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**PERCEPTIONS OF PERFORMANCE FEEDBACK FOR AN
INCREDIBLE YEARS TRAINED TEACHER**

A thesis presented in partial fulfilment of the requirements
for the degree of

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ABSTRACT

The Incredible Years Teacher Classroom Management (IYTCM) programme, developed by Webster-Stratton, is delivered to New Zealand teachers as part of an initiative promoting positive behaviour in the education sector. The IYTCM incorporates evidence-based practices that have demonstrated effective and favourable outcomes for students and teachers. Teachers are able to create positive and nurturing learning environments through regular and accurate use of pro-active strategies and appropriate behaviour management practices. In turn, these environments can prevent and/or reduce adverse life outcomes for students. Performance feedback (PFB) was assessed as a support mechanism to enhance implementation of IYTCM command strategies. The use of a mixed methods design with an intervention trial, contributed to the exploration and establishment of value-oriented findings. By integrating methods, data and, analysis of qualitative and quantitative approaches, this research, (a) facilitated awareness for the teacher on their classroom management practices, (b) identified contextual factors that resulted in confounding effects on implementation; (c) underscored the teacher's perceptions of credibility in relation to PFB consultants; and (d) considered the effects of the teacher's perceived efficacy in classroom management. A concurrent examination of the findings produced insights into factors that may facilitate and/or hinder PFB, such as, attitudes toward practices, and degree of behavioural control. It was concluded that the combination of (i) teacher's perceived efficacy; (ii) incongruence of IYTCM strategies with current practices; and (iii) poor knowledge to facilitate attitudinal change, may have impeded the teacher's intentions to use IYTCM practices. The teacher's perceptions and experiences present in this research have implications for the delivery and sustainability of classroom management practices, as well as efforts to ensure favourable outcomes for students.

DEDICATION

Happiness can be found in the darkest of times, if one only remembers to turn on the light¹

To my parents
Marlene and Charles,
and my dearest sister
Prianka,

Thank you for being my light.

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¹ Prof. A. Dumbledore, HP: PoA.

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CHAPTER ONE - Introduction

Challenging Behaviours among New Zealand Youth

Among New Zealand (NZ) youth aged 5 – 18, there are concerning levels of deviant behaviours (bullying, vandalism, fighting), academic failure in school, unemployment and criminality (Gluckman, 2010). The Ministry of Justice (MOJ) reported that court charges for youth (aged 10-16) have dropped to their lowest in over 20 years, however, there still remain approximately 2,000 young people being charged for criminal offences (Ministry of Justice [MOJ], 2015). This statistic unfortunately does not include youth who have engaged in chargeable offences, without being charged, nor does it convey the increased proportion (47 to 59%) of Māori young people who were involved in deviant behaviours over the last decade (MOJ, 2015). Further unfavourable outcomes for youth have been reported in the past. Approximately 12% of adolescents (15-19 years old) were not engaged in employment, education or training, with the highest proportion for Māori and Pacific youth (Statistics NZ, 2012). It was also previously reported that 16-19% of school leavers had no or low school qualifications (Statistics NZ, 2001). The statistics presented attempt to quantify the types of negative outcomes experienced by NZ youth, however it fails to capture the pervasiveness of challenging behaviours.

The contributing factors and causes of adverse life outcomes have been researched in the Christchurch Health and Development Study (CHDS), and Dunedin Multidisciplinary Health and Development Study (DMHDS) longitudinal studies (Fergusson, Poulton, Horwood, Milne, & Swain-Campbell, 2003). The studies found that youth who exhibited challenging behaviours had a significantly higher rate of conviction in later life; i.e. they were 4 to 10 times (CHDS), and 1 to 4 times (DMHDS) more likely to be participate in criminal offending (Fergusson et al., 2003). There were also strong associations between early school leavers and increased risk of criminality (Fergusson et al., 2003). Young people who left school without formal qualifications had an increased risk of involvement in deviant behaviour or crime, dependence on substances, and no engagement in further education (Fergusson, Swain-Campbell, & Horwood, 2002). The presence of challenging behaviours in childhood and adolescence is therefore a strong predictor of detrimental life outcomes (Farrington, 1990; Fergusson et al., 2003; Walker, Colvin, & Ramsey, 1995).

The risk of negative life outcomes among youth prompted urgent interventions from NZ government ministries, who responded with collaborative, inter-agency intervention plans to alleviate adverse consequences for youth (see: The Youth Crime Action Plan devised by MOJ, [2013]; Children's Action Plan devised by Ministry of Health, [2012]). The Ministry of Education (MOE) launched the Positive Behaviour for Learning (PB4L) initiative which comprises of adopted programmes that support compliant behaviour of children, and lead to improved student engagement and achievement (MOE, 2015). Among these programmes are the Incredible Years (IY) teacher and parent courses (Webster-Stratton, 2011) developed to promote positive adult-child relationships, and support caregivers/teachers to appropriately manage young people with challenging behaviours. Presently in NZ, the Incredible Years Teacher Classroom Management (IYTCM) programme is being delivered to approximately 2, 400 early years and primary educators, per year (MOE, 2015).

Students who leave school early, and/or leave with poor qualifications, have an increased risk of deviant behaviours, and future criminal convictions. It is therefore imperative that initiatives and programmes have components for preventing and mitigating challenging behaviours, as well as sustaining programme practices.

Preventing Challenging Behaviours

Prevention science relies on evidence-based research to identify factors that contribute or lead to the problems of concern. Adverse life outcomes for individuals may be moderated by reducing factors associated with difficult behaviour (Coie et al., 1993). Unfortunately, challenging behaviour does not occur in isolation. A longitudinal study following participants from ages 8 – 32, revealed six childhood predictors of criminality; (a) socio-economic deprivation, (b) poor parenting, (c) history of family deviance, (d) school problems, (e) hyperactivity-impulsivity-attention-deficit difficulties and (f) anti-social behaviour (Farrington, 1990). Risk factors - conditions that are associated with increased probability, severity, and duration of negative outcomes - can affect individuals in different ways, and vary according to environmental and social influences (Coie et al., 1993). Given the pervasiveness and compounded nature of risk factors, a focus on promoting protective factors may be more valuable in reducing the unfavourable outcomes, promoting resilience, and decreasing the occurrence of risk factors (Coie et al., 1993).

Ecological model. Protective factors can be promoted and enhanced in numerous facets of a young person's life. The ecological framework for human development (Bronfenbrenner, 1994) identifies five interrelated environmental systems that impact children's development through their interactions with each system. The concentric environmental systems facilitate bi-directional interactions between the child and their environment. Starting from the centre, with the child's biology, the next system is the microsystem (family, school, friends, community etc.), followed by the meso-, exo-, and macro- systems (Bronfenbrenner, 1994).

School Context

The ecological model understands challenging behaviours as a result of the environment in which the child develops. The problem is external to the child and can therefore be impacted to promote adequate development. In NZ, children are formally enrolled in the school system from age 5, and as a result, the school environment (along with teachers and peers) becomes one of the most influential socialising contexts outside the family home. Berryman, Walker, Reweti, O'Brien, and Weiss (2000, p. 37) explained that the "...ecological model is a child-focused, whānau²-focused and classroom-focused model..." which enables interventions to encompass all contexts in which children interact and develop. The school and classroom environments have the potential to intervene early by providing clear behavioural expectations to promote protective factors.

Definition. Challenging behaviours in the school context includes a range of disruptive, non-compliant or aggressive behaviours that educators have referred to as off-task behaviours. Off-task behaviours; disrupt the classroom environment, negatively impacts on the rest of the class, and reduces teacher instruction time (Kauffman & Landrum, 2013).

Protective factors. The association between challenging behaviours, poor academic performance and school failure has been documented (Hinshaw, 1992; Walker et al., 1995). Unfortunately it is uncertain whether; occurrences of student disruptive behaviour hinders academic progress, or if learning difficulties give rise to off-task behaviours (see Morgan, Farkas, Tufis, and Sperling (2008) for findings on

² Family

reading and task engagement). Two different theoretical explanations were suggested by Miles and Stipek (2006) for the bi-directionality of factors. First, students who struggle to read or experience academic failure may react disruptively or with frustration if they have not developed adequate social and emotional competence. Secondly, students who are aware of their poor progress may cause deliberate disruptions to avoid the embarrassment of not achieving well in comparison to their peers. Both explanations illustrate the complexity of the bi-directional relationship between learning and behaviour, and this is further complicated by the teacher.

The type of responses offered by teachers towards challenging behaviour can either increase or reduce behavioural difficulties. A positive teacher-student relationship may serve to promote academic success, and contribute to the behavioural and emotional development of students. Positive teacher-student relationships can also improve social skills, lower academic difficulties and, promote pro-social behaviours. Inclusive and caring learning environments can foster student resilience, (Sugai & Horner, 2009), while punitive environments, characterised by negative teacher-student relationships, may increase emotional difficulties, and maintain challenging behaviours (Walker et al., 1995).

