of language – positive language use

I kind of found just to be more kind of like self-aware as you said over your language and how you approach a situation and the kind of positive command and not giving kind of extra additional your know, commands that aren't really necessary, just kind of keeping them short and brief and to the point.

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- More specific with language when giving commands

It's very specific as well, I think I was using very general kind of commands, I was saying, be respectful and things like that, whereas, you were saying the last day, you know say, I'm looking for feet on the floor; I'm looking for arms folded or whatever. Then there's no grey area, they know they're either doing it or they're not, it's very specific.

Yeah I think I've tried to be more specific in my language as well as [name of teacher] was saying, to give a command, say exactly rather than just a general statement, you know, so that's a change, definitely a change in practice.

-Need for training programme to upskill and change practice over time

Definitely, yeah but sometimes like you have to be reminded of this, you know and...

Like if look back, I'm like, I'm three years out, my first year compared to now like, programmes like these, they, you focus more on the child and you get more done with the child like if they're in a positive mood you'll get a lot more done. More rather than trying to discipline more, more positive.

...it is good to be reminded about other things that are important, other than just curriculum and what needs to be taught.

- Importance of communication and working in partnership with parents

And they were reminded also of how communication, you know, communicate with the parents as well is very important, you know, because you can go into the classroom and think that you're completely in charge of this child and you're not, I mean the more help you seek from home as well and to work as a team with the parents or the guardians from home. It gives you an easier plan as well to work from.

- Change in practice re working with parents

I sent the show me five rules home and the parents thought that was a great idea and they've been practising them at home and that, so that was very good.

Yeah, well parent support is great, we held a parent information morning and there was a big turnout, nearly all the parents arrived and they just spoke about how it was great that they knew the rules at home and they were practising them at home, makes it easier in class.

we sent home sheets then so that the children had a bit of homework, the parents were aware of what was going on as well, so they knew to talk things over with the children. A lot of them brought in the homework, not all of them, but a lot of them did and the parents did really like the idea of what we were doing in the class as well.

- Need for consistent whole school approach

And working as a whole school, having it as an approach, that it's introduced in the junior classes and it's brought up through the school up to the senior classes, that it's a whole school approach, that everybody's working off the same page and the same standards are set and the same practices and beliefs are within the whole school, I think would make it very effective.

- Change in teacher's reaction to misbehaviour – calmer and more structured in approach

If there's an incident in the classroom I'm calmer, like often, kids falling off chairs, you just hear a scream and you're doing something and you just look up, you haven't seen what's happened where before I'd, everybody I'd just go, OK, sit down everyone. Where now I just go down, I have a look see; get exactly what's happened before I react to the situation. So I think it's working a little bit better, so it's calmer a bit.

Research Question 1 (b): What factors support or hinder teacher change during participation in the IY TCM programme?

The following codes and data extracts relate to teacher perceptions of the factors which support or hinder change during participation in IY TCM:

- Time pressures in schools and on teachers

My biggest hindrance is probably time, and I know a lot of them don't take a lot of time, before I came here...going through the list, he asked me what we hadn't done and what we had done and I was saying, no, I wanted to put the rules of the classroom up visually on the wall. I know it's only a matter of typing them out and getting a picture but like you're so focused on everything else that's going on around you and like, I know I keep going back to it, but I know in our school between school self-evaluation and then you're on certain committees for different things and like, assessment and every school I suppose has a different focus at different times, like our school is a DEIS school so we're big into first steps and the reading and writing. And we have a schedule and in September we need to get this done and in October you're so focused on getting that one thing done that other things like can take over. So again I think, I'd love to, we will get the opportunity to say to the staff but like it is good to be reminded about other things that are important, other than just curriculum and what needs to be taught.

-Frustration - teachers want to develop positive relationships with children but time pressure makes this difficult

Yeah, the idea of you know, chatting to a child and getting to know them personally and like I'd often give them like a little kind of questionnaire, what's your favourite subject, and you know, but even you collect it off them and you get obviously a certain amount of information off them, who their friends are, what they like to play and that. But you don't feel that connection, but like I'd really love to actually have the time and just you know, to just chat with them like, you know, and maybe I'm just being selfish but sometimes at break time...

Yeah or even they suggest like having playtime with them and that like, but I'd find myself in the yard doing an activity like that, I'd love to sit down sometimes, I used to, when I started in school, teaching first, I remember I used to sit with them and do art with them. Do you know that kind of way? And now I find myself...

You are racing against time...

Doing things, what am I getting ready for the next lesson and do you know, this is a good time for me to collect that or you know, or fill out that form or start my [10.45] because someone might be coming in. Do you know that kind of way? Whereas you'd love that relaxation time again to be able to just, we have gone a bit crazy I think, just I know it's all...

-Curriculum overload

It's overload though there is...

Getting your notes in order and I've so many things I need to consider, like when I think when we started, like I started eleven years ago now and it was so much more relaxing, you know.

- Frustration and stress of a challenging class

In saying that though, it is working, there's still times in the day though where it is challenging to be incredible years all the time and... There's, I have a very lively class and like, they're very needy of me. And I go in in the morning and after lunch sometimes, they're exhausted, I'm drained by the time we get in after lunch and it's, you've told them three times, you've told them four times, and they still are messing and clicking and you've tried four different things to try and get them on track and you've done your rhyme and they do the rhyme and then they go back exactly doing what they were doing. And then you just, I let a roar and that does, it does get them on track again but like sometimes that's the only way I can get them back because they're, they don't, like there's times when they could have a conversation across the classroom like, and I've spoken to them, I've, like I had behavioural plans in place, so yeah, it's not all the time like it does work to a certain extent but sometimes like it's not all airy fairy in the classroom either.

It can be very difficult when something happens and it's really testing you to the limits like a particular child and like you've tried all the positive, you've given them the rewards, everything's going fine and still she managed to do whatever, like it can be very frustrating.

- Communication and parental involvement can support and hinder change

Yeah, well parent support is great, we held a parent information morning and there was a big turnout, nearly all the parents arrived and they just spoke about how it was great that they knew the rules at home and they were practising them at home, makes it easier in class.

we explained about giving the children privacy and we sent home sheets then so that the children had a bit of homework, the parents were aware of what was going on as well, so they knew to talk things over with the children. A lot of them brought in the homework, not all of them, but a lot of them did and the parents did really like the idea of what we were doing in the class as well.

A big one for me was parents, like, what you see in the classroom is probably a tenth of what they're doing at home and over a full year like, the amount of information I got out of one parent, and even the year after that I had the child, stuff that I didn't know that was going on, explained an awful lot of stuff. And if you could you know, start that information at the start of the year. It gives you an awful lot more

information and understanding about the child like you know in the classroom had you known beforehand what was going on, you know. But I think that's a lot to do with it, like if you can picture yourself in their shoes, what's going on, that gives you an awful lot more understanding.

Some of the parents can be wary enough with giving you information until they do get to know you and that's a bit of a hindrance. They're wondering why you're asking that.

Just about building relationship with parents, but then again as you said, where are you going to get time like?

See the time comes back into it.

I know, and again, I remember years ago in our school suggesting something like a parents information evening in your class because I know that what was coming up with my maths curriculum was someone was saying, oh there's this new way of doing the maths and it wasn't new at all, it was decomposition and subtraction and they were used to carrying and paying back and I was saying, you'd love to bring them in just to show them, because they think it's this really difficult thing, like it's not, if you've five minutes with them, but again it was, well if you go doing that, they'll all want that. Do you know that kind of a way, so that can be difficult too.

- Difficult to move away from the 'norm' of the school

We just got set yesterday about, they were talking about parents evening or bringing parents in and I said the one thing that would probably hinder us would be I suppose what's usually done in the school, like we'd always, we're only third to sixth class in our school and we'd always have an open night for third class parents. But I, like [name of teacher] is third, I'm fourth, I was saying, if I decided to have something like that even in the morning time, there's kind of an expectation, well why isn't every teacher having it and that's what said to you, well if you did that then they'd be wondering why you're doing it and not everybody doing it, you'd be setting in...

It's kind of like a cultural kind of norm or like...

If you're doing it they'll all want it, that type of attitude.

- Other teacher's responses to misbehaviour (lack of consistency across whole school – need for whole school approach)

I found it difficult that the boy in my class that I was focusing on, I was really getting somewhere with him, ignoring the bad behaviour to a point, but then he'd go out to the yard and he'd do something that I would ignore and somebody else would read him out of it and put him standing at the wall or something. And I think that was very confusing for him, you know, and it's hard because you can't, like every teacher couldn't tell the whole staff about every child who's difficult in their class, we'd all get very confused. So I think it's, that was something that I found hard for him.

Yeah I think if it was the case that all teachers could train together so that it was a whole school approach - if you're trying to do it in a class and then it's a different approach in the yard or...

You don't understand or, it's like assessment, like, your good and my good could be very different, you know, or what your tolerance level for noise or, you know, might be.

And when each teacher has a different strategy, each teacher in each room has a different approach, so if there's a uniform approach with the children across the school you know, it might have been more kind of effective rather than, oh this is just something we're trying for a month or, you know.

In an ideal world we'd all be doing it.

....but it's a whole school approach as well, you know, and we have to all sing of the same hymn sheet as such.

- Lack of social skills in children

But even a lot of them, in the yard is huge problems like I've kids that are, there's huge problems out in the yard, they don't know how to play, they don't know how like, tip is the only game they know how to play and like we are talking about it in school, we're trying to bring in games like trying to figure out how we can, like it's karate or hitting or kickboxing or like wrestling, that's all they know and you're giving out to them and they're like, we know we're not allowed. And they don't know how to play anything else; they actually really don't know how to do it. So that has to be taken into account as well, that they don't mean to be bold.

It's just the norm.

- Individual teacher's bad habits

Bad habits maybe, old habits, you know, you need to constantly remind yourself, and sometimes it can be hard if you're in the throes of doing something just to say like, oh I should have said that instead of such and such or whatever, you know.

- Other children's' reactions to teacher's discipline

What I find the hardest is being positive to that child when all the other children are looking knowing what she's just done, and you have your logic behind it but they... They think it's not fair, yeah.

Well she just did that and you're happy with her and I only did this and you, you know that kind of way. Like that can be difficult, watching the other children.

But I find that the kids know, they do know like we had, someone came into our class yesterday and the same lad, he's hyper active at the same time, so he went to the bathroom, he came in, he was making noises and marching around the place or whatever, we all ignored him because we'd practised ignoring or whatever and I was like, OK, can you try that again, out you go and come in quietly like you're supposed to come into class, and one of the kids goes, sure he's mad anyway, he's the maddest one we have in the classroom. So like they do know that he does get away with blue murder sometimes compared to what the other ones do because you can't be giving out, he can't be at it, like yeah, but they do know, they know that he's being bold and that it's up to the teacher how she reacts.

And that's hard.

It is, yeah.

Because they're waiting for your reaction too.

Yeah.

They kind of, you can see it in their head they're saying, what's she going to do now? Do you know that kind of way?

- Teachers feel guilty for imposing consequences

And I know they say like, oh you shouldn't take it personally or whatever but sometimes you know, you kind of feel, oh you know, I'm going down the consequences list and you know, I don't know maybe I'm just, I don't know I just feel you know, when you're kind of, you know, this is the consequence for your behaviour. And your heart's broken and their heart's broken and you know, you just have to follow through and you know, sometimes it can just be like for yourself you're kind of like, this every day like you know, we have to go through this you know, and I know I suppose maybe in six months it'll be you know, or next month that it does kind of get easier and that, but yeah, sometimes I just feel that.

Stages 3 and 4: Searching for Themes and Reviewing Themes

The third phase involved trying to sort the codes into potential themes and collating the relevant data extracts within the identified themes. Stage 4 involved review of the coded data extracts and refinement of the themes. The researcher decided to have an overarching theme called 'Raised awareness' with three subthemes (Positive behaviour and social-emotional competence – not just academics, Relationships, Positive and proactive teaching strategies).

Main theme of focus group 1: Raised awareness

1) Positive behaviour and social-emotional competence – not just academics

Change in beliefs and focus from academics/curriculum to children's behaviour and emotional needs – realisation of importance of emotional/behavioural functioning

I've tried to change my idea like you know this from talking to me as well, [name of researcher], like I'm very focused on the curriculum and what has to be covered because it's been said to us constantly now with the curriculum and so much time in English and so much time in maths, so I've tried to bring into my own head that the behaviour and how they're feeling and their experience is just as important really in school. So that's one, I don't know if that's a good thing now I'm after doing there or a bad thing but I've tried to change a little bit that way.