While it may be appropriate that interventions focus on changing the child's behaviour, it will also be crucial to sustain the change by focusing on the environment around the child and the relationships that maintain specific behaviours. Maintaining positive teacher-student relationships and encouraging academic success are necessary protective factors for promoting proper social, emotional and behavioural development of students. One way that teachers can encourage positive relationships, engage students, and deliver curriculum instruction without interruption, is through effective classroom management.

Rationale for This Study

The consistent and proper management of classroom environments is able to advance behavioural and learning opportunities for young people, granting them access to opportunities for positive life outcomes. Classroom management strategies and behaviour programmes can support teachers in creating appropriate learning environments for students to prosper. The consistent implementation of these programmes is therefore crucial to maintaining favourable outcomes. The complex

and dynamic classroom environment may however produce challenges, making programme implementation difficult. It is with this concern that the current research explores real-life implementation of the IY Teacher Classroom Management (IYTCM) programme. Further, this research examines performance feedback (PFB) as a promising tool to enhance the use of programme practices. The purpose of this research is to gain insights into classroom implementation, and explore pragmatic measures to ensure sustainable practices that will, overtime, improve outcomes for youth. The mixed methods employed contribute to this study's research question: Is PFB a useful tool to support an IY trained teacher's classroom management skills?

Researcher's Personal Context

I have undertaken this research in fulfilment of my Masters in Educational Psychology. With a strong background in social psychology and a passion for children and adolescents, I have developed a keen interest in early intervention and prevention programmes, specifically those initiatives that target social and emotional wellbeing. I am not a qualified teacher and my role in the classroom has been as a learner's support person, teacher's assistant, and researcher. I have worked with, and alongside, youth (3 – 18 years old) in various educational settings (kindergarten, primary and junior school) and after-school care programmes. While conducting this research, I was not affiliated with the Ministry of Education in NZ, nor had I participated in the Incredible Years programmes.

Overview of Research

This introductory chapter has provided the research context for this study, and has outlined the prevalence and pervasiveness of challenging behaviours experienced by youth in New Zealand. The initiative and programmes adopted by government ministries are viable options to protect against and/or reduce challenging behaviours. Particularly in schools, behaviour management programmes, such as the Incredible Years Teacher Classroom Management programme offer evidence-based practices for cultivating a positive, nurturing environment that promotes desirable student development and encourages learning and pro-social behaviours.

This thesis is laid out in five chapters. Following this chapter, the second chapter will review the literature regarding classroom management programmes, specifically focusing on the Incredible Years teacher training programme. Aspects of effectiveness and fidelity will be explored before presenting performance feedback as a promising tool to support implementation. The third chapter presents the research philosophy and design for a mixed methods approach, and highlights the integrated procedures, methods and tools used to address the research questions and objectives. The insights and findings are analysed in the fourth chapter, with qualitative and quantitative results incorporated and presented together for a coherent view of the participant's experience. The final chapter discusses the overall inferences from the study in relation to the research question, as well as outlining the conclusions and suggestions for future practice.

CHAPTER TWO - Literature Review

As classroom management programmes are able to promote and enhance protective factors for students, the following review outlines classroom management programmes, with particular interest in the Incredible Years Teacher Classroom Management (IYTCM) programme. An exploration of IYTCM content and effectiveness is presented before examining techniques used during training to promote implementation fidelity. Assessment of implementation literature reveals that sustained performance naturally deteriorates over time and therefore a way to support continued implementation is essential. Performance feedback is then suggested as a promising tool to support the implementation fidelity of IYTCM training.

Classroom Management Programmes

The teachers' ability to effectively manage her/his classroom has consequences for students. Effective teachers are able to facilitate learning environments that encourage student growth and appropriate development in learning, behaviour, and social and emotional competence (Henley, 2006). Challenging behaviours within classrooms are not only disadvantageous to the student, but the whole class. Classroom management programmes provide practices to support teachers to create and maintain positive, nurturing environments.

Evidence-based practices (EBPs) are strategies and interventions that have been researched in randomised controlled trials and have produced sufficient support for the interventions' effectiveness (Horner, Sugai, & Anderson, 2010). Programmes such as Positive Behavioural Interventions and Supports (PBIS), and School Wide Positive Behaviour Supports (SWPBS) have developed EBPs that aim to; (a) reduce challenging behaviour by manipulating aspects that reinforce disruptive behaviour; (b) promote pro-social and desirable behaviours throughout the school, and; (c) prevent further inappropriate behaviour by modifying the environment in which behaviour occurs (Sugai & Horner, 2009). These programmes encourage teachers to be proactive in their management of behaviour by ensuring that they employ EBPs, for example; clear rules and expectations, praise and rewards, effective instruction and commands, and student choice (Bear, 2015). The presence of EBPs can indicate how equipped the classroom is in facilitating student engagement and compliance. Teachers in classrooms with

engaged students and set behavioural expectations are able to spend more time delivering instruction, ultimately benefiting student achievement and mitigating against potential adverse life outcomes (Henley, 2006).

Positive Behaviour for Learning.

Positive Behaviour for Learning (PB4L) is an umbrella term for initiatives adopted by the Ministry of Education (MOE) to ensure that all children have the opportunity to succeed with minimal adverse life outcomes (MOE, n.d.). PB4L comprises of programmes and initiatives that have been adapted to NZ's educational context to promote positive behaviour, support children's social and emotional development, create inclusive educational environments, improve academic achievement, and address challenging behaviours (MOE, n.d.). PB4L operates as a tiered support system that targets environmental changes to produce positive outcomes. The bottom tier is a universal approach that aims to modify the whole-school environment (PB4L School-Wide). The middle tier provides targeted support to caregivers, whānau and teachers with training in the Incredible Years teacher or parent programme. The top tier of the PB4L initiative is reserved for students experiencing intense behavioural challenges and complex needs. The Intensive Wraparound Service provides intervention support for these students in their school, home and community environments

PB4L School-Wide. Based on PBIS, PB4L School-Wide (SW) is a whole-school approach to supporting positive behaviour choices. Schools develop their own educational culture that reflects the values and strengths of the school's community. Changes are made to systems, practices and school environment to correspond with the educational culture, thereby making academic and behavioural expectations clear (MOE, 2015b; n.d.)

In 2015, SW practices were being applied in 415 primary schools and 182 secondary schools (MOE, 2015). An evaluation survey of 408 schools in their second to fifth year of PB4L implementation revealed positive changes for students and teachers, such as; increased ability of students to reflect and manage their behaviour, decreases in suspensions, stand-downs and exclusions, improved engagement and on-task behaviour from students, and safer, more inclusive, environments to learn (MOE, 2015). Teachers also reported favourable changes to their confidence in managing behaviour

(Boyd & Felgate, 2015). While a modified learning environment can produce positive outcomes for students, it is likely that some students may require a more intensive form of intervention to support them to meet academic and behavioural expectations. The next tier of intervention available for targeted students is the Incredible Years Teacher programme (MOE, n.d.).

Incredible Years Teacher. The Incredible Years Teacher Classroom Management (IYTCM) programme is one component of the Incredible Years (IY) Series developed by Carolyn Webster-Stratton. IYTCM (along with IY parent and child programmes) use evidence-based interventions to improve teacher-student relationships, effectively manage behaviour, prevent and reduce behavioural difficulties, and promote social, emotional and academic competence in students (Webster-Stratton, 2011, 2012). The theoretical foundations of IYTCM include; cognitive social learning and the coercion process, and developmental learning stages (Webster-Stratton, 2011) These underlying theories permit the programme to address risk factors associated with the development and maintenance of challenging behaviours. Further, modelling and self-efficacy theories (see Bandura, 1986), provide techniques for training teachers in new strategies and skills.

Delivery. Designed for teachers working with students aged 3-8 years, IYTCM focuses on strengthening the teacher's use of effective classroom management strategies and skills (Webster-Stratton, 2011). Participating teachers attend six full day group workshops (one per month) where they are trained to use appropriate and effective management skills (specific training techniques are described later in this chapter). The group format encourages peer support, decreases feelings of isolation, normalises teachers' classroom experiences, and offers various problem-solving perspectives (Webster-Stratton, 2004).

Workshops are delivered by trained IY leaders who facilitate discussions in the following topic areas; building positive relationships, proactive teaching, importance of teacher attention, praise, encouragement and coaching, managing inappropriate behaviour, motivating children through incentives, and teaching empathy, emotional-regulation, social skills and problem-solving in the classroom (Webster-Stratton, 2012).

IYTCM pyramid. The workshops follow the IYTCM pyramid framework (Appendix A) which represents a hierarchy of strategies and skills teachers can implement (MOE, 2015a; Webster-Stratton, 2011). Beginning with the foundational

levels, these strategies are the building blocks to support appropriate development for all students. Such practices are designed to be used liberally to sustain positive, nurturing learning environments. Advancing up the pyramid levels offers more intensive and targeted strategies for students with specific behavioural challenges. Assuming a solid foundation has been developed; the higher level strategies are used moderately and may include programmes and strategies tailored to individual students (Webster-Stratton, 2011). The pyramid structure, with the associated strategies and skills at each level, aims to ensure that students benefit from optimal behaviour management, and consequently, adequate academic, social, and emotional development.

Effectiveness. The benefits and outcomes of IYTCM for both teachers and students have been assessed through randomised, controlled trials (Hutchings, Martin-Forbes, Daley, & Williams, 2013; Murray, Murr, & Rabiner, 2012; Webster-Stratton, Reid, & Hammond, 2004; Webster-Stratton, Reid, & Stoolmiller, 2008). Studies have presented favourable outcomes for the IYTCM programme; with the parent programme (Webster-Stratton et al., 2004), the child programme (Webster-Stratton et al., 2008) and as a stand-alone programme (Hutchings et al., 2007; Hutchings et al., 2013; Murray et al., 2012)

Student benefits. Students who were exposed to IYTCM trained teachers showed improvements in social-emotional competence (Webster-Stratton et al., 2004; Webster-Stratton et al., 2008), significant reduction in severe challenging behaviours (Hutchings et al., 2007; Webster-Stratton et al., 2004; Webster-Stratton et al., 2008) increased attention (Hutchings et al., 2007) and greater academic outcomes (Webster-Stratton et al., 2004). Students who were only exposed to IYTCM intervention showed a decrease in negative interactions with teachers, less off-task behaviour and were more compliant with teachers' commands than the control group (Hutchings et al., 2013). A randomised control trial - conducted in a school with high rates of poverty - concluded that intervention teachers' use of more strategies to teach social-emotional skills favourably impacted all students regardless of existing behaviour problems, family or socio-economic status (Webster-Stratton et al., 2008)

Teacher benefits. Teachers are less likely to give praise and encouragement to disruptive students, even when they exhibit appropriate behaviours, and are more likely to punish these students for inappropriate behaviours (Walker et al., 1995). IYTCM trained teacher were shown to have less critical and harsh teaching styles (Webster-

Stratton et al., 2008; Hutchings et al., 2013) and more positive student-teacher relationships (Murray et al., 2012). Intervention teachers were also more nurturing, confident, and offered more praise to students (Fergusson, Horwood, & Stanley, 2013; Murray et al., 2012; Webster-Stratton et al., 2004). Trained IY teachers acknowledged improved management of challenging behaviour, and had either gained a wider range of effective strategies, or increased their use of existing strategies (Hutchings et al., 2007).

NZ Research. A preliminary evaluation on the IYTCM programme was conducted with 237 primary school teachers (Fergusson et al., 2013). Using pre and post training questionnaires to compare teacher's strategies, the results reported an increased frequency of positive behaviour management strategies, and greater confidence in managing whole classroom behaviour (Fergusson et al., 2013).

The effectiveness of the IYTCM programme has been well established with benefits for teachers and students. To achieve the positive outcomes promised by the programme, it is necessary that EBPs are implemented accurately and reliably with all students. Unfortunately, one of the challenges faced by schools and teachers is the ability to sustain implementation of IYTCM programme with rigor and fidelity (Domitrovich et al., 2008). Classroom settings are dynamic and implementation is susceptible to low adherence, misapplication, or poor managerial support may lead to little or no favourable outcomes (Domitrovich et al., 2008; Fixsen, Naoom, Blase, Friedman, & Wallace, 2005; Wilson, Lipsey, & Derzon, 2003).

Achieving Positive Outcomes Through Implementation Fidelity

The ability of EBPs to bring about positive outcomes is dependent on three components; (1) the researched effectiveness of the chosen intervention to do what is has been designed to do, (2) the degree of implementation fidelity, and (3) the fit of the intervention to the context (National Implementation Research Network [NIRN], n.d). The effectiveness of the IYTCM was described earlier in the chapter and satisfies the first component. The shift in behaviour management to positive, rather than punitive strategies, infers contextual fit of the classroom management programmes and school-wide interventions previously discussed. Thus the following sections describe the implementation fidelity of IYTCM.

Measures of fidelity. The degree of fidelity refers to the extent a programme is delivered or implemented as planned (Noell et al., 2005; Webster-Stratton, 2004). If programme fidelity is below standard, promised intervention outcomes are likely to be unfavourable (Dane & Schneider, 1998; Durlak & DuPre, 2008). Fidelity data is primarily gathered through self-report measures and direct behavioural observations (Durlak & DuPre, 2008) however self-report data may not be consistent with ratings from direct observations (Durlak & DuPre, 2008; Power, Dowrick, & Ginsburg-Block, 2004; Wickstrom, Jones, LaFleur, & Witt, 1998). After one month of literacy development intervention, Power et al. (2004) found that implementers deviated from the set programme even though they reported 100% intervention integrity. After two months of programme application, a discrepancy of 17 - 54% was found between self-report ratings and direct observations measures of implementation fidelity (Power et al., 2004).

IYTCM programme fidelity. The IYTCM programme is committed to supporting teachers' learning of key concepts and applying practices in their classrooms. However teachers as predominant implementers may experience challenges using new practices with rigor and fidelity (Power et al., 2004; Wickstrom et al., 1998), and may require support beyond professional development workshops (Domitrovich et al., 2008). The IYTCM programme requires high quality of implementation to produce positive outcomes therefore fidelity measures and coaching elements have been embedded into the programme design (Webster-Stratton, 2004). It can be assumed that the provision of IYTCM in NZ delivers similar techniques, programme components, and processes as recommended by the developer (MOE, 2015a).

Supporting teacher implementation of practices. IYTCM programme fidelity in the classroom can be assessed at three levels; (1) training workshops, (2) consultation after workshops and, (3) teacher implementation of skills.

The implementation of intervention skills is influenced by the training and consultation received during IYTCM programme (Reinke, Herman, Stormont, Newcomer, & David, 2013). In a study exploring aspects of fidelity according to how much of the intervention was implemented, and how well the intervention was implemented, Reinke et al. (2013) found that accuracy of teacher implementation was associated with exposure to training in workshops, and the consultation after workshops.

Training techniques employed in workshops are founded on social-learning theory (Bandura, 1978). Social-learning theory posits that reciprocal interactions between the individual and their environment facilitates learning, and thereby permitting new practices to be successfully attained through appropriate interactions with the learning environment. During IYTCM training, collaborative, interactive and self-reflective learning is increased through role-play and modelling of effective strategies (Webster-Stratton & Reid, 2004; Webster-Stratton, Reinke, Herman, & Newcomer, 2011). Strategies and skills are also demonstrated with video vignettes - which portray different types of teacher - student interactions, cultural groups and classroom situations – and group discussions. Workshops are supplemented with training manuals and IY classroom resources (Webster-Stratton, 2011). The training components are important aspects of skill acquisition that not only allows teachers to practice new strategies, but also serves to improve their self-efficacy regarding new skills and strategies.

Self-efficacy is the perception an individual has about their ability to perform a certain behaviour or skill (Bandura, 1978). This concept has been extended to teacher efficacy (TE) which is a construct that has been well researched alongside programme implementation (Ghaith & Yaghi, 1997; Guskey, 1988; Kim & Hunter, 1993; Tschannen-Moran & Hoy, 2001). TE has been viewed as the teacher's belief in the notion that student's behaviour and learning is able to be modified (Tschannen-Moran, Hoy, & Hoy, 1998; Woolfolk, Rosoff, & Hoy, 1990) and their judgements about their own abilities to affect student learning, behaviour and engagement (Bandura, 1978). The extent of TE was positively associated with teachers' perceived value or importance of a new programme, as well as their successful implementation of programme practices.

The IYTCM training facilitates the shift from modelling skills in the workshop, to practising strategies in the classroom. Coaching acts as a support mechanism for implementing practices, and has been demonstrated to be effective in transferring teachers' use of interventions into the classroom (Fixsen et al., 2005; Reinke, Stormont, Herman, & Newcomer, 2014). Between workshops, teachers review strategies, complete practice assignments and self-reflective inventories, and are encouraged to set goals. IY teachers have access to coaching supports from the facilitators for the duration of the programme, with coaches expected (ideally) to visit teachers between each session, with a minimum of 3 visits (MOE, 2015). One-to-one coaching sessions involve classroom observations, assistance with difficult students, development of

teachers' knowledge of effective behaviour strategies, and modelling skills if necessary (Webster-Stratton, 2011; Webster-Stratton & Reid, 2004; Webster-Stratton et al., 2011) as well as checking progress towards monthly goals, and supporting self-reflection (MOE, 2015).

The coaching component produces significant increase in teachers' use of interventions, surpassing training sessions that use a combination of theoretical knowledge, skill demonstration, role-play and feedback without in-class coaching (Joyce and Showers, 2002, cited Fixsen et al., 2005). Reviewing strategies with a coach enables refinement of practices within the classroom (Reinke, Stormont, Webster-Stratton, Newcomer, & Herman, 2012). Coaches reportedly spent an average of 28 minutes (range 4 – 120 minutes) with the teacher during weekly visits to classrooms, reviewing previous goals and data with the teacher (Reinke, Stormont, Herman, & Newcomer, 2014). Furthermore, teachers who began implementing IYTCM strategies with ease and at higher levels of adherence, received less coaching (feedback and goal setting) and subsequently showed deterioration in implementation Reinke et al., (2014)

While the combination of workshops, techniques facilitating behaviour and in-class coaching, are able to improve implementation outcomes (Domitrovich et al., 2008; Webster-Stratton & Reid, 2002) these support mechanisms generally cease the end of training, yet continued and additional supports are necessary for full generalisation of skills into the classroom, and the maintenance of optimal levels of fidelity (Domitrovich et al., 2008; Noell et al., 2005).