My beliefs kind of that it's not just a curriculum, there's other things that's very important as well.

I'd agree with the girls there as well, like it makes you think about the holistic development of the child, it's not just academic, it's about their emotion and everything that is involved in that as well.

Well it seems to me, it's supposed to be a child centred programme, like being at school, at centred around the child but it seems to be based more on curriculum now than the child focuses on the curriculum so this kind of brings you back down to earth that they are only kids and think of yourself in a workplace like, if you're not in a positive atmosphere in a workplace, you're not happy. So it needs to be more like, say child centred like you know that they're happy at school. And if they're coming into a positive place like they're going to be happy and they're going to, obviously you're going to be able to teach a lot more, rather than if you were coming in being negative.

Like if look back, I'm like, I'm three years out, my first year compared to now like, programmes like these, they, you focus more on the child and you get more done with the child like if they're in a positive mood you'll get a lot more done. More rather than trying to discipline more, more positive.

It is good to be reminded about other things that are important, other than just curriculum and what needs to be taught.

2) Relationships

- Realisation/belief in the importance of children being happy at school

So it needs to be more like, say child centred like you know that they're happy at school. And if they're coming into a positive place like they're going to be happy and they're going to, obviously you're going to be able to teach a lot more, rather than if you were coming in being negative.

Yeah I think that's something that I got from it as well, how important it is to be happy and if the children aren't happy, they won't learn. And for optimum learning to take place I suppose they need to be happy.

- Awareness of the importance of a positive relationship with children

I think the same, I just kind of, it's kind of brought more awareness back to interaction with the child and behaviour and how important it is to build relationships with the child. I think it's just kind of, you know, as you said earlier, you're very aware of it when you're starting to, but it kind of get caught up with curriculum and how busy you are. So it brings your focus back I think to the relationship.

The personal greeting in the morning also, I started using that and it certainly, it eases the day, you know, it gives it a good start, greeting them all and just that little acknowledgement, makes them feel important coming in.

- Practice and impact of developing positive relationships with the children

And a girl from the Roscommon, she's in another group I think, she said she told them like, you know, they were kind of like a family, so I tried that the next day or a few days after I was here and you could nearly see the visible tension disappear. You know, you could see them kind of nearly all relaxing, we all look after them like they're our own but you never tell them. But once you tell them, you could see them kind of

coming down off a level and it's relaxed the whole classroom even since then, you know, a big difference, that you're looking out for them rather than.

The personal greeting in the morning also, I started using that and it certainly, it eases the day, you know, it gives it a good start, greeting them all and just that little acknowledgement, makes them feel important coming in. Like it might be the only acknowledgement a lot of them get for the day or even from home.

- Importance of communication and working in partnership with parents

And they were reminded also of how communication, you know, communicate with the parents as well is very important, you know, because you can go into the classroom and think that you're completely in charge of this child and you're not, I mean the more help you seek from home as well and to work as a team with the parents or the guardians from home. It gives you an easier plan as well to work from.

- Change in practice re working with parents

I sent the show me five rules home and the parents thought that was a great idea and they've been practising them at home and that, so that was very good.

Yeah, well parent support is great, we held a parent information morning and there was a big turnout, nearly all the parents arrived and they just spoke about how it was great that they knew the rules at home and they were practising them at home, makes it easier in class.

We sent home sheets then so that the children had a bit of homework, the parents were aware of what was going on as well, so they knew to talk things over with the children. A lot of them brought in the homework, not all of them, but a lot of them did and the parents did really like the idea of what we were doing in the class as well.

3) Positive and proactive teaching strategies

- Use of proactive teaching strategies

And I find being proactive, it has helped me an awful lot for, because I've a couple of kids in my class that are, they have behavioural issues and if you can avoid coming to the final straw that like, that makes you just kind of give out to them and what not, it's much, the classroom, the environment is much, much better, for everyone, me and the kids.

The show me five and the human shield I found was great for being consistent so that the children know what's expected from them, and by reminding them what you're looking for so that they have an opportunity to do their best. So they do need a little bit of reminding every so often and I just found with infant classes it worked really successfully, it was a nice positive environment for them.

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I kind of found just to be more kind of like self-aware as you said over your language and how you approach a situation and the kind of positive command and not giving kind of extra additional your know, commands that aren't really necessary, just kind of keeping them short and brief and to the point.

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...we did it on the first day and the puppets were just after leaving and one of the kids had hit like, it was ten to three and one of the kids had already hit one of the other kids twice before, just after us doing, you can't hit children. So we had to bring in Dina, the other puppet again, with one of the other teachers

again and we revised back over it. So it did, it eventually it's getting there.

- Need for training programme to upskill and change practice over time

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Factors which support/hinder change

1) Working with parents

Yeah, well parent support is great, we held a parent information morning and there was a big turnout, nearly all the parents arrived and they just spoke about how it was great that they knew the rules at home and they were practising them at home, makes it easier in class.

We explained about giving the children privacy and we sent home sheets then so that the children had a bit of homework, the parents were aware of what was going on as well, so they knew to talk things over with the children. A lot of them brought in the homework, not all of them, but a lot of them did and the parents did really like the idea of what we were doing in the class as well.

A big one for me was parents, like, what you see in the classroom is probably a tenth of what they're doing at home and over a full year like, the amount of information I got out of one parent, and even the year after that I had the child, stuff that I didn't know that was going on, explained an awful lot of stuff. And if you could you know, start that information at the start of the year. It gives you an awful lot more information and understanding about the child like you know in the classroom had you known beforehand what was going on, you know. But I think that's a lot to do with it, like if you can picture yourself in their shoes, what's going on, that gives you an awful lot more understanding.

Some of the parents can be wary enough with giving you information until they do get to know you and that's a bit of a hindrance.

They're wondering why you're asking that.

Just about building relationship with parents, but then again as you said, where are you going to get time like?

See the time comes back into it.

I know, and again, I remember years ago in our school suggesting something like a parents information evening in your class because I know that what was coming up with my maths curriculum was someone was saying, oh there's this new way of doing the maths and it wasn't new at all, it was decomposition and subtraction and they were used to carrying and paying back and I was saying, you'd love to bring them in just to show them, because they think it's this really difficult thing, like it's not, if you've five minutes with them, but again it was, well if you go doing that, they'll all want that. Do you know that kind of a way, so that can be difficult too.

2) Time

- Time pressures in schools and on teachers

My biggest hindrance is probably time, and I know a lot of them don't take a lot of time, before I came here...going through the list, he asked me what we hadn't done and what we had done and I was saying, no, I wanted to put the rules of the classroom up visually on the wall. I know it's only a matter of typing them out and getting a picture but like you're so focused on everything else that's going on around you and like, I know I keep going back to it, but I know in our school between school self-evaluation and then you're on certain committees for different things and like, assessment and every school I suppose has a different focus at different times, like our school is a DEIS school so we're big into first steps and the

reading and writing. And we have a schedule and in September we need to get this done and in October you're so focused on getting that one thing done that other things like can take over. So again I think, I'd love to, we will get the opportunity to say to the staff but like it is good to be reminded about other things that are important, other than just curriculum and what needs to be taught.

- Frustration – teachers want to develop positive relationships with children but time pressure makes this difficult

Yeah, the idea of you know, chatting to a child and getting to know them personally and like I'd often give them like a little kind of questionnaire, what's your favourite subject, and you know, but even you collect it off them and you get obviously a certain amount of information off them, who their friends are, what they like to play and that. But you don't feel that connection, but like I'd really love to actually have the time and just you know, to just chat with them like, you know, and maybe I'm just being selfish but sometimes at break time...

Yeah or even they suggest like having playtime with them and that like, but I'd find myself in the yard doing an activity like that, I'd love to sit down sometimes, I used to, when I started in school, teaching first, I remember I used to sit with them and do art with them. Do you know that kind of way? And now I find myself...

You are racing against time...

Doing things, what am I getting ready for the next lesson and do you know, this is a good time for me to collect that or you know, or fill out that form or start my [10.45] because someone might be coming in. Do you know that kind of way? Whereas you'd love that relaxation time again to be able to just, we have gone a bit crazy I think, just I know it's all...

- Curriculum overload

It's overload though there is...

Getting your notes in order and I've so many things I need to consider, like when I think when we started, like I started eleven years ago now and it was so much more relaxing, you know.

3) Challenging behaviour of individual children

- Frustration and stress of a challenging class

In saying that though, it is working, there's still times in the day though were it is challenging to be incredible years all the time and... There's, I have a very lively class and like, they're very needy of me. And I go in in the morning and after lunch sometimes, they're exhausted, I'm drained by the time we get in after lunch and it's, you've told them three times, you've told them four times, and they still are messing and clicking and you've tried four different things to try and get them on track and you've done your rhyme and they do the rhyme and then they go back exactly doing what they were doing. And then you just, I let a roar and that does, it does get them on track again but like sometimes that's the only way I can get them back because they're, they don't, like there's times when they could have a conversation across the classroom like, and I've spoken to them, I've, like I had behavioural plans in place, so yeah, it's not all the time like it does work to a certain extent but sometimes like it's not all airy fairy in the classroom either.

It can be very difficult when something happens and it's really testing you to the limits like a particular child and like you've tried all the positive, you've given them the rewards, everything's going fine and still she managed to do whatever, like it can be very frustrating.

- Individual teacher's bad habits

Bad habits maybe, old habits, you know, you need to constantly remind yourself, and sometimes it can be hard if you're in the throes of doing something just to say like, oh I should have said that instead of such and such or whatever, you know.

- Lack of social skills in children

But even a lot of them, in the yard is huge problems like I've kids that are, there's huge problems out in

the yard, they don't know how to play, they don't know how like, tip is the only game they know how to play and like we are talking about it in school, we're trying to bring in games like trying to figure out how we can, like it's karate or hitting or kickboxing or like wrestling, that's all they know and you're giving out to them and they're like, we know we're not allowed. And they don't know how to play anything else; they actually really don't know how to do it. So that has to be taken into account as well, that they don't mean to be bold.

It's just the norm.

- Other children's' reactions to teacher's discipline

What I find the hardest is being positive to that child when all the other children are looking knowing what she's just done, and you have your logic behind it but they... They think it's not fair, yeah.

Well she just did that and you're happy with her and I only did this and you, you know that kind of way. Like that can be difficult, watching the other children.

But I find that the kids know, they do know like we had, someone came into our class yesterday and the same lad, he's hyper active at the same time, so he went to the bathroom, he came in, he was making noises and marching around the place or whatever, we all ignored him because we'd practised ignoring or whatever and I was like, OK, can you try that again, out you go and come in quietly like you're supposed to come into class, and one of the kids goes, sure he's mad anyway, he's the maddest one we have in the classroom. So like they do know that he does get away with blue murder sometimes compared to what the other ones do because you can't be giving out, he can't be at it, like yeah, but they do know, they know that he's being bold and that it's up to the teacher how she reacts.

And that's hard.

It is, yeah.

Because they're waiting for your reaction too.

Yeah.

They kind of, you can see it in their head they're saying, what's she going to do now? Do you know that kind of way?

- Teachers feel guilty for imposing consequences

And I know they say like, oh you shouldn't take it personally or whatever but sometimes you know, you kind of feel, oh you know, I'm going down the consequences list and you know, I don't know maybe I'm just, I don't know I just feel you know, when you're kind of, you know, this is the consequence for your behaviour. And your heart's broken and their heart's broken and you know, you just have to follow through and you know, sometimes it can just be like for yourself you're kind of like, this every day like you know, we have to go through this you know, and I know I suppose maybe in six months it'll be you know, or next month that it does kind of get easier and that, but yeah, sometimes I just feel that.

4) Whole school approach

- Need for consistent whole school approach

And working as a whole school, having it as an approach, that it's introduced in the junior classes and it's brought up through the school up to the senior classes, that it's a whole school approach, that everybody's working off the same page and the same standards are set and the same practices and beliefs are within the whole school, I think would make it very effective.

- Difficult to move away from the 'norm' of the school

We just got set yesterday about, they were talking about parents evening or bringing parents in and I said the one thing that would probably hinder us would be I suppose what's usually done in the school, like we'd always, we're only third to sixth class in our school and we'd always have an open night for third class parents. But I, like [name of teacher] is third, I'm fourth, I was saying, if I decided to have something like that even in the morning time, there's kind of an expectation, well why isn't every teacher having it and that's what said to you, well if you did that then they'd be wondering why you're doing it and not everybody doing it, you'd be setting in...

It's kind of like a cultural kind of norm or like...