EBPs are explicit about the accuracy and consistency needed when implementing intervention and obtaining desired outcomes. Noell et al. (2005) directly observed that teachers' level of implementation deteriorated after two weeks even though they received structured, intervention focused consultations. Similarly, Murray et al. (2012) used blind-observers to rate impressions of teachers who had, and had not, completed the IYT training. They found that all teachers showed significantly lower levels of quality feedback and positive language modelling over time.

The frequency of teachers' use of classroom management strategies was directly studied. General and specific praise statements, reprimands, precorrections, reactive strategies (Reinke et al., 2013; Reinke, Stormont, Herman, Wang, et al., 2014) were recorded during observations. The authors found that teachers' engagement during training sessions were associated to frequency of classroom management

strategies however no follow-up observations were conducted to obtain maintenance data (Reinke et al., 2013). The decreasing levels of fidelity suggest that regular support and monitoring of teachers' implementation practices may strengthen maintenance, however "simply meeting and talking about implementation was not enough to support implementation," (Noell et al., 2005, p101).

How Can Implementation of Interventions Be Supported Post-Training?

Difficulties in managing challenging behaviour are causes for teacher stress and burn out. Providing professional development for teachers may have benefits for a short period of time, however given the complex classroom dynamic, difficult behaviour may increase before it improves. Teachers experiencing stress may have reduced capacity and ability to maintain appropriate behaviour of students (Towl, 2007) and resort to ineffective strategies such as reacting in anger or engaging in coercion (Reinke, Sprick, & Knight, 2009). As a preventative measure, occasional check-ins with teacher implementers may assist in gauging their ability to effectively use strategies or to talk through implementation difficulties (Durlak & DuPre, 2008). Brief supportive programme follow-ups may assist to sustain teachers' use of new practices with integrity (Domitrovich et al., 2008). A tool that may possibly provide the necessary support for teachers is performance feedback.

Performance feedback. Performance feedback (PFB) involves monitoring and providing systematic information to an individual regarding some aspect of their task performance, or current level of behaviour (Noell et al., 2005). The intention of PFB is to improve specific, measurable behaviours of concern by providing verbal and/or visual communication regarding that behaviour (Noell et al., 2005; Sanetti, Chafouleas, Fallon, & Jaffrey, 2014). During a PFB session, the consultant provides non-evaluative information regarding observational data and provides opportunities for reflection and comment (Duchaine, Jolivet, & Fredrick, 2011; Fallon, Collier-Meek, Maggin, Sanetti, & Johnson, 2015). PFB as an evidence-based support mechanism can be used to support teachers' implementation fidelity (Colvin, Flannery, Sugai, & Monegan, 2009; Fallon et al., 2015; Sanetti et al., 2014). Effective classroom management behaviours, such as praise statements (general and behaviour specific), positive attention, and opportunities to respond, have been assessed using PFB as a support mechanism to improve implementation (Cavanaugh, 2013; Reinke et al., 2009). PFB demonstrated

effectiveness by assisting teachers to reflect on their frequency and adherence of behaviour management strategies, which in turn supported implementation fidelity and reduced student inappropriate and disruptive behaviours (Colvin et al., 2009; DiGennaro, Martens, & Kleinmann, 2007; Reinke et al., 2009; Sutherland, Wehby, & Copeland, 2000). Frequency of behaviour specific praise statements (BSPS) was examined and PFB had a direct and immediate impact on teachers' use of BSPS (Duchaine et al., 2000; Sutherland et al., 2000). However, an unclear association between BSPS and student on-task behaviour was also found, with levels of on-task behaviour decreasing with higher frequency of BSPS (Duchaine et al., 2011), or increasing from 49 - 86% with higher rates of BSPS (Sutherland et al., 2000).

Problem behaviour for targeted students and whole-class showed improvement when teachers received feedback on their effective classroom practices (Colvin et al., 2009; DiGennaro et al., 2007; Sutherland et al., 2000). Actively applying behaviour management strategies is equally as important to effective classroom management as the frequency or quality of implementation. Data gathered from direct observations can be helpful in raising teachers' awareness of their behaviours and interactions with students, while also providing teachers with opportunities for self-reflection (Duchaine et al., 2011; Reinke et al., 2009). Higher levels of implementation were documented when special education teachers received PFB, however DiGennaro et al. (2007) found that teachers responded more to feedback that included results of student performance and teacher's adherence to intervention, rather than only student centred results (DiGennaro et al., 2007).

Delivery. The provision of PFB varies in the medium of delivery, and the process of delivery (Fallon et al., 2015; Cavanaugh, 2013). Feedback is most commonly provided verbally although 29 studies reviewed by Fallon et al., (2015) described a combination of verbal with visual (graphs of data) feedback, or verbal accompanied with student data. The medium used to deliver PFB was not shown to influence effectiveness (Fallon et al., 2015) and as Reinke, Lewis-Palmer, and Martin (2007) demonstrated; classroom management behaviours can be immediately increased solely by providing visual feedback to teachers, however these results were not maintained.

The process of delivery, specifically the frequency and immediacy of delivery, may influence PFB effectiveness. Studies that obtained strong to moderate evidence of PFB effectiveness differed in the frequency of feedback delivery; ranging from daily, (Reinke, et al., 2007), multiple times a week, weekly, and whenever implementation

integrity dropped below a set level (Fallon et al., 2015). The immediacy of PFB delivery was also varied, typically occurring after sessions on the same day (Duchaine et al., 2011; Scheeler, Ruhl, & McAfee, 2004), next day (DiGennaro et al., 2007) and sometimes after multiple observation sessions (Fallon et al., 2015). Research has also explored delivering PFB before instruction (Reinke et al., 2007), and via email (Fallon et al., 2015). According to Solomon, Klein, and Politylo (2012) PFB delivered immediately, or on the same day after observation, displayed equal effects. PFB delivered any later, however, was associated with decreased PFB effects. Therefore immediacy of delivery is able to impact the effectiveness of PFB (Scheeler et al., 2004; Solomon et al., 2012).

Research on PFB effectiveness has been conducted primarily by single-case designs (Cavanaugh, 2013; Solomon et al., 2012) and has mostly been delivered by coaches or researchers who are skilled in implementation of the intervention. A trial with members of school staff delivering PFB gained increases to intervention adherence, although these increases were only temporary (Sanetti et al., 2014).

PFB has been demonstrated to be effective in improving adherence to implementation, and is a flexible tool that can be adapted with regards to how it is delivered and what content is provided. Therefore, this research thesis explores the current implementation practices of IYTCM, and aims to determine if PFB can effectively support an IYTCM trained teacher.

Research Development

The present research explores the impact PFB has on practices obtained through the IYTCM training programme. The positive outcomes produced by the programme rely heavily on the consistent and frequent use of strategies and techniques according to the IYTCM pyramid. Implementation of newly learnt practices can decrease over time (Noell et al., 2005), and for primary school educators, some of the challenges to implementation may include; a new group of students each year, student absences, school-driven initiatives, new students joining the class during the year etc. An efficient tool that could bring strategies to the forefront and affect the use of proactive techniques would therefore benefit both teachers and students. Performance feedback has been suggested as a tool to support enhanced implementation practices, and is thus explored in this study as an intervention method with an IYTCM trained teacher.

Research Question and Objectives

This study was developed to firstly determine a teacher's use of foundational classroom management strategies post Incredible Years teacher training, and secondly, to explore if performance feedback has an effect on the teacher's implementation of these strategies. The current research therefore addressed the question: Is PFB a useful tool to support an IY trained teacher's classroom management skills?

To explore the scope of the research question, three objectives were established:

1. To gather information to the contextual factors within the classroom that determines the implementation of IYTCM strategies during PFB.
2. To determine if providing PFB to an IYTCM teacher impacted (increased/decreased) their use of foundational classroom management practices.
3. To elicit a teacher's perspective of the process of PFB and its effectiveness in supporting enhanced implementation of IYTCM strategies and skills.

Summary of Chapter

Classroom behaviour management programmes can be effective in reducing future adverse life outcomes for students; however, the effectiveness of such programmes relies on the consistent and regular use of proactive and positive management strategies. The NZ Ministry of Education has taken the stance to provide positive learning environments for students and has adopted the IY teacher's classroom management programme to assist in achieving well managed and effective classroom environments. The positive effects and favourable outcomes produced by the IYTCM programme has been documented, as well as in New Zealand. Research on implementation and support for continued programme use showed deterioration in implementation fidelity over time. Performance feedback is recommended as a convenient and practical tool to support a trained teacher with programme implementation. The benefits of enhanced implementation through PFB would make it possible for learnt skills, knowledge, and strategies to be brought to the front of the teacher's mind after hiatus. This could promote the positive outcomes from the IY programme.

The convenience and practicality of PFB may make it viable for senior leaders or peer teachers to observe each other and deliver PFB. For that reason, the research design, methods, measurement tools and overall philosophical stance is outlined in the following method chapter. It is important to note that this research was not developed to evaluate the IYTCM programme or its participants, rather explore the impact PFB has on the strategies and practices obtained through the IYTCM programme.

CHAPTER THREE - Method Chapter

The philosophical underpinnings of mixed methods research is outlined in this chapter, before describing how an exploratory sequential design (Creswell & Plano Clark, 2011) advanced this study's assessment of the research question. The phases of the study are then presented, and this encompasses a clear description of the qualitative and quantitative methods that have been integrated at each phase. An overview of the study's measurement tools precedes a detailed account of the participant, and the processes used this study. The ethical concerns of this research were crucial as the research was completed in an environment with vulnerable persons. These considerations are summarised before finally addressing the research limitations.

Research Philosophy

The current body of work is positioned within pragmatist philosophy, with importance given to socio-ecological theory as the overarching approach to the PFB and teacher's use of classroom management strategies. Borne out of frustration that educational research has not had a significant enough impact on the educational systems, pragmatism proposes the central principle that ways of thinking and doing should be based on practical rather than theoretical considerations (Kalolo, 2015; Powell, 2001). Pragmatist philosophy directs researchers to adopt ways of conducting research that lead to pragmatic solutions and problem-solving (Kalolo, 2015; Powell, 2001). Pragmatism is an "explicitly value-oriented approach" to research (Johnson & Onwuegbuzie, 2004, p. 17) which allows researchers to make decisions based on what is important to their research participants (Kalolo, 2015; Mertens, 2014). Researchers are thus guided to consider the empirical and practical consequences of ideas with a focus on promoting appropriate action (Johnson & Onwuegbuzie, 2004).

The effectiveness and knowledge obtained from research within a pragmatic paradigm is contentious because of the allowances it grants to researchers. The argument is that research located within a pragmatic frame provides the researcher with the freedom to study whatever may be of interest, and use methods the researcher decides are appropriate. That said, the perceived subjectivity of pragmatic research is counteracted by ensuring that chosen methods achieve their intention, and that the effectiveness of the research is determined by whether the results can be

utilised in “ways that can bring about positive consequences within your [*sic*] value system,” (Tashakkori & Teddlie, 1998, p. 30). The research design for this study is arguably practical - with data collection designed to be unobtrusive, and by ensuring minimal time-commitment by the participant while still obtaining sufficient data.

Pragmatist philosophy also allows the integration of quantitative and qualitative methods of data collection and analyses to be employed in the research design, irrespective of their conflicting paradigms (Johnson & Onwuegbuzie, 2004; Tashakkori & Teddlie, 2010).

Mixed Methods Research Design

A pragmatic approach to research supports the use of mixed approaches to conduct practical, solution-focused research. The present study has sought to explore PFB as a convenient tool to use within a learning environment, as well as determine if PFB was effective in supporting a teacher’s classroom management strategies. The different aspects of the research question made it necessary to incorporate quantitative and qualitative approaches into the design. Quantitative approaches have the capacity to explore causal associations between variables however research designs may decontextualise results from participants’ experiences and their environment. In contrast, qualitative measures are able to provide detailed accounts of experiences and offer insights; however these results are subjective and cannot be generalized (Castro, Kellison, Boyd, & Kopak, 2010). The flexibility to choose the best methods from either approach, integrate their strengths, and obtain pragmatic solutions to the research question, provided the rationale for mixed methods design.

Benefits and challenges of using mixed methods. A mixed methods design provided insight and understanding to the topic that may have otherwise been missed if a single approach study was conducted. The mixing of approaches allowed extensive knowledge to be gathered about PFB to better inform practice (Johnson & Onwuegbuzie, 2004). The inclusion of an intervention trial also made it possible to develop variables grounded in the lived experiences of the participant, and then trial the variables in naturalistic settings. Mixed methods research was also challenging as the researcher needed to become familiar with different methods before being able to integrate these methods appropriately (Johnson & Onwuegbuzie, 2004). Using a combination of mixed methods was also more time-consuming, and as the sequential

design relied on previously obtained information (Creswell, 2014), it was necessary that the methods were comprehensive and adaptable to the environment and participant.

Exploratory sequential design. Using mixed methods in social and behavioural research offers unique opportunities to integrate quantitative and qualitative approaches at a design, methods and analysis level thus enhancing the value of the research and maintaining validity throughout the study (Guetterman, Fetter, & Creswell, 2015). The most suitable design to explore PFB and incorporate participant experience with observable findings was an *exploratory sequential design with an embedded intervention trial* (Creswell, 2014; Creswell & Plano Clark, 2011). Exploratory designs are characterized by an initial qualitative data collection and analysis phase, followed by quantitative data collection and analysis (Creswell, 2003). The embedded intervention trial provides quantitative data, plus qualitative data which may be gathered before, during or after the intervention trial (Creswell & Plano Clark, 2011).

Present research design. An adapted version of an exploratory sequential design (Creswell & Plano Clark, 2011) is illustrated in Figure 3.1. The design consists of three consecutive phases where either qualitative and/or quantitative data are collected and analysed before progressing to the next phase. As indicated previously, given that qualitative data collection would be time consuming, the pragmatic solution was to include a brief quantitative measure during the first phase to assist and direct the exploration of PFB and IYTCM strategies and skills.

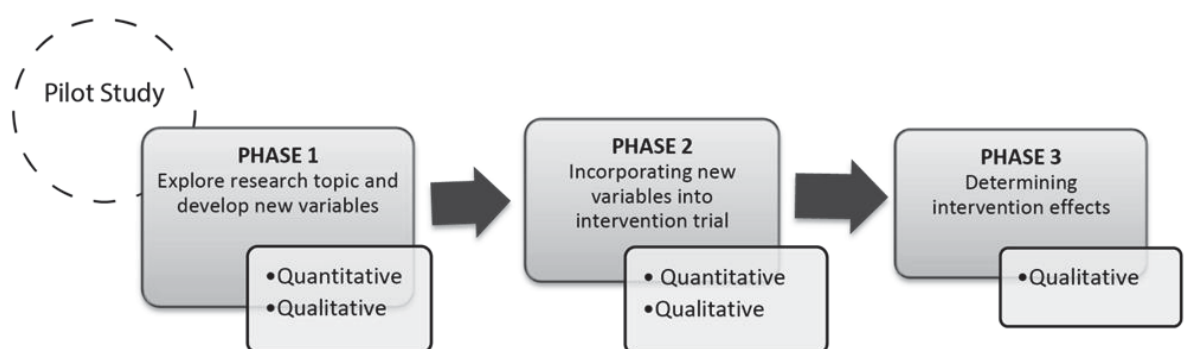


Figure 3.1. Phases of the exploratory sequential design with intervention trial, with descriptions of each phase's purpose and respective data collection approaches.

In the following discussion, the phases of the research design and the rationale for selected methods are outlined. It is important to note upfront that this overview includes a pilot study that was conducted and supplemented the main research.

The pilot study processes were evaluated and highlighted specific implications for the measurement tools which are described at the end of the method selection.

Method Selection

The amount of time the participant was expected to dedicate to the study, and the opportunities for collaboration, were important factors when determining the most suitable methods for data collection. For that reason, methods were selected against the following criteria: (a) being effective and efficient in answering the research question and objectives; (b) practical for the classroom environment; and (c) suitable for a single participant. Each phase of the study is presented below with the rationale for the chosen methods. The procedures and application of methods are outlined in the next section.

Phase 1. The first phase explored classroom management strategies to enable the development of an operationally defined behaviour management strategy or skill (as represented in Figure 3.2). Consistent with the exploratory sequential design, a qualitative approach was used to gain sufficient information for the development of intervention's behaviour of concern.

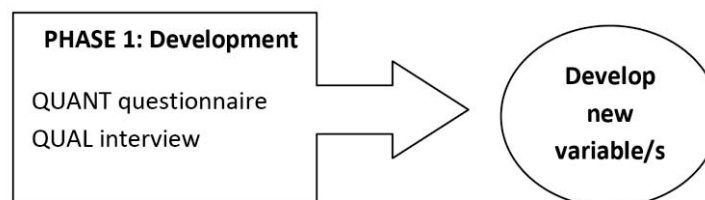


Figure 3.2. Exploration and development phase integrating quantitative and qualitative methods to develop variables.

Qualitative exploration and data collection can be time-consuming, especially given the scope of teacher classroom management strategies and skills. Hence quantitative data was collected first to establish areas for further exploration. Questionnaires are efficient tools in gathering large amounts of data over a short duration (Mertens, 2015). A simple descriptive questionnaire was delivered and relied on self-report measures of participant's behaviours to target relevant classroom management strategies. Questionnaires may limit the participant's opportunity to

elaborate of particular responses and so, similar to Christ (2007; cited in Mertens, 2015), the responses were incorporated into an interview. Kvale describes research interviews as an “inter-view, where knowledge is constructed in the inter-action between the interviewer and interviewee,” (2007, p. 1). Interviews offer flexibility and a conversational dynamic which provides space for the participant to explore topics in depth, while enabling the researcher to probe for additional information (Mertens, 2015). The data from the interview and questionnaire were then used to develop variables for the intervention phase. The limitation of using these methods is that responses have a potential to be influenced by response bias, i.e. tendency to respond in socially acceptable ways (Suter, 2012). Therefore, the methods in the second phase not only addressed the research objective, but also enhance project validity.