If you're doing it they'll all want it, that type of attitude.

- Other teacher's responses to misbehaviour (lack of consistency across whole school – need for whole school approach)

I found it difficult that the boy in my class that I was focusing on, I was really getting somewhere with him, ignoring the bad behaviour to a point, but then he'd go out to the yard and he'd do something that I would ignore and somebody else would read him out of it and put him standing at the wall or something. And I think that was very confusing for him, you know, and it's hard because you can't, like every teacher couldn't tell the whole staff about every child who's difficult in their class, we'd all get very confused. So I think it's, that was something that I found hard for him.

Yeah I think if it was the case that all teachers could train together so that it was a whole school approach - if you're trying to do it in a class and then it's a different approach in the yard or...

You don't understand or, it's like assessment, like, your good and my good could be very different, you know, or what your tolerance level for noise or, you know, might be.

And when each teacher has a different strategy, each teacher in each room has a different approach, so if there's a uniform approach with the children across the school you know, it might have been more kind of effective rather than, oh this is just something we're trying for a month or, you know.

In an ideal world we'd all be doing it.

....but it's a whole school approach as well, you know, and we have to all sing of the same hymn sheet as such.

Stage 5: Defining Themes

This phase involved further refining the themes and identifying the essence of what each theme is about using accompanying narrative to tell its 'story'. The following themes were identified in an attempt to understand teacher perceptions of change in themselves and their students as a result of IY TCM:

The most significant change identified by teachers in the first focus group was an increased awareness of the importance of children's emotional-behavioural functioning, relationships with parents and children, and the use of positive and proactive behavioural management strategies.

1) Positive behaviour and social-emotional competence – not just academics

Teachers identified significant change in their knowledge and beliefs regarding the importance of children's emotional-behavioural wellbeing in school. They identified a shift in their focus from an emphasis on academics/curriculum to children's behavioural and emotional needs:

I've tried to change my idea...like I'm very focused on the curriculum and what has to be covered...so I've tried to bring into my own head that the behaviour and how they're feeling and their experience is just as important really in school. So that's one, I don't know if that's a good thing now I'm after doing there or a bad thing but I've tried to change a little bit that way.

My beliefs kind of that it's not just a curriculum, there's other things that's very important as well. I'd agree with the girls there as well, like it makes you think about the holistic development of the child, it's not just academic, it's about their emotion and everything that is involved in that as well.

It is good to be reminded about other things that are important, other than just curriculum and what needs to be taught.

2) Relationships

Teachers identified change in their beliefs about the importance of children feeling happy at school:

Yeah I think that's something that I got from it as well, how important it is to be happy and if the children aren't happy, they won't learn. And for optimum learning to take place I suppose they need to be happy.

They also spoke about increased awareness of the significance of developing positive relationships with children:

I think the same, I just kind of, it's kind of brought more awareness back to interaction with the child and behaviour and how important it is to build relationships with the child. I think it's just kind of, you know, as you said earlier, you're very aware of it when you're starting to, but it kind of get caught up with curriculum and how busy you are. So it brings your focus back I think to the relationship.

Teachers recognised change in their practice regarding the development of positive relationships with the children as well as the impact of this:

...she told them like, you know, they were kind of like a family, so I tried that the next day...and you could nearly see the visible tension disappear. You know, you could see them kind of nearly all relaxing, we all look after them like they're our own but you never tell them. But once you tell them, you could see them kind of coming down off a level and it's relaxed the whole classroom even since then, you know, a big difference, that you're looking out for them...

The personal greeting in the morning also, I started using that and it certainly, it eases the day, you know, it gives it a good start, greeting them all and just that little acknowledgement, makes them feel important coming in. Like it might be the only acknowledgement a lot of them get for the day or even from home.

The programme reminded teachers of the importance of communication and working in partnership with parents and they identified changes in their practice in this area:

And they were reminded also of how communication, you know, communicate with the parents as well is very important, you know, because you can go into the classroom and think that you're completely in charge of this child and you're not, I mean the more help you seek from home as well and to work as a team with the parents or the guardians from home. It gives you an easier plan as well to work from.

I sent the show me five rules home and the parents thought that was a great idea and they've been practising them at home and that, so that was very good.

...we held a parent information morning and there was a big turnout, nearly all the parents arrived and they just spoke about how it was great that they knew the rules at home and they were practising them at home, makes it easier in class.

We sent home sheets then so that the children had a bit of homework, the parents were aware of what was going on as well, so they knew to talk things over with the children. A lot of them brought in the homework, not all of them, but a lot of them did and the parents did really like the idea of what we were doing in the class as well.

3) Positive and proactive teaching strategies

Teachers talked about significant change in their use of proactive teaching strategies and its impact on the classroom environment:

And I find being proactive, it has helped me an awful lot for, because I've a couple of kids in my class that are, they have behavioural issues and if you can avoid coming to the final straw that like, that makes you just kind of give out to them and what not, it's much, the classroom, the environment is much, much better, for everyone, me and the kids.

Teachers identified change in their skill and use of positive commands and praise. They are more aware of their use of positive language:

Yeah, trying to pick the positive and praising people who are close by that are doing something good, does sometimes work as well...

Like if look back, I'm like, I'm three years out, my first year compared to now like, programmes like these, they, you focus more on the child and you get more done with the child like if they're in a positive mood you'll get a lot more done. More rather than trying to discipline more, more positive.

...not saying "don't", just saying like, "I'm looking for..." rather than saying "I don't want...", and, "No talking...", and you know, trying to keep it positive...

The use of positive commands can be difficult and teachers acknowledged that it is easier to give negative commands:

Yeah at times it can just be easier to you know, pick out the problem and you know, and say, this is not the behaviour we'd like to see or you know, rather than just looking at the behaviour you do want to see. Just I suppose changing your focus and to be more aware of I suppose the ninety-nine per cent that are you know, paying attention and giving me five or whatever.

Teachers are more aware of their use of positive language and are reportedly more specific with their language when giving commands:

I kind of found just to be more kind of like self-aware as you said over your language and how you approach a situation and the kind of positive command and not giving kind of extra additional your know, commands that aren't really necessary, just kind of keeping them short and brief and to the point.

It's very specific as well, I think I was using very general kind of commands, I was saying, be respectful and things like that, whereas, you were saying the last day, you know say, I'm looking for feet on the floor; I'm looking for arms folded or whatever. Then there's no grey area, they know they're either doing it or they're not, it's very specific.

Yeah I think I've tried to be more specific in my language as well... to give a command, say exactly rather than just a general statement, you know, so that's a change, definitely a change in practice.

Teachers consider that their reaction to misbehaviour is calmer and more structured which has resulted in a calmer classroom environment:

If there's an incident in the classroom I'm calmer, like often, kids falling off chairs, you just hear a scream and you're doing something and you just look up, you haven't seen what's happened where before I'd, everybody I'd just go, OK, sit down everyone. Where now I just go down, I have a look see; get exactly what's happened before I react to the situation. So I think it's working a little bit better, so it's calmer a bit.

...it's much, the classroom, the environment is much, much better, for everyone, me and the kids.

In spite of the use of positive and proactive strategies, some teachers referred to the effectiveness and continued use of familiar negative discipline approaches when positive strategies do not work:

Yeah, trying to pick the positive and praising people who are close by that are doing something good, does sometimes work as well as giving out to ones that are being bold.

There's, I have a very lively class and like, they're very needy of me. And I go in in the morning and after lunch sometimes, they're exhausted, I'm drained by the time we get in after lunch and it's, you've told them three times, you've told them four times, and they still are messing and clicking and you've tried four different things to try and get them on track and you've done your rhyme and they do the rhyme and then they go back exactly doing what they were doing. And then you just, I let a roar and that does, it does get them on track again but like sometimes that's the only way I can get them back because they're, they don't, like there's times when they could have a conversation across the classroom like, and I've spoken to them, I've, like I had behavioural plans in place, so yeah, it's not all the time like it does work to a certain extent but sometimes like it's not all airy fairy in the classroom either.

Factors which support/hinder change

1) Working with parents

Teachers identified working with parents as a factor that can support and hinder change. Enabling factors included providing parents with information about the IY programme through parent information sessions and sending information home which meant that parents could reinforce the strategies at home.

Yeah, well parent support is great, we held a parent information morning and there was a big turnout, nearly all the parents arrived and they just spoke about how it was great that they knew the rules at home and they were practising them at home, makes it easier in class.

...we sent home sheets then so that the children had a bit of homework, the parents were aware of what was going on as well, so they knew to talk things over with the children. A lot of them brought in the homework, not all of them, but a lot of them did and the parents did really like the idea of what we were doing in the class as well.

Listening to parents and gathering information from them about their child enables teachers to understand the child's difficulties:

A big one for me was parents...the amount of information I got out of one parent...stuff that I didn't know that was going on, explained an awful lot of stuff. And if you could you know, start that information at the start of the year. It gives you an awful lot more information and understanding about the child like you know in the classroom, had you known beforehand what was going on, you know. But I think that's a lot to do with it, like if you can picture yourself in their shoes, what's going on, that gives you an awful lot more understanding.

In some cases, however, parents can be unwilling to share this information with schools:

Some of the parents can be wary enough with giving you information until they do get to know you and that's a bit of a hindrance...They're wondering why you're asking that...So I can find that difficult sometimes.

Although teachers recognise the importance of building positive relationships with parents, time is a challenging factor:

Just about building relationship with parents, but then again as you said, where are you going to get time like?

Even what's bugging me now is because we have our parent teacher meetings at the end of this month and the whole, like well I've thirty three kids, so I won't fit my parent teacher meetings into the two days of the week allotted for it anyhow. But like you've ten minutes with them, do you know that kind of a way.

You see sometimes, I think somebody said last week that they have it twice, and I think it's good to have you know, at least at the beginning of the year you gather, you're only gathering your information about the child and you're only getting to know the child, you know, but by the end of the year you see the child completely differently.

2) Time

Time pressures in schools and on teachers (e.g. curriculum pressures, school self-evaluation, lesson planning/notes) are key challenges to change:

My biggest hindrance is probably time...I wanted to put the rules of the classroom up visually on the wall. I know it's only a matter of typing them out and getting a picture but like you're so focused on everything else that's going on around you and like, I know I keep going back to it, but I know in our school between school self-evaluation and then you're on certain committees for different things and like, assessment and every school I suppose has a different focus at different times, like our school is a DEIS school so we're big into first steps and the reading and writing. And we have a schedule and in September we need to get this done and in October you're so focused on getting that one thing done that other things like can take over. So again I think, I'd love to, we will get the opportunity to say to the staff but like it is good to be reminded about other things that are important, other than just curriculum and what needs to be taught.

It's overload though there is...

Getting your notes in order and I've so many things I need to consider, like when I think when we started, like I started eleven years ago now and it was so much more relaxing, you know.

Teachers spoke about a sense of frustration in wanting develop positive relationships with children but

time pressures make this difficult:

Yeah, the idea of you know, chatting to a child and getting to know them personally...I'd really love to actually have the time and just you know, to just chat with them like, you know...

Yeah or even they suggest like having playtime with them and that like, but I'd find myself in the yard doing an activity like that, I'd love to sit down sometimes, I used to, when I started in school, teaching first, I remember I used to sit with them and do art with them. Do you know that kind of way? And now I find myself...You are racing against time...

Doing things, what am I getting ready for the next lesson and do you know, this is a good time for me to collect that or you know, or fill out that form or start my notes because someone might be coming in. Do you know that kind of way? Whereas you'd love that relaxation time again to be able to just, we have gone a bit crazy I think, just I know it's all...

3) Challenging behaviour of individual children

Teacher stress and frustration as a result challenging behaviour is regarded as a key factor hindering change in their classroom management style. This can lead teachers to resort to the use of negative discipline strategies:

It can be very difficult when something happens and it's really testing you to the limits like a particular child and like you've tried all the positive, you've given them the rewards, everything's going fine and still she managed to do whatever, like it can be very frustrating.

In saying that though, it is working, there's still times in the day though where it is challenging to be incredible years all the time and... There's, I have a very lively class and like, they're very needy of me. And I go in in the morning and after lunch sometimes, they're exhausted, I'm drained by the time we get in after lunch and it's, you've told them three times, you've told them four times, and they still are messing and clicking and you've tried four different things to try and get them on track and you've done your rhyme and they do the rhyme and then they go back exactly doing what they were doing. And then you just, I let a roar and that does, it does get them on track again but like sometimes that's the only way I can get them back because they're, they don't, like there's times when they could have a conversation across the classroom like, and I've spoken to them, I've, like I had behavioural plans in place, so yeah, it's not all the time like it does work to a certain extent but sometimes like it's not all airy fairy in the classroom either.

Individual teacher's habits can also make it difficult to implement IY strategies:

Bad habits maybe, old habits, you know, you need to constantly remind yourself, and sometimes it can be hard if you're in the throes of doing something just to say like, oh I should have said that instead of such and such or whatever, you know.

The reaction of other children to the teacher's discipline was mentioned by several teachers as challenging their approach:

What I find the hardest is being positive to that child when all the other children are looking knowing what she's just done, and you have your logic behind it but they...They think it's not fair, yeah.

Well she just did that and you're happy with her and I only did this and you, you know that kind of way. Like that can be difficult, watching the other children.

But I find that the kids know, they do know like we had, someone came into our class yesterday and the same lad, he's hyper active at the same time, so he went to the bathroom, he came in, he was making noises and marching around the place or whatever, we all ignored him because we'd practised ignoring or whatever and I was like, OK, can you try that again, out you go and come in quietly like you're supposed to come into class, and one of the kids goes, sure he's mad anyway, he's the maddest one we have in the classroom. So like they do know that he does get away with blue murder sometimes compared to what the other ones do because you can't be giving out, he can't be at it, like yeah, but they do know, they know that he's being bold and that it's up to the teacher how she reacts...And that's hard. Because they're waiting for your reaction too.

They kind of, you can see it in their head they're saying, what's she going to do now? Do you know that kind of way?

Teachers feel guilty for imposing consequences:

And I know they say like, oh you shouldn't take it personally or whatever but sometimes you know, you kind of feel, oh you know, I'm going down the consequences list and you know, I don't know maybe I'm just, I don't know I just feel you know, when you're kind of, you know, this is the consequence for your behaviour. And your heart's broken and their heart's broken and you know, you just have to follow through and you know, sometimes it can just be like for yourself you're kind of like, this every day like you know, we have to go through this you know, and I know I suppose maybe in six months it'll be you know, or next month that it does kind of get easier and that, but yeah, sometimes I just feel that.

4) Whole school approach

In order to be effective, teachers identified the need for a consistent whole school approach to IY:

And working as a whole school, having it as an approach, that it's introduced in the junior classes and it's brought up through the school up to the senior classes, that it's a whole school approach, that everybody's working off the same page and the same standards are set and the same practices and beliefs are within the whole school, I think would make it very effective.

And when each teacher has a different strategy, each teacher in each room has a different approach, so if there's a uniform approach with the children across the school you know, it might have been more kind of effective rather than, oh this is just something we're trying for a month or, you know.

In an ideal world we'd all be doing it.

....but it's a whole school approach as well, you know, and we have to all sing of the same hymn sheet as such.

Other teacher's responses to misbehaviour which are not in line with teacher's IY approach can undermine progress:

I found it difficult that the boy in my class that I was focusing on, I was really getting somewhere with him, ignoring the bad behaviour to a point, but then he'd go out to the yard and he'd do something that I would ignore and somebody else would read him out of it and put him standing at the wall or something. And I think that was very confusing for him, you know, and it's hard because you can't, like every teacher couldn't tell the whole staff about every child who's difficult in their class, we'd all get very confused. So I think it's, that was something that I found hard for him.

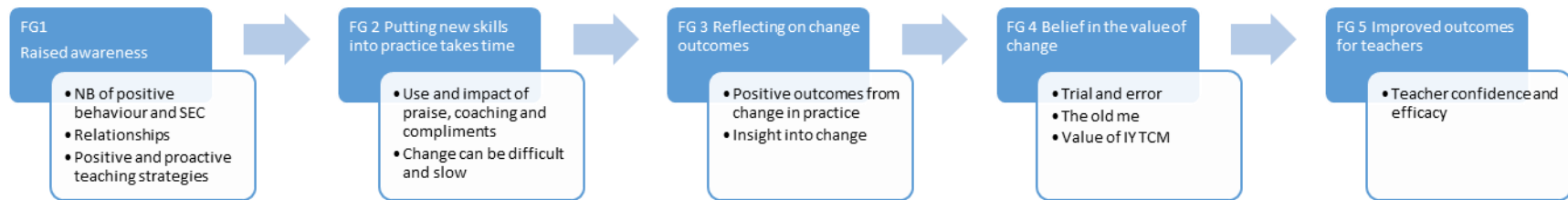
Yeah I think if it was the case that all teachers could train together so that it was a whole school approach - if you're trying to do it in a class and then it's a different approach in the yard or...

Changing practice from the 'norm' of the school can be difficult:

...the one thing that would probably hinder us would be I suppose what's usually done in the school, like we'd always, we're only third to sixth class in our school and we'd always have an open night for third class parents. But I, like [name of teacher] is third, I'm fourth, I was saying, if I decided to have something like that even in the morning time, there's kind of an expectation, well why isn't every teacher having it and that's what said to you, well if you did that then they'd be wondering why you're doing it and not everybody doing it, you'd be setting in...

It's kind of like a cultural kind of norm or like...

If you're doing it they'll all want it, that type of attitude.



Factors

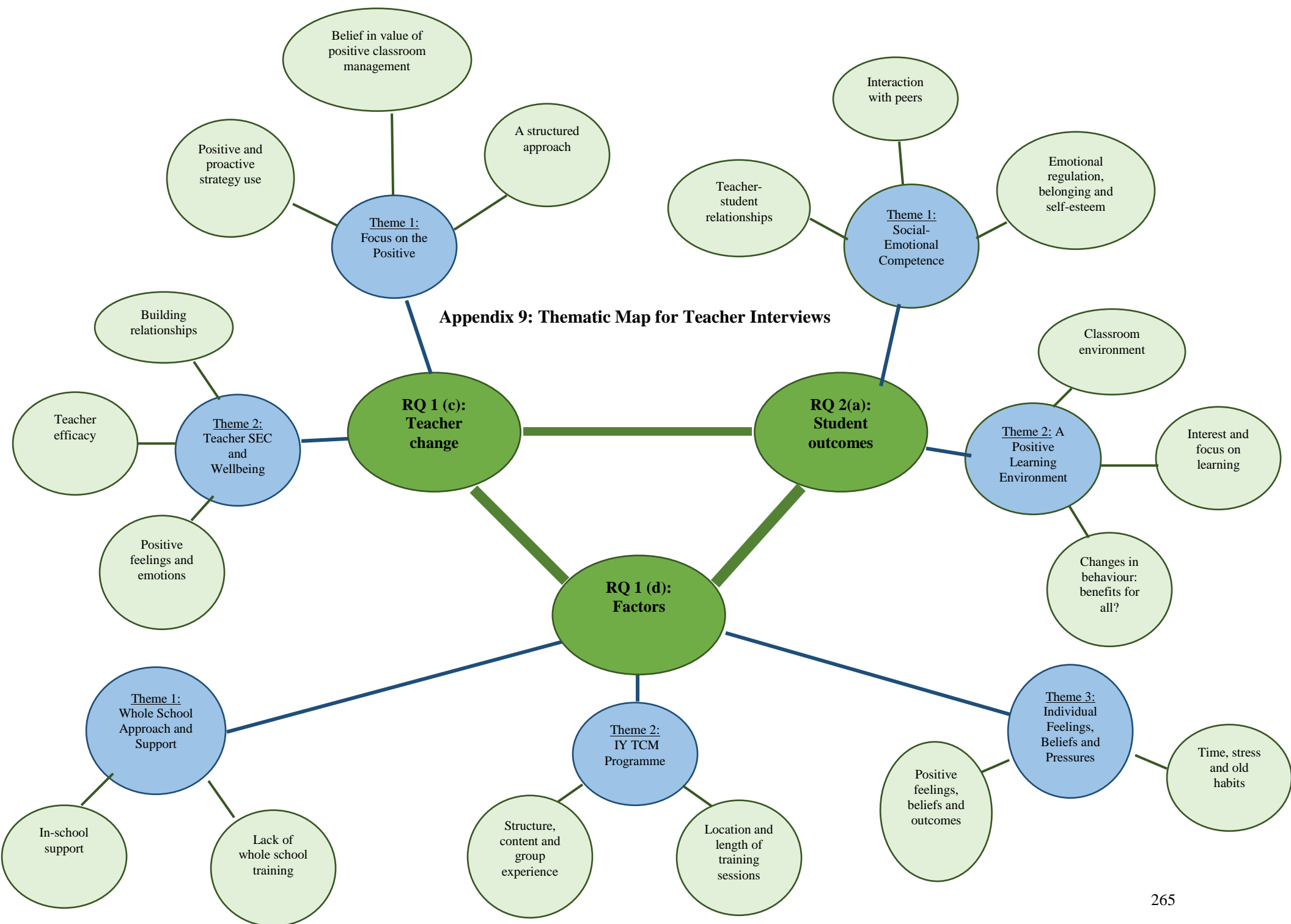
Theme 1: Whole school approach

Theme 2: Evidence-based practice: IY TCM programme

Theme 3: Individual feelings and pressures

Theme 4: Working with parents

Appendix 8: Focus Group Themes



Appendix 10: Additional Transcript Extracts for Focus Group Themes (Process of Change)

<p>Appendix 10.1</p> <p>Focus Group 1</p> <p>Theme: Raised Awareness</p>	<p>a) Positive behaviour and social-emotional competence – not just academics</p> <p><i>I'd agree with the girls there as well, like it makes you think about the holistic development of the child, it's not just academic, it's about their emotion and everything that is involved in that as well.</i></p> <p>b) Relationships</p> <p><i>Yeah I think that's something that I got from it as well, how important it is to be happy and if the children aren't happy, they won't learn. And for optimum learning to take place I suppose they need to be happy.</i></p> <p><i>The personal greeting in the morning also, I started using that and it certainly, it eases the day, you know, it gives it a good start, greeting them all and just that little acknowledgement, makes them feel important coming in. Like it might be the only acknowledgement a lot of them get for the day or even from home.</i></p> <p><i>...she told them like, you know, they were kind of like a family, so I tried that the next day...and you could nearly see the visible tension disappear. You know, you could see them kind of nearly all relaxing, we all look after them like they're our own but you never tell them...it's relaxed the whole classroom even since then, you know, a big difference, that you're looking out for them...</i></p> <p><i>And they were reminded also of how communication, you know, communicate with the parents as well is very important, you know...I mean the more help you seek from home as well and to work as a team with the parents or the guardians from home. It gives you an easier plan as well to work from.</i></p> <p>c) Positive and proactive teaching strategies</p> <p><i>Yeah I think I've tried to be more specific in my language as well... to give a command, say exactly rather than just a general statement, you know, so that's a change, definitely a change in practice.</i></p> <p><i>There's, I have a very lively class and like, they're very needy of me...I'm drained by the time we get in after lunch and it's, you've told them three times, you've told them four times, and they still are messing and clicking and you've tried four different things to try and get them on track...And then you just, I let a roar and that does, it does get them on track again but like sometimes that's the only way I can get them back because they're, they don't, like there's times when they could have a conversation across the classroom like, and I've spoken to them, I've, like I had behavioural plans in place, so yeah, it's not all the time like it does work to a certain extent but sometimes like it's not all airy fairy in the classroom either.</i></p> <p><i>If there's an incident in the classroom I'm calmer...now I just go down, I have a look see; get exactly what's happened before I react to the</i></p>
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	<p><i>situation. So I think it's working a little bit better, so it's calmer a bit.</i></p> <p><i>...like it does work to a certain extent but sometimes like it's not all airy fairy in the classroom either.</i></p>
<p>Appendix 10.2</p> <p>Focus Group 2</p> <p>Theme: Putting new skills into practice takes time</p>	<p>a) Use and impact of praise, coaching and compliments</p> <p><i>And I suppose the two obvious things were you could see the children learning to compliment each other and then obviously the ones that receive the compliments were, you know, you could see the little you know like switch on or whatever like, and that was nice...</i></p> <p><i>...I didn't realise that you know, kind of I suppose how explicitly you probably had to teach it and you know different compliments that they could give each other, you know, not just, 'Your hair is nice' like you know, how somebody does something or like a finished product or that you can compliment sharing or listening...</i></p> <p>b) Change is difficult and slow for some children</p> <p><i>...So it's interesting to see how the children who you would be specifically catering for are trying to resist the changes....</i></p>
<p>Appendix 10.3</p> <p>Focus Group 3</p> <p>Theme: Reflecting on change outcomes</p>	<p>a) Positive outcomes from change in practice</p> <p><i>I had a little boy who was having trouble using the toilet and he kept having accidents. So I found it very good using the incentives and the praise and now he is great and he uses the toilet and there has been no more accidents...</i></p> <p><i>My classroom atmosphere is just most days I walk in and I am just waiting for something to go wrong because like it is that calm and you know, totally turned around the atmosphere and it is positive and even the kids are positive like...</i></p> <p><i>I have started using the counters...I have put a wee tub on the desk and I think it is kind of more effective. I had the chart on the wall and I had the table chart and we gave them smiley faces and stars but I think putting the counters on their desk is something kind of physical and they get to count them then at the end of the week and they really like the actual physical part of it...I see them working as a team you know and they are really trying hard...You know it is encouraging their motivation and it is instant as well.</i></p> <p><i>I was giving some unexpected rewards like just every so often at a lesson if it was a lesson I know they get would get chatty during, like I have a box of sweets just...But it did keep the class focused for do you know, just for certain lessons that can get hectic.</i></p> <p><i>Special recognition is what I find is - I am using that a bit more to try and help the children with their reading and just to try and get them to practice it more. And if a teacher comes into the room I am making a much bigger deal about it when before I wouldn't have been involved like I would just praise them by myself. But now it does help when someone</i></p>