Phase 2. The second phase of the design is illustrated in Figure 3.3 and shows the progression from the exploratory phase to the embedded intervention trial (detailed in the next section). A typical exploratory sequential design would collect and analyse quantitative data and then proceed to interpretation (Creswell & Plano Clark, 2011)). The inclusion of the intervention trial enhances the overall design and enabled the study to address another aim of the research i.e. to determine if PFB could impact (increase/decrease) a teacher’s use of classroom management skills. Intervention trials in natural contexts have been employed in mixed methods research and accompanied by data collection methods such as, questionnaires, interviews, and direct observations (see Cross, Lester, Barnes, Cardoso, & Hadwen, 2015; Hyndman, Benson, & Telford, 2014).

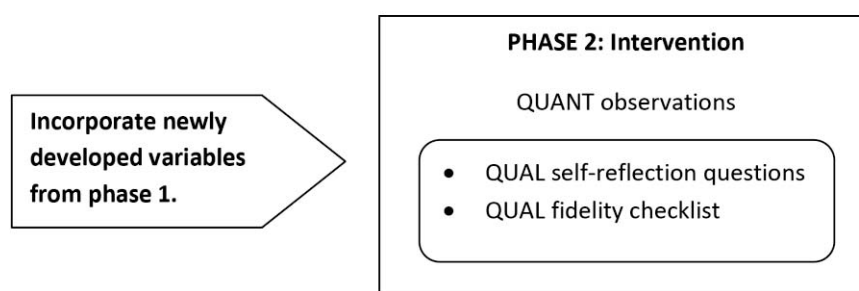


Figure 3.3. Intervention trial variables are incorporated and quantitative data is collected with two complementary qualitative measures.

This study used an intervention trial with direct observations. Direct observations were used to collect frequency data for the duration of the trial, and this offered more direct and timely information gathering on behaviour than self-reported

measures (Hersen, 2003). As the participant acted as their own control, data gathered prior to the intervention could be compared to data collected during and/or after the intervention (Horner et al., 2005). Thus, pre and post intervention data were able to demonstrate effects of PFB.

The opportunity to observe and record behaviour as and when it occurs in its natural environment is an advantage; however, this method limits the researcher's control over variables and does not remove bias. The presence of a researcher in the classroom compromised the validity of the data collection due to the phenomenon of *observer effects*, i.e. the notion that behaviours change when individuals or groups are being observed (Suter, 2012). These effects influence student and teacher behaviour regardless of who is being observed, nevertheless, direct observations were employed with its limitations for pragmatic reasons.

Intervention. The intervention consisted of delivering PFB to a teacher on her/his use of behaviour management strategies/skills (determined from the exploration phase) and was supplemented with self-reflection questions for the teacher. Quantitative frequency data were converted into percentages and visually presented as graphs. The percentages were also verbally provided to the participant, along with an example of the participant's use of the targeted behaviour.

The inclusion of an embedded intervention trial in the design allowed for qualitative data to be integrated before, during or after the intervention. In addition to the frequency data, self-reflection questions were included to gather contextual information during the PFB sessions. Self-reflection questions enabled access to information which would be difficult to directly observe, i.e. cognitive, emotional and other factors that may have been influencing behaviour and data collection (Hersen, 2004). A challenge of self-reported data is that participants may respond in ways they perceive are socially desirable (Paulhus & Vazire, 2007). This limitation however may be reduced as self-reflection responses in this study are supplementary to quantitative data.

To ensure the PFB intervention was delivered with fidelity, a checklist was developed and completed by the researcher during each session. Any events that may have impacted PFB, participant's behaviour, or data collection were noted on the fidelity checklist.

Phase 3. The final phase of the design involved evaluating the intervention, and assessing the support provided by PFB. Qualitative information about the intervention was gathered in a follow-up interview. The knowledge produced during interviews may be constrained by the researcher-participant relationship (Kvale, 2007). To be able to gather authentic and in depth information about the participant's overall experience, a comfortable space for expressing views and a semi-structured schedule was advantageous. This allowed the participant to explore beneficial or concerning aspects from the study.

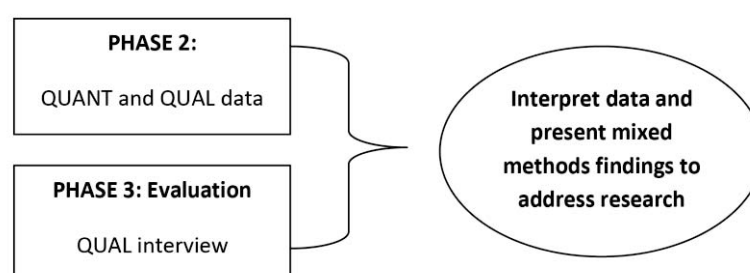


Figure 3.4. Data from intervention trial and evaluation information for the interview are incorporated into a mixed methods interpretation of findings.

All data (frequency counts, self-reflection responses and fidelity notes) collected during the intervention trial, and the final interview, were integrated to formulate mixed methods findings to address the research question and objectives (Figure 3.4).

Pilot study. The pilot study was reviewed and aspects that impacted data collection and delivery of PFB were evaluated and are outlined in Table 3.1. The key aspects examined included conducting direct observations, recording notes with fidelity, integrating measurement tools, and the provision of visual feedback.

The pilot study consisted of three data collection and analysis phases, and a PFB intervention was delivered on the teacher's use of praise statements. The review provided evidence-based suggestions which improved fidelity, enhanced validity, and reduced methodological limitations. The complete table of pilot study processes, implications, and decisions for the present study is located in Appendix B. No data from the pilot study were included among the results of the current project.

Table 3.1

Key Aspects of the Pilot Study Evaluation Accompanied by Changes to Data Collection and PFB Procedures in the Current Research.

Evaluation Area	Pilot research	Implications from Pilot Study	Present research
Direct Observations	The use of an observation schedule was not practical for the large classroom and adjoining studio. A tally counter was used to record the number of effective behaviour strategies.	Attention to the setting (particularly movement and sound) is important before deciding on a measurement tool.	Classroom setting was evaluated to determine most practical, unobtrusive measurement tool. Before the intervention, the observation schedule was trialled in the classroom.
Issues with fidelity	Researcher notes lacked richness and quality and minimal and inconsistent information was gathered on teacher's opinions of feedback or factors influencing her performance.	Poor notes documenting classroom factors, curriculum areas and examples of behaviour reduced the reliability of the study and left a gap in contextual information.	Templates and checklists were developed and included prompts to gather rich qualitative data and examples during observations. The teacher was asked the same self-reflection questions during each PFB session.
Measurement tools	Interview schedules were not comprehensive enough, and questionnaire data was not incorporated as thoroughly as envisioned.	Interview did not create an overall picture of teacher's IYTCM experience, or adequately address questionnaire responses.	Interview schedules were amended to include questions about experiences of IYTCM training, access to support, targeted questionnaire responses and opinions of the research and PFB.
Visual Feedback	Visual feedback was provided as printed, coloured graphs showing the teacher's score/percentage obtained during the observation session.	Fidelity criteria stated that feedback should be delivered within 2 hours of the observation session. Obtaining printed graphs was problematic due to time constraints.	For convenience and to ensure feedback was delivered within two hours, a digital tablet was used to display the visual data in an efficient manner.

Measurement Tools

Questionnaire. An adapted version of the IYTCM questionnaire collected data on the frequency and usefulness of behaviour strategies and techniques (Appendix C). Section A included two items that assessed teacher's confidence in managing classroom behaviour on a 7-point Likert scale. Section B consisted of 20 classroom management items which were rated on a 5-point Likert scale according to the frequency and usefulness of each. The questionnaire items correspond to the IYTCM pyramid, with 12 items targeting foundational strategies and 8 items representing inappropriate or limit setting strategies.

Interview. Semi-structured interview schedules gathered qualitative data at the beginning and end of the study (Appendix D). The initial interview explored the participant's background, general IYTCM training, coaching and access to support, and stress management. The participant was asked to elaborate on the questionnaire responses and rated strategies. The follow-up interview presented open-ended questions that addressed the participant's overall experience of the study, as well as opinions, usefulness, and beneficial characteristics of PFB.

Direct observations. Strategies that could be developed into variables were identified from the questionnaire and interview responses. At the first consultation, the researcher presented potential foundational strategies and skills that could benefit from PFB, and the second meeting aimed to discuss the operational definition of the behaviour to be recorded. Before commencing observations, a brief trial was conducted to test the operational definition of behaviour and to determine the practicality of data collection method. The behaviour of concern for the intervention was the foundational strategy 'commands'.

Defined from the IYTCM teacher's training manual and the IY self-reflection inventories, effective commands are clear, specific and positive behaviour instructions (Webster-Stratton, 2012). Commands are proactive and limit setting strategies that can be accompanied by praise statements to reinforce appropriate behaviour more effectively. Direct observations focused on *behaviour management* commands, not academic instruction; for example, "use your ruler to draw a straight line" is an academic instruction whereas, "boys can put their books away" is a command to manage the students. Commands given as academic instructions were therefore excluded from data collection. All behaviour management commands expressed in the

observation session were recorded regardless if they were directed at the whole class, a group or an individual. The types of effective commands (start and non-verbal), and ineffective commands (stop, consecutive and question), are described in Table 3.2 with examples.

Table 3.2

Operational Definition of Targeted Types of Effective and Ineffective Commands Displayed with Examples.

Command Effectiveness	Sub-type of Command	Description	Example
Effective Commands	Start commands	Short sentences which include an action verb at the beginning of the command and provide the appropriate alternative behaviour (Webster-Stratton, 2012)	<ul style="list-style-type: none"> • sit on your bottom • raise your quiet hands
	Non-Verbal commands	Non-verbal commands signalled the appropriate alternative behaviours	<ul style="list-style-type: none"> • fingers to lips to (indicate silence)
	Start command with praise	Start command with a related praise. Praise reinforces the desired appropriate behaviour.	"come sit on the mat" closely followed by "I see Josh is sitting quietly on the mat"
Ineffective Commands	Stop commands	Opposite to start commands. They do not provide the positive alternative behaviour	<ul style="list-style-type: none"> • "Don't yell!" • "Don't run!"
	Consecutive commands	Commands that do not allow time for compliance. Commands should be followed by approximately 5 seconds to allow students time to comply before giving the next command (Webster-Stratton, 2012).	Come sit on the mat - Give me 5 - sit on the mat.
	Questioning	A type of command that is typically critical and rhetorical. Intended as a reprimand for disruptive behaviour, but do not explicitly state the that desired behaviour	<ul style="list-style-type: none"> • "Should you be talking?" • "Why can't you sit down?"

Commands had a distinct beginning and end with sufficient time in between to distinguish one command from another. Frequency recording was used to count the number of commands given by the teacher during a 20 minute observation session. Data were recorded on an observation schedule with examples of the commands where possible (Appendix E).

Self-reflection questions. A set of four self-reflection questions were incorporated into the intervention session to gather contextual information and allow the participant to reflect on their day. The first three questions were asked before PFB was delivered to obtain participant's experience of the observation session, and once PFB was provided, the final question ascertained the participant's opinion of the feedback they received. The self-reflection questionnaire is located in Appendix F.

Fidelity checklist. A fidelity checklist was developed as a measure to ensure intervention implementation fidelity. The checklist served as a reminder to deliver all parts of the intervention as set out by the design, and was completed by the researcher during the PFB session (Appendix F). Items on the checklist included, (1) delivering PFB within two hours of the observation session; (2) presenting visual graphs to the teacher, (3) verbally stating the results obtained; and (4) providing an example of an effective command used from the observation session.

Participant and Selection Process

The participant was identified through convenience sampling / word of mouth according to the following selection criteria:

- had at least 3 years teaching experience
- currently employed full-time teaching either years 1, 2, 3 or 4 (students aged 5-9)
- completed Incredible Years Teacher training programme at least 12 months ago (before 2015)

Prospective schools were supplied with the project information sheets and after a brief meeting with the deputy principal, a potential participant was identified. Mrs Drier (pseudonym given) had been working in a decile 10 primary school in a Central Auckland suburb. She had 28 years of teaching experience, 23 years internationally and 5 years at her present school. At the time of the study, Mrs Drier was teaching year two students (6-7 year olds) with a class size of 22 students. Her IYTCM training

programme was completed in 2013 and Mrs Drier attended all the required training workshops.

Setting. The study was conducted in a year two classroom which contained 6 desks able to seat 4 - 6 chairs. Mrs Drier's workspace was situated to the corner of the room allowing full view of the classroom and entrance. Along the walls were shelves containing reading books, games and toys, art supplies, work books and curriculum resources. There were no classroom rules posted on the walls however school behaviour initiatives were visible in the classroom. There were no individual, group or school team incentive charts. A "did not remember" chart had all students' names and was used to record the number of times a student had forgotten school materials or notices during the term.

Procedures and Application of Methods

The project details, design and time commitments were discussed with Mrs Drier with an emphasis on researcher-teacher collaborative approach. Any concerns and questions about the study were addressed prior to Mrs Drier providing consent to participate. The procedures for the study are described below, and are reflected in Figure 3.5 along with the relevant measurement tools for each phase of data collection.

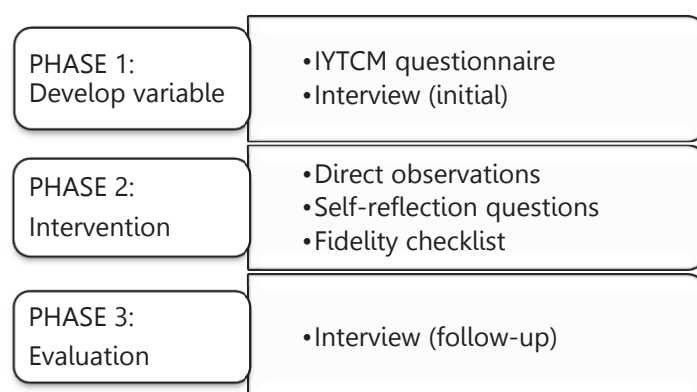


Figure 3.5. Illustration of research design and measurement tools for data collection phase.

Mrs Drier completed an adapted version of the IYTCM questionnaire (Appendix C). Questionnaire items from section B were inspected further if the teacher rated them according to the following categories: (a) positive strategies used half the time or less; (b) appropriate strategies perceived as least useful; (c) negative strategies used half the time or more; and (d) inappropriate strategies perceived as most useful.

Table 3.3 displays the type of strategy along with the questionnaire number, and the description of each item. Two appropriate strategies (item 13 and 18) corresponded to the foundational strategy level, specifically empathy, play and incentives. The inappropriate strategies (items 2, 9, 10 and 15) corresponded to the higher levels of the IYTCM pyramid, such as verbal redirection, reminder of behaviour expectations, and warning of consequences. Questions regarding the selected strategies were then included in the initial interview.

Table 3.3

Description of IYTCM Questionnaire Items According to Categories

Category	IYTCM Questionnaire	
	Item	Description of Item
Positive strategies used half the time or less / perceived as least useful	13	Set up individual incentive programme
	18	Teach specific social skills in circle time
Negative strategies used half the time or more / perceived as most useful.	2	Describe or comment on bad behaviour
	9	Ignore misbehaviour that is non-disruptive to class
	10	Use verbal redirection for a child who is disengaged
	15	Warn of consequences for misbehaviour

The interview was conducted before school in the teacher's classroom. Mrs Drier consented to audio-recording the interview which was later transcribed for accuracy. Interview data highlighted potential skill areas that may be useful to enhance with PFB. Mrs Drier's opinions on targeted strategies were considered to ensure she found value and subsequent benefit from the project. Qualitative information from consultations was then used to develop variables for the intervention phase of the study. The new variables were operationally defined, reviewed with Mrs Drier, and then trialled in the classroom before commencing the second phase.

A template was used for all observation sessions to record frequency data, and contextual information, such as; number of students, curriculum topic, teacher activities, and examples of IYTCM strategies/skills. Observation sessions of 20 minutes were conducted in the classroom during different curriculum topics and activities.

Baseline data were collected over three observation sessions, followed by five intervention sessions with PFB. After a two week non-contact period, one non-intervention observation was completed.

As per the fidelity checklist, PFB was delivered within two hours of the observation. PFB was provided in a quiet, partitioned space in the school staffroom. Before observational data was presented, Mrs Drier was asked to reflect on her performance and any contributing factors, as well as provide an example of her use of command techniques in class. Visual PFB was then delivered by presenting digital, coloured graphs on an electronic tablet. A bar graph illustrated the percentage of effective and ineffective commands used across the study, and a pie chart illustrated the proportion of start commands with, and without, praise statements. Verbal PFB consisted of stating the percentages obtained with each graph, followed by an example of effective commands used by the teacher during the session. Mrs Drier was given the opportunity to comment on the feedback she received, and intervention sessions ended with the researcher confirming the day for the next observation.

The follow-up interview was conducted in the teacher's classroom and audio-recorded. One withdrawal observation was conducted after the interview with no PFB provided after the session. The follow-up was transcribed and all data - the intervention phase and the interview - were analysed and integrated.

Ethical Considerations

A full ethics application was submitted and approved by Massey University Human Ethics Committee (Southern A – 14/88). Development of this research and procedures were guided by the Code of Ethics and Code of Conduct for Psychologists in Aotearoa, NZ. Permission to conduct the project was obtained from the school, which then distributed information sheets to potential participants (Appendix G for project-related forms). The researcher was a child-minder for two students at the school. Thus to prevent any conflict of interest, and protect teacher and students' rights, the study was not conducted in classrooms where the researcher had a pre-existing relationship with either a student or the teacher. A confidentiality form was signed as a guarantee to the school that personal information regarding students and teachers would not be shared.