	<p><i>comes into the room and you can see them beaming down the back of the room and it does push them on to do better.</i></p> <p><i>...So, I will just have to think now about what we need to do because she doesn't want it on the desk anymore so that is the way she is now so.</i></p> <p>b)Insight into change</p> <p><i>I would say that personally that I have noticed that I would tend to kind of focus more on when I see you know, a child that is actually you know, doing something that I like you know, or expected behaviour you know, and that is one thing I really, you know, not that I never did it but I am just more conscious of it and more aware of it and the value that is in it really.</i></p> <p><i>I think my use of language has changed a bit like that I would have always been conscious that you would be naming the behaviour rather than the person and things like that. I know that from college but I think now...when I am praising them I am quite specific so that the others know why she is getting praise. So just I would probably be more like you and probably wouldn't have thought of it beforehand – what way will I put this so that everyone gets the benefit out of it and not just a child that is getting the “Well done”, do you know that kind of way?</i></p> <p><i>...and it was like a magic spell over them but it was amazing like because she said she knew herself she was wasting her energy giving out and giving instruction and this way it made proper sense you know so it is great that we can pass it on.</i></p> <p>Some of the teachers' insight into the change in their skills and practice has come from watching trainee teachers:</p> <p><i>I found that watching my – I had student in November and like that, if I had of had him last year I would have been watching him saying “Yeah he is doing great like, you know, like trying to manage the class and being vocal.” And like when I listened to what he was saying like, I am not saying he was saying anything because I probably would have said some of the sentences that he came out with as well last year but like that, I was able to help him out and tell him “Well look it's only because I am doing this programme and it is not that I am a genius but I have tried this and it is working.” So and do you know it was working for him too then so it was great to see that.</i></p> <p><i>Yeah it definitely brings a calmness. That I haven't had before like the whole class they are all calm and it rubs off on each other. Like sometimes I am watching them working and wondering what is going on there? Why are they so calm?</i></p>
<p>Appendix 10.4</p> <p>Focus Group 4</p> <p>Theme: Belief in the value of</p>	<p>a) Trial and error</p> <p><i>I had a strange month too...I kind of had these little cards done out - like ask me today why I'm happy do you know? ...And the two times I sent one home with the two children that I was targeting the next day they actually, their bad behaviour for some reason it increased and I was saying “Did I</i></p>

<p>change</p>	<p><i>do something wrong?" ...It was just very strange. But it could have been just that they were both having bad days....So I will keep it going.</i></p> <p>b) The ‘old me’ <i>And I think it worked because two years ago I tried ignoring, I didn’t try for long enough and the child, like did break me. Well just I gave in to the child. So I learned there’s only one way to do it and just you have to keep at it.</i></p> <p><i>I think for me I’m probably more I don’t know how you’d describe - maybe open with the children in telling them like “This is what I’m doing.” Or you know I don’t know I suppose did I just expect them to know I was ignoring this behaviour but you know that I’m kind of saying like we can ignore this and kind of as well with the reminders and that you know, to remind them of consequences that you know if this happens and you know if it did happen again and just to kind of I suppose just really verbalise, you know.</i></p> <p><i>...I think other people said - like you do slip back and you kind of have to you know really kind of immerse yourself in you know the thinking of it and kind of get back on track...</i></p> <p>c) Belief in the value of IY TCM <i>Yeah, positivity I think that’s the main thing that I got from this course anyway like definitely your attitude is going to go more towards the positive than negative....And it rubs off on the kids too like you know that you’re positive like the negativity would be gone like. And you’re just using positive statements all the time like and it just makes a huge change to even the atmosphere in the class. And it’s like a rolling stone, once you start using positive statements, behaviour kind of the whole class gets on to it and...</i></p>
<p>Appendix 10.5</p> <p>Focus Group 5</p> <p>Theme: Improved outcomes for teachers</p>	<p>a) Teacher confidence and efficacy <i>I would say that I felt the whole, oh gosh, yeah the time-out, from the time-out the IY programme kind of puts a positive spin on it. And it is something I never thought of or never would have used as you know in a positive kind of way...</i></p> <p><i>I think kind of for myself knowing that there is a place for consequences for time-out or whatever the consequence might be but that you do it from a calmer place after having gone through the hierarchy and that you have the system yourself so that if you have to use a consequence that you know yourself it is not a reaction, it is not you know.</i></p> <p><i>We always worry about the parent let’s say who gives out if somebody has missed whatever or that someone was given time-out, do you know that kind of way whereas like when you have the back up now to say - well there is a hierarchy – even using that word you know that kind of way. And you can see that this is the way it is done. I think it would be more logical even for them to understand what’s happened and why the consequences were the way they were.</i></p>

	<p><i>It is just you have in your head where you are and this because it is the same offenders nearly all the time and it is just you are more calm and you are more sure about where you are going with this before you have the major consequence.</i></p>
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Appendix 11: Additional Transcript Extracts for Focus Group Themes (Factors)

<p>Appendix 11.1</p> <p>Whole school approach</p>	<p><i>What factors have hindered, like I find I'm starting to feel I'm making progress with a particular child but she seems to still find herself in a lot of trouble in the school. So, like my factor that's hindering me I suppose at the minute is like when she gets in trouble in the yard or with the principal, then it's very awkward because you're after making such progress like relationship wise, but then you still have to, if something has happened you still have to deal with that situation so that's what I was finding awkward at the minute..(FG 2)</i></p> <p><i>...I find sometimes that when an SNA is travelling from classroom to classroom they kind of come in and I don't know whether it is with a different energy or different focus but it kind of throws your plan sometimes...I just kind of find you are on this positive buzz and you are trying to be all positive in the classroom and the next thing you have somebody coming in and they start throwing out an odd command every so often and it is... sometimes a child gets a bit confused as to what's going on. (FG 5)</i></p> <p><i>Yeah because it can just take the one situation out in the yard for a lot of the things that you have worked towards that you can just go backwards by five steps... (FG 3)</i></p> <p><i>Having the support of the school principal regarding the IY programme was only mentioned by one teacher: We also ordered in the school the information pack for parents and we're hoping to send that home so that to give them some literature on the programme and that they can read around it too. It was something I found that the school kind of supported getting parents on board and they were happy and keen to learn more about the programme. (FG 4)</i></p>
<p>Appendix 11.2</p> <p>Evidence-based practice – IY TCM programme</p>	<p><i>...But then you go back out again like and the month is good and you can try out something and see how it goes and then we will all be talking about the different things today as well so it mightn't feel so bad if someone else's was an absolute flop as well or if it was a success you can see how they did it so it does help with the sessions. (FG 3)</i></p> <p><i>I think for me it's more personally like you know I think you feel kind of more confident that you kind of have a bank of resources that you can kind of go to and if you feel this isn't working with this child then there's something else that you can try. Like I think prior to the course - I probably would have come up with a lot of them - but it's how to</i></p>

	<p><i>implement them...(FG 4)</i></p> <p><i>...when you listen to other people speaking it's "Oh yeah, I can see yeah" ... (FG 3)</i></p> <p><i>I find just the way we have every month we have a meeting and we meet together. I always leave very positive and kind of have an idea of what I am going to try and implement next month...So I think the way the programme is structured that it is every month and step by step we try something out for myself as a teacher... (FG 3)</i></p> <p><i>And even just talking to everybody else here it's just reassuring that you actually aren't doing everything wrong or like it just kind of builds your confidence I find anyway ...(FG 4)</i></p> <p><i>I find the videos and I know we laugh at the videos sometimes but I find the videos good because you get to see, I know again it's obvious, but you get to see somebody actually going through it like, do you know that kind of way, you see it like, the particular lady with the apron I always think of, she's so calm, do you know that kind of a way and she does constitute what that chapter's about, like she constantly talks through what the children are actually doing and they're hearing it, do you know that kind of a way. So I do find the videos good, even though as I have found sometimes they're American or sometimes it's things that don't work, you know that kind of way. (FG 2)</i></p> <p><i>Well I think supported as in a lot of people kind of said it this morning is you feel more confident that yes I am following the programme it is not just I have kind of dreamed this up kind of thing that you know that there is kind of logic and reason to it that you know you can say look it is more focused I suppose and you are just confident in the sense that you know, you know you are following the steps...So I suppose really it is a confidence just that you do need and feel that you have the support you know and the experience of listening to other teachers and you know that you are kind of not out there on your own and what you are doing is you know best practice and what other people do in that sense. (FG 5)</i></p> <p><i>I was always worried as a teacher whether like when you do have consequences and we are doing something are we correct or incorrect, do you know what I mean?...so for that reason as you say like that there is a logical hierarchy as such and that you know that using the time-out and the loss of privileges that they are correct like ways to deal with certain situations...yeah and if you are using them you kind of have gone through your steps. And you have come to them as an end result rather than first instance. (FG 5)</i></p> <p><i>I find it very good now with infants but if you're trying to use it on the yard with older children or that, you know the phrases, you need to kind of change and adapt a bit. (FG 2)</i></p>
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<p>Appendix 11.3</p> <p>Individual feelings and pressures</p>	<p><i>At the moment I am having a bit of a difficulty in my class with influencing any kind of loss of privileges or anything that could be seen as negative even something very simple like giving an orange card to some students. So first I give a warning and then change a green card to orange for some students and it is just in recent weeks and there are one or two students and they take it very negatively you know. They are very defiant, they have been given very clear parameters you know and sometimes they even indicate that they intend on doing such and such a thing like ...and you know a complete refusal to do what is being put in place. And then crying and you know she said to me “you hate me you know and this kind of thing and it is very difficult because I am left with absolutely nothing you know...It is just very difficult when a child kind of says to you...(FG 5)</i></p> <p><i>Similarly, I find some of the other children can be a factor too because like you know the way obviously they are only kids and then you have this big plan in place for a particular child who is behaving in a certain way. You know what to do but you can’t necessarily explain it to other children... (FG 3)</i></p> <p><i>I have found with all the different types of coaching and all the new skills that we would have discussed in the past two sessions as a whole for my class have been great, but I find for the target children who may have more difficulties, at the moment they seem to be resisting kind of minor changes and minor approaches... (FG 2)</i></p> <p><i>And I know they say like, oh you shouldn’t take it personally or whatever but sometimes you know, you kind of feel, oh you know, I’m going down the consequences list and you know, I don’t know maybe I’m just, I don’t know I just feel you know, when you’re kind of, you know, this is the consequence for your behaviour. And your heart’s broken and their heart’s broken and you know, you just have to follow through... (FG 1)</i></p> <p><i>In a situation just the normal instinct is to be negative...And it was hard at the start not to react to a situation just it was the norm but now it’s like my attitude has just totally changed like and it’s a lot easier now than it was at the start. (FG 4)</i></p> <p><i>What I find the hardest is being positive to that child when all the other children are looking knowing what she’s just done, and you have your logic behind it but they...They think it’s not fair, yeah. (FG 1)</i></p> <p><i>It is hard to keep on top of all of the behaviour plans...If it was one child yeah and it is great but like three you would be writing all week and you still wouldn’t have it all done.... (FG 5)</i></p> <p><i>Yeah it goes down to time again, you just don’t have time to do it all and that can become frustrating as well because now that we know that it works you are like well maybe I am not just putting in enough, maybe I just need not to ever do anything ever again. (FG 5)</i></p> <p><i>I find if I have a day where I start to doubt myself it’s very hard. Because</i></p>
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	<p><i>the boy that I'm targeting in my class has rubbed so many staff members up the wrong way. And then they're coming to me and they're saying "You shouldn't have to put up with that." And you know and I'm really trying to re-focus myself then and say "No I'm doing the right thing." (FG 4)</i></p> <p>Having another adult in the room would ease this pressure and one teacher suggests getting support from the SEN team in the form of team teaching: <i>So that's maybe where you need the school to support you so other adults that come for EAL or learning support that maybe you can you know balance the workload, kind of share it out if rather than say the EAL children going out for EAL in a group maybe the EAL teacher can come in and support you in the class and do the activities as a whole or maybe have stations set up for literacy. (FG 5)</i></p>
<p>Appendix 11.4</p> <p>Working with parents</p>	<p><i>But like sometimes when you do send a child home who's looking for attention and seeks negative attention or positive attention, if they have I suppose, a family situation at home that is used to shouting and slapping and fighting and do you know. Sometimes it's hard to remind them that in school they can be different you know because it's hard for a child to have nearly like two personalities going on. (FG 4)</i></p> <p><i>...we had a meeting with the parents of some of the target children and we just informed them about the programme and what was being implemented in the class...And the parents were very keen to learn more so that they could implement something similar at home, to then be able to correct the behaviours. So there was the same expectations at school and at home...(FG 4)</i></p>

Appendix 12: Additional Transcript Extracts for Teacher Interviews (Teacher Change)

<p>Appendix 12.1</p> <p>Theme 1: Focus on the Positive</p>	<p>a) Positive and proactive strategy use</p> <p><i>I used an awful lot more behavioural charts and before I was very worried about having special behavioural charts for the children. Like I was worried of what the children would think and why did they get a behaviour chart and they're getting extra rewards and I'm not? But the children know themselves and it really has improved the environment in the classroom. (T 5)</i></p> <p><i>...when we talked about ignoring...That was the most significant thing because I hadn't previously had a structured way of ignoring minor discipline and also I had never taught the other children openly to ignore those minor misbehaviours...And it really made a big difference... (T 7)</i></p> <p><i>Just kind of proactive, kind of being proactive in the classroom as well because like seeing that something was going to happen and being able to prevent it. (T 5)</i></p>
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	<p><i>Definitely taking the time out between subjects to reward and to reinforce...whereas before, I would have kind of done it at the end of the day, whereas now I'm kind of separating it into break, lunch and after lunch. (T 4)</i></p> <p><i>The motivating through incentives, that was really good because even though I would have had incentives before, the way that I approached doing them this time was different. [What was different about it?] Well, this time it was different because I had groups, so for each table group, I had group rewards, but also I had individual rewards for key students. So I suppose it was how much it meant to the children giving out the rewards and even things like the little Dina School, the ones that you send home, the communications systems that you send home. The happygrams, yes. They meant an awful lot to the children...Yes, and even to the parents. The parents were delighted to receive them and will come back in and said, 'It's amazing how much that it means to the child. It means the whole world to them.' How much it meant and the home-school link then by creating the positive relationships between school and home. (T 7)</i></p> <p><i>But I would tell them now what behaviour I am looking for and even like... (T 2)</i></p> <p>b) Belief in the value of positive classroom management</p> <p><i>I suppose I would think of the children differently. Your expectations might change. My expectations of those had changed a little. [What do you mean?] In that, I'm looking at it far more positively... (T 10)</i></p> <p><i>Probably the most significant change...was my theory about teaching was how the educational aspect of it was most important. And behaviour would have been important alright but, I didn't realise that without the behaviour that you wouldn't actually get the learning and the teaching going on in the classroom as much as you do when the behaviour is good. I suppose in a nutshell I realised after doing the course that, when the behaviour is good the teaching is easier and the learning is better rather than the education..... I suppose I would have felt curriculum first, behaviour second, whereas now, I kind of have changed that way of thinking... (T 2)</i></p> <p><i>Biggest change was probably positive, to be way more positive than what I was and not to rely on old kind of teaching methods...to focus on all the positive things instead of being more negative. [And how or why has that been significant for you?] I probably would have been a bit negative. You don't realise it until you do the IY course how negative you can be in the classroom. (T 8)</i></p> <p>c) A structured approach</p> <p><i>I think all, you know all your steps, all the various steps, it's so structured...you know you can follow your steps one to seven and it means you are being totally fair with everybody, plus it's something that you can have in, you know, you have it in your mind, you're not just chancing your</i></p>
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	<p>arm as you go along... (T 12)</p> <p><i>I have to say most of what we learned is kind of obvious now that we've learnt it, do you know that kind of a way, and like it all seems fairly logical. However, putting it with the, even with the triangle here in front of me, like putting a set way of doing things or I suppose a system, like having a name as well on things, that was probably my biggest change in knowledge, naming different things, naming behaviours. (T 2)</i></p> <p><i>...I think the IY course was definitely very related to the way I was trained...So it was all very familiar to me. So it linked in with my training. It definitely reinforced the way I was trained and it kind of refreshed it as well and gave it more credence... (T 4)</i></p> <p><i>I think it was em, being aware of what I was doing already, and kind of having more faith in that, then... A lot of it I was doing already, but I don't think I knew the value of it until that was pointed out...(T 4)</i></p>
<p>Appendix 12.2</p> <p>Theme 2: Teacher Social-Emotional Competence and Wellbeing</p>	<p>a) Building relationships</p> <p><i>I'm using Happy Dinas in the class as well so the parents are aware of the children's improvements and it's rarely that I have to go home with bad news, unless there's something occurring. They're being involved. They're coming in and they're hearing good news as well, so the parents have a good relationship. I have a good relationship with the parents as a result. And they're very fair. The parents understand that there's a reason if I'm talking to them about behaviour, there's a reason they've had this, that and the other amount of chances and this is the reason I'm talking to them now. And then they're getting the good news as well, which is good. (T 5)</i></p> <p><i>...I do forge strong relationships with the children anyway, so I think that was already there, but I think that it has, as I say, reminded and brought it back and brought it to the forefront. It was always something I did as a by the way, but this had made it a forerunner and the important, the foundation in the classroom, rather than something by the way. (T 10)</i></p> <p><i>In knowledge, just being more open with the parents at home, giving them more communications, sending home letters and the parents will come back and say that they really appreciated the letters and they love to see what rules that we have in class, and that they use them at home as well, so it was great that we were both doing the same. (T 6)</i></p> <p><i>...In the past I may have brought them in and probably told them what was happening and what was going wrong, and we would have discussed how we would have changed it. But when it was more focused, when they knew she had to do step 1, 2, 3 and that I was going to do this in school, and if she comes home with the 5 ticks at the end of the week, you're going to do this at home and this is the behaviour we are looking for at home as well. So for that reason I suppose the interaction with some of the parents has</i></p>

	<p><i>been more focused. (T 4)</i></p> <p><i>I find, I found in my first few years teaching that I would be very nervous talking to parents and approaching parents, but as the years have gone on and definitely with the, the course, I'm a lot more confident speaking to the parents I feel, you're the teacher, you're there to support them and help them. I would say my confidence has gone up definitely. (T 8)</i></p> <p><i>I think this year and because of the IY course, I think I'm a lot more kind of empathetic towards the child and the family and the situation, and I think that makes you deal with everybody differently then. I think when you're speaking to parents, you're thinking about it from a different point of view, you're definitely not as, not that you would be on the attack, but you're definitely more thinking about what they have to deal with when they go home. And I know this child in particular I built up a really positive relationship with his mum and it's really it's worth its weight in gold because when we need to suggest anything or need to ring and say, 'He's having a bad day' she doesn't question coming in to have a chat with us, and I know in the past she would have. (T 4)</i></p> <p><i>...knowing that the building relationships is so important, it draws your attention to the fact that doing that is what makes a difference. And you do have so much better relationships when you make the effort to build a relationship with the children and you don't have the same behavioural problems. (T 7)</i></p> <p><i>Yes, I have made an effort just to greet them personally in the morning and like, they would come running up to you in Senior Infants anyway but you can tend to say oh I'm trying to do a job or you can tend to try to block it off, but I just made a conscious effort to listen to their news and to greet them by name, and to refer back to things that they have already told me. It is really lovely now and it just, kind of does create a group environment and a warm environment and I have told them, one of the things that I liked was that I have told them that teacher cares about them. You know you kind of take that for granted but they don't. So telling them explicitly that, they get real delighted and it's lovely. (T 8)</i></p> <p>b) Teacher efficacy</p> <p><i>In my beliefs...That's been significant for me because I was nervous to give negative consequences. I suppose I don't want to give a negative consequence that I feel will damage the relationship between teacher and child, or that would make a child feel bad. So knowing that if a child does something intentionally that they shouldn't do and that they know they shouldn't do, knowing that it's ok to give the negative consequence and having a structure in place, like the logical or natural consequence. (T 7)</i></p> <p><i>I think it was em, being aware of what I was doing already, and kind of having more faith in that, then...A lot of it I was doing already, but I don't think I knew the value of it until that was pointed out, so it gave me more</i></p>
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	<p><i>confidence...So it was great to kind of go away one day a month and be told, 'Ok, you're doing a good job. You're doing what you're supposed to be doing.'... (T 4)</i></p> <p><i>There has been one or two instances where there have been outbursts but I kind of feel I don't know how I would have dealt with it if I hadn't done the course...I was able to say to the class you can carry on with your work and don't be worrying about what's going on down here, I'm here and being calm and saying this is what I'm going to do. (T 1)</i></p> <p><i>So I did really trust in the programme even though I kind of felt I took a step forward and then maybe three steps back but what I felt consistency, that's what I got from the course was just to be consistent and that things might escalate before they get better and just really trusting in the programme and there's no quick fix overnight and it is a challenge, it's a work in progress, but that would be my main thing. (T 3)</i></p> <p><i>I would place belief and trust in the programme that persistence will get me there in the end even though there were many challenges along the way, I just had to believe that it was going to work and that changes were going to happen. (T 3)</i></p> <p><i>I think it makes you think for yourself and not look to be given strategies or being told. I think each teacher kind of knows intrinsically what to do in a situation, but I think we don't have the confidence in ourselves to kind of go ahead and do that and speak up for ourselves or have courage in our convictions. (T 4)</i></p> <p><i>I suppose an openness, well as I say, I was always open to change and to progress and to different things...so I'm more researching new ideas and programmes and even on Twitter and different things like that. I'm following different sites and that, so I think it has kind of awakened an interest, I suppose, yes. (T 10)</i></p> <p>c) Positive feelings and emotions</p> <p><i>Overall, in my classroom, the way I deal with situations has completely changed. Where before I would inevitably raise my voice, I don't raise it as much anymore. My instructions are clearer. I think I'm a fairer teacher because I have a plan in place for the individuals in my class and they know what happens when the steps that are taken. They know. So for that reason, that wasn't there in September, so it's there now. [And how or why is that significant for you?] Because I don't give out as much. Yeah, I'm not giving out as much and I'm not as stressed when I'm not giving out and the children respond better when it's a calmer environment. And like there's been such a huge change between January and now. Huge. And the children are enjoying much more. I get more done because the behaviour has come on so much. (T 5)</i></p> <p><i>More patient. Wait until you dive in and maybe ignore a lot of the stuff</i></p>
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	<p><i>that probably went on before that now that I'd just ignore and not even bother with it and maybe deal with it later on, rather than at that moment. So it would help me wait instead of running into a situation, to wait and let it dissolve itself and then maybe talk to the child afterwards. (T 8)</i></p> <p><i>...So each time I was very deflated but when I would leave the course I would kind of feel I had something new to try and implement or I had the next step so I would leave very positive... (T 3)</i></p> <p><i>Well first of all to know that if you have a very challenging class one year that as part of the group there are others who experience the same so it's having the knowledge to know that it's not that you're failing as a teacher, it's just that you have new challenges and you have to find a new way by using the new set of knowledge that you have gained from the course. So to be able to apply the course to the reality of it. (T 3)</i></p> <p><i>Well, I know now the warning signs and I know now that I could probably read a situation better, that it's about to happen. Before like if there was a situation that was going to escalate, I'd probably let it escalate and there'd be an explosion in the classroom, where now I know where maybe it's going to happen and I just either ignore it or else maybe give the child a break. Like I'm able to read situations a lot better than what I was. (T 8)</i></p> <p>One teacher talked about how the IY training has enabled her to fit in with the whole school IY approach in her school:</p> <p><i>Well, I suppose as a teacher, working here in the school that I'm in, I feel that knowing the background behind Incredible Years is really important because the other teachers in the school here use the skills and I feel that I can fit in line with what the teachers are doing...And it means that when you're working with children from other classes, say on the yard or something like that where you come across other children, you can feel confident in knowing that you're doing your behaviour. That same message. (T 7)</i></p>
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Appendix 13: Additional Transcript Extracts for Teacher Interviews (Factors)

Appendix 13.1	a) In- school support
Theme 1: Whole School Approach and Support	<p><i>I do have another staff member in the room with me, an SNA and she was very much on board with the programme too and we both followed the same steps so when I came back from each month I would have shown her the pack and would have went through as much as possible and then I would have tried to model it for her as best I could and then she would try to carry it on. So if it was break time it was consistent in the yard and she's in the yard with them every day so it's not one rule for one adult and another rule for another adult. We worked as a team so myself, the other adult in my room and really the school as well they were very</i></p>

	<p>understanding. (T 3)</p> <p><i>Well, I suppose just having the support of the instructors there was really good and knowing that they had said that they were available if you needed to talk about something. (T 7)</i></p> <p><i>I suppose the fact that it's an IY school. Yes, it has, like the fact that everybody is on the same page, really. It does help and the principal is very, very supportive as well, so she would come in and she'd be very Incredible Years as well, so it really does help. (T 5)</i></p> <p>b) Lack of whole school training</p> <p><i>Continuity. I think I'd love to see them go into a class next year where a teacher is IY trained. I think whole school training would have a lot to do with it as well, and not just the teachers, the mainstream teachers, but the SNAs and the auxiliary staff who are in the school. Even when they meet our secretary in the corridor or our caretaker, that everybody's kind of singing from the same hymn sheet and everybody greets each other with a smile or has a positive word to say. I know that's a bit wishful thinking, so that would push it on, I think. (T 4)</i></p> <p><i>The odd time you might have somebody on a good path and something happens on a corridor or in the hall and another adult might intervene...oh yes and then if you have a child and you're really encouraging them and catching them being good and giving them praise and telling them how wonderful they are and then you have to leave, it's break time or you have to go supervise somewhere else and another adult comes in and something happens and all the hard work done that morning can just be taken away in a few short seconds and you can come back to a scenario where maybe you had been working. So that's something that might hinder it, another adult. Even though they're aware that my classroom is definitely an Incredible Years classroom, just their approach might be different. (T 3)</i></p> <p><i>Something I would have ignored would have been picked up on in the yard and a huge drama made of it. And then you're kind of inclined to have to agree with the other adult and be seen to be supportive of your colleagues, but at the same time, not go back on that positive relationship you've built up with the child...And I think that was really difficult sometimes because an adult might be really upset by the way he spoke to them in the yard and you want to be seen to correct him, but at the same time don't ruin all of the work that was done. (T 4)</i></p> <p><i>Oh well, I think refreshers programme, it really would be helpful because even talking to one of my colleagues, she did it two years ago and she'll say herself she's forgotten half of the things because you just get into your routine and all of a sudden, bad habits can creep back in. And a refresher course would really help it... (T 5)</i></p>
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	<p><i>It is difficult to change things on a school level unless somebody knows what you're talking about...So I think the only way that you'd have an impact at school level would be if the school took part in the course together at the same time (T 2)</i></p> <p><i>I think [name of EP service] should be fighting to introduce a module of this even in the last term of teaching in teacher training schools...it'd make an awful lot of difference to new teachers coming out. An awful lot of difference, or else for it to be compulsory in the first five years of teaching. It's a long-term thing and you need to get it early on to get the maximum benefit out of it and if every classroom could focus on positive behaviour and the little things, it'd be an awful lot of difference to an awful lot of children, without a doubt...If we had something like this in teacher training colleges, it would be...way more prepared and it would be an invaluable resource to teachers coming out. A lifetime resource compared to a lot of the stuff that we do. (T 8)</i></p>
<p>Appendix 13.2</p> <p>Theme 2: IY TCM Programme</p>	<p>a) Structure, content and group experience</p> <p><i>I think that it's a very positive programme, a very positive way that it's laid out and it's very structured. And the way that you start off by building the relationships and just focusing on that, that's really important...Not starting at the negative end, starting at the positive end is the most important. (T 7)</i></p> <p><i>The structure of it, yeah that would be the main thing. The way it was broken down into modules was like building blocks so you weren't given everything at the beginning. I think if I had been given everything at the beginning there would have been times in October/November/December that I would have jumped to the end. It was a building block and it was good to do that with the children because they got used to having the steps, it wasn't too much for them either and I suppose as I was challenged with challenging behaviour each month there was another building block to add on... so the fact that it was a progression, I think it's nicely planned out that way. (T 3)</i></p> <p><i>...it's quite Americanised...and in that sense I would have liked to see the vignettes in a bit more of an Irish context as well in the sense that am I right in saying that some of them were special school. In the context of a mainstream classroom without an SNA support. Yes because it's a bit more true to life if you like for us in Ireland... (T 1)</i></p> <p><i>I liked the way that there was the talk, the discussion, I liked that group mix you know that you get to discuss and hear other people's opinions and I do think that's something that teachers appreciate being given the opportunity to do it and discuss it and to have yourself and [name of EP] there to say yes or no and to give guidance and help or say you could try this or that in that sense... (T 1)</i></p> <p><i>It's good to look at the vignettes to see other people's practice, and say oh</i></p>

	<p><i>God that's me or oh God that's not me, I need to change that. (T 9)</i></p> <p><i>I liked the way that there was the talk, the discussion, I liked that group mix you know that you get to discuss and hear other people's opinions and I do think that's something that teachers appreciate being given the opportunity to do it and discuss it and to have yourself and [name of EP] there to say yes or no and to give guidance and help or say you could try this or that in that sense...and changing your perception because sometimes I suppose and especially when you're teaching a while you're kinda like that's the way I do it and what if it doesn't work so just seeing it from a different angle and from a different point of view. (T 1)</i></p> <p><i>The discussions throughout the course were really helpful, meeting the other teachers, listening to them and their problems as well and you realise that it wasn't just you. It really helped. I liked the way you could meet the teachers. I really found that so helpful and the discussions with the teachers and using problems that they had to work together using the Incredible Years strategies to deal with their problem. And then they'd go back and they might come back saying, 'This worked' or 'This had no impact whatsoever.' And that really helped. (T 5)</i></p> <p><i>Having enough time to talk about things, that was really important, and hearing other people's examples and discussions. It's amazing how they stay with you and stay in your head. (T 7)'</i></p> <p><i>I liked the way that there was the talk, the discussion, I liked that group mix you know that you get to discuss and hear other people's opinions and I do think that's something that teachers appreciate being given the opportunity to do it and discuss it and to have yourself and [name of EP] there to say yes or no and to give guidance and help or say you could try this or that in that sense... (T 1)</i></p> <p><i>The discussions throughout the course were really helpful, meeting the other teachers, listening to them and their problems as well and you realise that it wasn't just you. It really helped. (T 5)</i></p> <p>b)Location and length of training sessions</p> <p><i>Well, one of the biggest things was the fact that you went to somewhere else. I think even not doing it after school because sometimes after school, you don't absorb information. So doing it during the daytime was probably really good. (T 5)</i></p>
<p>Appendix 13.3</p> <p>Theme 3: Individual Feelings, Beliefs and Pressures</p>	<p>a) Positive feelings, beliefs and outcomes</p> <p><i>You have to be open to change. You have to be willing to change and for the good of the class and the children, like you have to be able to change your own behaviour and probably just open to change, yes. And like you have to be willing to do the course. If you're not willing to do the course, there's no point. (T 8)</i></p> <p><i>I think myself I was very open to the programme and I was willing to</i></p>

	<p><i>implement each stage of the programme, it does need time and it does need you fully on board and you do have to be committed to continuously go through it even if behaviours escalate...to just be consistent. (T 3)</i></p> <p><i>Well, I feel I was open to changing and that was a huge help because when you have a class that is difficult, you're willing to try anything. And I was very willing to open up to any suggestions whatsoever. (T 5)</i></p> <p><i>I suppose the class to a certain extent and when you do implement it or try something new that you see the positive or the growth or you see their confidence or that you get to know them a little bit better. (T 1)</i></p> <p>b) Time, stress and old habits</p> <p><i>So classroom life is a busy life and it's a short day. There's always stuff going on in the school as well. (T 8)</i></p> <p><i>There was an awful lot of course content, I did feel that you know. There was an awful lot to take on, to get your head around and understand, that was hard. I suppose in isolation, not in isolation that but in the sense that if you have one child in your class and you have your little plan that's fine but when you have 3 or 4 it's very, very hard to keep it going...Trying to keep on top of all of the strategies...really I'm consciously aware of how difficult that now is. (T 1)</i></p> <p><i>...We did notice that those particular parents put it back to the school well that it's up to you to sort, it's your issue, we're not here, that's your job. (T 3)</i></p>
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Appendix 14: Additional Transcript Extracts for Teacher Interviews (Student Outcomes)

<p>Appendix 14.1</p> <p>Theme 1: Social- Emotional Competence</p>	<p>a) Teacher-student relationships</p> <p><i>...one of the things that I liked was that I have told them that teacher cares about them. You know you kind of take that for granted but they don't. So telling them explicitly that, they get real delighted and it's lovely. (T 10)</i></p> <p><i>I had stronger relationships with the children this year than any other year...it's definitely a more personal one this year and I think a more positive one. (T 8)</i></p> <p><i>Because when we built up the relationships, the problems that had been there at the start were no longer a problem. (T 7)</i></p> <p><i>And just being able to chat to her. I think that it meant that she handled things better. I mean she still had a difficult time, but it just meant that we did develop a relationship, which we hadn't actively tried to develop before. So I did try to develop a relationship with her that she could talk to me about the problems that she was having, and she did talk to me about the problems and it made a difference then. It was great. Yeah. (T 7)</i></p>
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b) Interaction with peers

I feel the class as a group have really got close...I find that they take turns and they listen to one another which is a great improvement since September, they have come a long way and they seem like a very happy group. (T 3)

...we call ourselves a team which is lovely, I can say they're on your team, or it's up to us to make everybody feel good and in themselves as well, I'm working on that, trying to work on the positive self-image, and trying to get the children to find something good that they have done or find something that they are good at, and giving compliments to themselves and each other, so yeah they have loved that and they are just delighted with themselves. (T 10)

Again, the teamwork is working very well...they are a very responsible little crew. (T 11)

...we did the session and we gave compliments, giving compliments and we did a number of SPHE sessions with circle time...that made a big difference on making sure that all the children in the room were friends with each other and that they knew that they were a whole class and that every child in the class was friends and giving a compliment was a really nice way of teaching them how to give a compliment, but also of building that relationship amongst themselves. (T 7)

Well I found when they were in their play areas in the morning for their integrated play that if a disagreement occurred I was trying to encourage them to problem solve...you could kind of see it was the Incredible Years programme the answers that they gave whereas at the beginning of the programme they probably would have taken a strop or not wanted to talk about it or gone into a bit of a tantrum. So I found they were able to talk through it...that they had the language to problem solve. So that would be the main thing I would have found. (T 3)

c) Emotional regulation, belonging and self-esteem

I could just see her blooming from the praise really and she is just eager for more all the time. (T 10)

I suppose giving the home-school links, the happygrams...And they'll come back to me then the next day and they'll say that, 'My parents said they were really proud of me.' And seeing how much that means to the children and the motivation that it gives to the children, that's made a big difference in the class. (T 7)

But even just sending home the happygrams...it's boosting their self-esteem and it's encouraging good behaviour and role modeling...Children love to be praised and it's all about catching them being good... (T 3)

...one of the things that we worked on was like being able to say when you're in a bad mood and to talk about your feelings. So sometimes she did

	<p><i>come in feeling bad, but even just the experience of sharing it and for letting me know that maybe that she's not feeling so good...So I think that that changed her behaviour and then over time, I think maybe when she started to feel a bit more understood in the classroom, she started to feel more happy. And by the time the parent-teacher meeting came around in January, I was able to report that she's very agreeable, very happy to do her work, very positive about coming to school... (T 7)</i></p> <p><i>They feel safer, they feel happier to talk out...I would hope that because they are feeling happier that, you know, they are learning more, they are, you know, progressing. (T 12)</i></p>
Appendix 14.2 Theme 2: A Positive Learning Environment	<p>a) Classroom environment <i>...the minute I brought the positive strategies into the classroom, that it just changed the whole classroom atmosphere and then everybody comes on board, classroom and the teacher. So for children to be in a very positive atmosphere, it's for their own wellbeing going home in the evening, not worrying about coming in in the morning, the teacher being cross. (T 8)</i></p> <p>b) Interest and focus on learning <i>They are more settled and more calm when they are doing their work, they stay in their seats and they put up their hands, so they are listening better... (T 6)</i></p> <p><i>Well, I think so, definitely, because we were more focused on learning. We didn't have to spend time dealing with behavioural problems and it meant that we got a lot more work covered and the children were more focused when they were doing their work. So I do feel that it helped them to learn a greater volume of work and to learn the work better. (T 7)</i></p> <p><i>They can be quite chatty and they can shout out and you can tend to let things like that go, but I think this programme has reminded them. Little things like using the bell, using the visual reminders. That has all led to smoother transitions and when they come in from play, they can tend to be, kind of, up high, so it does bring them back down quite quickly and get them settled back down to the work. (T 10)</i></p> <p>c) Changes in behaviour – benefits for all? <i>Well I had a little boy who was terrified of going to the toilets and he would cry his eyes out, and he, he would just refuse to go to the toilet and he was having accidents, and he thought there was wolves in the toilets. So we had, again I did role play, and we talked about the toilets and we used the puppets to show that, do you know, like you can go to the toilet, there are no wolves in there...He will go to the toilet no problem. (T 6)</i></p> <p><i>...I'd say I speak to her maybe, two times a week in a negative sense. Whereas in the first week her name must have been said fifty times a day! Do you know that kind of a way? It's been a complete turnaround and she really is focused on her classwork now, and she is trying to make positive relationships herself now with other children in her class. She is enjoying</i></p>

	<p><i>some of the friendships that she's making whereas at the start of the year she didn't seem to want to make friends. It wasn't her whereas now bit by bit part of her way of thinking is changing as well. (T 2)</i></p> <p><i>As a class, it kind of varies. Like the good children, there's a little change, whereas the ones with the behavioural problems, there's a significant change...(T 5)</i></p> <p><i>Yeah, challenging behaviour has definitely decreased...We have had a lot of improvement with big incidents. I think the course is definitely good for huge challenging behaviour, but I think his kind of everyday disruptive behaviour is a little bit the same...The low level stuff, yes...It is harder to tackle... (T 4)</i></p>
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Appendix 15: Results of Tests of Normality

Skewness and kurtosis values for SDQ total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2)

SDQ	Time 1			Time 2		
	Skewness (SE)	Kurtosis (SE)	N	Skewness (SE)	Kurtosis (SE)	N
Total difficulties	.136 (.254)	-.859 (.503)	90	.585 (.255)	-.571 (.506)	89
Emotional symptoms	1.341 (.254)	1.308 (.503)	90	1.401 (.255)	1.641 (.506)	89
Conduct problems	.888 (.254)	-.136 (.503)	90	1.412 (.255)	1.540 (.506)	89
Hyperactivity	-.208 (.254)	-1.479 (.503)	90	.304 (.255)	-1.014 (.506)	89
Peer difficulties	1.085 (.254)	.508 (.503)	90	1.542 (.255)	1.885 (.506)	89
Prosocial behaviour	-.562 (.254)	-.653 (.503)	90	-1.073 (.255)	.155 (.506)	89
Impact of difficulties	1.239 (.254)	.205 (.503)	90	2.143 (.255)	3.914 (.506)	89

Results of Kolmogorov-Smirnov tests of normality for SDQ total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2)

SDQ	Statistic	Time 1		Statistic	Time 2	
		df	Sig.		df	Sig.
Total difficulties	.097	90	.036	.126	89	.001
Emotional symptoms	.190	90	.000	.239	89	.000
Conduct problems	.203	90	.000	.250	89	.000
Hyperactivity	.159	90	.000	.121	89	.003
Peer difficulties	.206	90	.000	.239	89	.000
Prosocial behaviour	.162	90	.000	.209	89	.000
Impact of difficulties	.380	90	.000	.430	89	.000

* $p > .05$ indicates normal distribution

Skewness and kurtosis values for SDQ total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2) by level of challenging behaviour

SDQ	Challenging behaviour	Skewness	<u>Time 1</u> Kurtosis	N	Skewness	<u>Time 2</u> Kurtosis	N
Total difficulties							
	High	.105 (.427)	.663 (.833)	30	.088 (.434)	-1.202 (.845)	29
	Medium	.967 (.427)	.774 (.833)	30	1.058 (.427)	.380 (.833)	30
	Low	1.986 (.427)	3.533 (.833)	30	1.028 (.472)	-.266 (.833)	30
Emotional symptoms							
	High	1.102 (.427)	.729 (.833)	30	.952 (.434)	.057 (.845)	29
	Medium	1.123 (.427)	.570 (.833)	30	1.435 (.427)	1.865 (.833)	30
	Low	1.845 (.427)	3.630 (.833)	30	1.572 (.427)	2.144 (.833)	30
Conduct problems							
	High	.176 (.427)	-.785 (.833)	30	.786 (.434)	.194 (.845)	29
	Medium	.676 (.427)	-.135 (.833)	30	1.253 (.427)	1.450 (.833)	30
	Low	3.188 (.427)	9.512 (.833)	30	3.785 (.427)	15.851 (.833)	30
Hyperactivity							
	High	-.845 (.427)	-.586 (.833)	30	-.156 (.434)	-.969 (.845)	29
	Medium	-.518 (.427)	-.135 (.833)	30	.643 (.427)	-.051 (.833)	30
	Low	2.636 (.427)	6.529 (.833)	30	1.620 (.427)	1.653 (.833)	30
Peer difficulties							
	High	.589 (.427)	-.538 (.833)	30	.551 (.434)	-1.025 (.845)	29
	Medium	.617 (.427)	-.581 (.833)	30	1.849 (.427)	3.913 (.833)	30
	Low	2.089 (.427)	4.304 (.833)	30	3.905 (.427)	17.741 (.833)	30
Prosocial behaviour							
	High	-.088 (.427)	-.890 (.833)	30	-.477 (.434)	-.911 (.845)	29
	Medium	-.036 (.427)	-.693 (.833)	30	-.946 (.427)	.282 (.833)	30
	Low	-1.686 (.427)	2.226 (.833)	30	-2.663 (.427)	7.807 (.833)	30
Impact of difficulties							
	High	-.061 (.427)	-1.068 (.833)	30	.830 (.434)	-.499 (.845)	29
	Medium	2.037 (.427)	3.200 (.833)	30	2.950 (.427)	9.484 (.833)	30
	Low	4.281 (.427)	18.773 (.833)	30	5.477 (.427)	30.000 (.833)	30

Results of Kolmogorov-Smirnov tests of normality for SDQ total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2) by level of challenging behaviour

SDQ	Challenging behaviour	Statistic	Time1		Statistic	Time2	
			df	Sig.		df	Sig.
Total difficulties	High	.112	30	.200*	.137	29	.173*
	Medium	.204	30	.003	.200	30	.004
Emotional symptoms	Low	.234	30	.000	.254	30	.000
	High	.160	30	.048	.272	29	.000
	Medium	.168	30	.030	.218	30	.001
	Low	.284	30	.000	.258	30	.000
Conduct problems	High	.146	30	.100*	.140	29	.154*
	Medium	.162	30	.042	.231	30	.000
	Low	.524	30	.000	.495	30	.000
Hyperactivity	High	.213	30	.001	.169	29	.033
	Medium	.125	30	.200*	.174	30	.021
	Low	.377	30	.000	.365	30	.000
Peer difficulties	High	.205	30	.002	.194	29	.007
	Medium	.191	30	.007	.226	30	.000
	Low	.380	30	.000	.366	30	.000
Prosocial behaviour	High	.106	30	.200*	.167	29	.038
	Medium	.127	30	.200*	.185	30	.010
Impact of difficulties	Low	.334	30	.000	.362	30	.000
	High	.184	30	.011	.283	29	.000
	Medium	.426	30	.000	.432	30	.000
	Low	.531	30	.000	.539	30	.000

* $p > .05$ indicates normal distribution

Skewness and kurtosis values for SDQ total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2) by self-perceived teacher change

SDQ	Teacher change	Skewness (SE)	Time 1	N	Skewness (SE)	Time 2	N
			Kurtosis (SE)			Kurtosis (SE)	
Total difficulties							
	Just a little	-.248 (.717)	-1.449 (1.400)	9	.047 (.717)	-2.203 (1.400)	9
	Quite a lot	.506 (.354)	-.514 (.695)	45	.895 (.354)	.389 (.695)	45
	Significant	-.430 (.393)	-.928 (.768)	36	.354 (.398)	-.809 (.778)	35
Emotional symptoms							
	Just a little	-.466 (.717)	-1.722 (1.400)	9	.000 (.717)	-1.672 (1.400)	9
	Quite a lot	1.618 (.354)	2.362 (.695)	45	2.368 (.354)	7.062 (.695)	45
	Significant	.254 (.393)	-1.342 (.768)	36	.464 (.398)	-.882 (.778)	35
Conduct problems							
	Just a little	.352 (.717)	-1.743 (1.400)	9	.545 (.717)	.454 (1.400)	9
	Quite a lot	1.533 (.354)	1.585 (.695)	45	2.105 (.354)	4.876 (.695)	45
	Significant	.371 (.393)	-.664 (.768)	36	1.114 (.398)	.470 (.778)	35
Hyperactivity							
	Just a little	.334 (.717)	-2.092 (1.400)	9	.815 (.717)	-.803 (1.400)	9
	Quite a lot	-.201 (.354)	-1.620 (.693)	45	.148 (.354)	-1.197 (.695)	45
	Significant	-.314 (.393)	-1.172 (.768)	36	.435 (.398)	-.737 (.778)	35
Peer difficulties							
	Just a little	-.115 (.717)	-1.853 (1.400)	9	2.636 (.717)	7.429 (1.400)	9
	Quite a lot	1.634 (.354)	2.206 (.695)	45	1.315 (.354)	.783 (.695)	45
	Significant	.903 (.393)	.525 (.768)	36	1.455 (.398)	1.442 (.778)	35
Prosocial behaviour							
	Just a little	-.492 (.717)	-1.144 (1.400)	9	-1.353 (.717)	2.305 (1.400)	9
	Quite a lot	-.839 (.354)	.108 (.695)	45	-.857 (.354)	-.515 (.695)	45
	Significant	-.211 (.393)	-1.160 (.768)	36	-1.300 (.398)	-.771 (.778)	35
Impact of difficulties							
	Just a little	.698 (.717)	-.797 (1.400)	9	1.533 (.717)	1.257 (1.400)	9
	Quite a lot	1.226 (.354)	-.055 (.695)	45	1.967 (.354)	2.620 (.695)	45
	Significant	1.292 (.393)	.219 (.768)	36	1.848 (.398)	2.258 (.778)	35

Results of Kolmogorov-Smirnov tests of normality for SDQ total difficulties and subscale scores pre- (Time 1) and post-intervention (Time 2) by self-perceived teacher change

SDQ	Teacher change	Statistic	Time1 df	Sig.	Statisitc	Time2 df	Sig.
Total difficulties							
	Just a little	.186	9	.200*	.242	9	.136*
	Quite a lot	.112	45	.200*	.152	45	.010
Emotional symptoms	Significant	.142	36	.065*	.139	35	.084*
	Just a little	.211	9	.200*	.189	9	.200*
	Quite a lot	.236	45	.000	.299	45	.000
	Significant	.173	36	.008	.165	35	.017
Conduct problems							
	Just a little	.196	9	.200*	.243	9	.132
	Quite a lot	.252	45	.000	.272	45	.000
	Significant	.143	36	.062*	.260	35	.000
Hyperactivity							
	Just a little	.265	9	.068*	.203	9	.200*
	Quite a lot	.189	45	.000	.161	45	.005
	Significant	.134	36	.098*	.191	35	.002
Peer difficulties							
	Just a little	.249	9	.113*	.370	9	.001
	Quite a lot	.270	45	.000	.299	45	.000
	Significant	.180	36	.005	.234	35	.000
Prosocial behaviour							
	Just a little	.269	9	.059*	.232	9	.178*
	Quite a lot	.176	45	.001	.233	45	.000
	Significant	.128	36	.146*	.228	35	.000
Impact of difficulties							
	Just a little	.257	9	.087*	.391	9	.000
	Quite a lot	.404	45	.000	.445	45	.000
	Significant	.379	36	.000	.438	35	.000

* $p > .05$ indicates normal distribution