Before consent was obtained, the participant was briefed about the purpose of the project, time commitments, confidentiality of information, and their right to

withdraw from the project at any time. As the research focused on teacher's behaviour management strategies, information involving students was recorded as a whole class, i.e. average age, number of students, responses to behaviour strategies. It was essential that the researcher's presence was unobtrusive and did not disrupt daily instruction or student engagement. The participant's right to ask the researcher to leave the classroom at any time was also affirmed.

A limitation of conducting classroom observations was the indirect effect the researcher had on the students and teacher. The researcher did not engage with the students unless contact or talking was initiated by the student/s. After observations, the researcher would sometimes spend additional time in the classroom, either interacting with students or assisting the teacher. This may have reduced the likelihood of the students "acting-up" or behaving inappropriately while being observed. As teachers are generally *more* likely to display appropriate and ideal behaviour when an observer is present (Samph, 1976), the extra time in the class may have had minimal influence on observer effects for Mrs Drier. Although the effects of the researcher in the classroom have been acknowledge, the potential for increased instructional time, less disruptive behaviour, and enhanced programme implementation may alleviate some of the ethical concerns.

Data Analysis

A sequential mixed methods design allowed data from one approach to be analysed before proceeding to analysis of the other data type. There was therefore minimal conflict when both approaches were integrated (Mertens, 2014).

Qualitative data from the interviews and self-reflection responses were examined through content analysis (Stemler, 2001). Content analysis is the process of grouping text into categories; defined by codes that focus on the content and contextual meanings being communicated (Hsieh & Shannon, 2005). Content analysis offered a way for findings to be supported by other data methods, and possible contradictions in results to be explored. While this enhanced validity and reliability of the research, there were challenges in ensuring categories were comprehensive and do not overlap (Hesse-Biber & Leavy, 2010; Stemler, 2001).

Questionnaire responses were analysed and positive strategies rated 3 and below, or negative strategies rated 3 and above, were included into the interview schedule. Descriptive statistics were used to analyse the quantitative frequency counts

to determine differences across baseline and intervention phases. The mean and range of baseline and intervention data were calculated using the frequency data per observation session. Frequency counts from observation sessions were converted into percentages to show increases or decreases of effective and ineffective commands.

Limitations

The limitations of each method have been described within the method selection discussion. The measurement tools used in the study are dependent on the researcher's interpretation; hence data is subjective and cannot be viewed in isolation, or with disregard to the research context. The measurement tools most susceptible to the context and researcher's subjectivity were interviews and direct observations. As mentioned earlier, observer effects cannot be controlled, although there was an attempt to reduce the effects by spending time in the classroom before data collection began. Due to the subjective nature of the measurement tools, and the presence of observer effects, the data collected in the study is not a valid representation of what Mrs Drier says and does in her classroom, but rather, a reflection of how she performs and manages behaviour when she is being observed.

Summary of Methods

Guided by pragmatist philosophy, this research aimed to explore PFB and its ability to support implementation of classroom behaviour management skills. A mixed methods study was conducted using an exploratory sequential design with an embedded intervention. This design permitted the integration of qualitative and quantitative methods to obtain solution-focused data to promote implementation fidelity. The different methods and measurement tools selected for the study were suitable and adequately supported data collection in each of the research phases. Further, the combination of qualitative and quantitative approaches aimed to capture the participant's full experience of PFB intervention, and their use of effective and ineffective commands. With ethical concerns and limitations considered, the results from the study were analysed and presented as a mixed methods dataset. The analysed data and findings from the present study are detailed in the following chapter.

CHAPTER FOUR - Analysis and Findings

Qualitative and quantitative data have been analysed within and across the research design phases. Relevant data from the pre-interview and questionnaire responses (phase 1) were analysed and applied to the development of variables for the intervention (phase 2). As per the exploratory sequential design, data collected from the intervention and the follow-up (phases 2 and 3 respectively) were analysed together to address the research question. Interview responses from the pre-intervention interview were also included in the data set as the comments provided necessary background information for the study. All future references to 'the teacher' or 'Mrs Drier' indict the teacher participant. First, a brief description of the teacher's IYTCM experience is provided to establish treatment fidelity. Then, the findings from both approaches are integrated and presented as a mixed methods results chapter.

Background Information

Mrs Drier attended all 6 IYT workshops in 2013 as well as the 3-month follow-up workshop at the beginning of 2014. During the initial interview, she reflected that she had enjoyed the IYTCM training and that the programme was delivered in a supportive way and covered a range of content which she was able to apply to real in-class situations. Of particular note, Mrs Drier valued the opportunity to hear the experiences of other teachers; *"every single teacher is feeling the same frustrations but when you hear it, it is comforting."* The IYTCM programme softened the teacher's approach with her students, and provided a framework for her to manage behaviour. *"When you have that knowledge it changes the way you deal with it; the way you intervene ... with the programme, it gave me the knowledge on: when to implement a harder intervention."* During the follow-up interview the teacher started, *"[IYTCM] is trying to show us: to run a happy class where there aren't massive problems that are impacting on the whole class."* Mrs Drier commented that since the training, she uses different strategies to focus on positive behaviour or resolves difficulties in a more positive way. When asked about the coaching she received between the workshops, the teacher acknowledged that she was visited twice by IYTCM facilitators, and even though the feedback she received was helpful, she didn't think the facilitators were completely aware of her specific on-going classroom issues.

The findings from the study are situated within the background information outlined above. The remainder of the chapter explores each research aim and presents the findings as outlined below:

1. To gather information on the contextual factors within the classroom that determine the implementation of IY foundational strategies during PFB
2. To determine if providing PFB to an IY teacher impacted (increased/decreased) their use of effective and ineffective commands in the classroom.
3. To elicit a teacher's perspective of the process of PFB and its effectiveness in supporting enhanced implementation of IY classroom strategies.

Summations of findings are then integrated to answer the research question:
Is PFB a useful tool to support an IY trained teacher's classroom management skills?

Aim 1: To Gather Information on the Contextual Factors within the Classroom that Determine the Implementation of IY Foundational Strategies during PFB

Qualitative information from self-reflection responses and interviews were analysed to determine situational factors that may have contributed to the teacher's use of commands. As Mrs Drier noted, "*[use of commands] is so variable, because there are different things, and different expectations for different times of the day, and different days of the week.*" Two distinct contextual factors were coded for their probable effect on implementation, and these were; classroom dynamics and teacher characteristics. Each factor is described below with references to qualitative and quantitative data.

Classroom dynamics. The PFB sessions gave Mrs Drier an opportunity to reflect on that day's observation before receiving visual and verbal feedback. Contextual information from interviews and PFB sessions were selected for coding; if the comments contained possible reasons for implementation, or Mrs Drier explicitly identified factors that impacted her performance. The codes were then categorised into either 'curriculum areas' or 'irregular events'. Table 4.1 compares curriculum area, irregular events and the number of effective and ineffective commands per observation, along with Mrs Drier's reflections on her performance that day.

Curriculum area. Data collection for observation numbers 1, 3, and 5 were completed during part or whole writing lessons. The students were required to remain silent while writing to enable concentration, and Mrs Drier remained silent as well, only whispering to individual students when necessary. The number of commands given during a writing lesson is therefore expected to be low and this is illustrated during the 3rd observation where a total of 8 commands were issued.

Irregular events. Mrs Drier mentioned various uncommon activities (school trips, cricket-skills day, and student critiques) that occurred. The teacher had to 'play it by ear' during the 2nd observations (PFB2) because of the cricket-skills activity. During the 5th observation, she expressed that she wasn't focused and this was possibly due to the disruptions from the leader, and upcoming assessments and reviews. For PFB2 and PFB5, the frequency of effective commands was, 13 and 9 respectively. The effective commands recorded on a day where Mrs Drier was "*very relaxed*" did not indicate much difference (PFB4, 12 effective commands). The ineffective commands used

during observations sessions 2, 4, and 5 ranged from 2 to 6, with the highest frequency of ineffective commands recorded during PFB4.

Table 4.1

Analysis of Curriculum Area and Irregular Events per PFB Session with Corresponding Event Counts for Effective and Ineffective Commands.

PFB	Curriculum topics	Teacher's self-reflection comments on performance	Irregular events mentioned by teacher	Frequency of commands	
				Eff.	Ineff.
1	Writing (10 mins) Poem creation	<i>"I don't really reflect on my behaviour"</i>	None	15	6
2	Reading Singing	<i>"I played it by ear"</i> <i>"It was not the day for group teaching"</i> <i>"I adapted"</i>	Cricket activity Writing test	13	2
3	Writing (20mins)	<i>"[Harry] was being particularly difficult, very needy/demanding"</i>	School trip tomorrow	4	4
4	Spelling Poetry / drawing	<i>"I was very relaxed."</i> <i>"I didn't worry about the noise level during their creative time"</i>	Mixed class for poetry Mufti day	12	6
5	Mat time Writing	<i>"I don't think I was very present in the classroom."</i> <i>"There was a lot on today..."</i>	Student critiques ESOL running records ERO visiting	9	3

Teacher characteristics. Pre and post interviews were coded for Mrs Drier's assumptions, opinions, and perspectives that may have contributed to implementation of IYTCM strategies. These aspects were categorised as: perceived classroom management capabilities, perceived behaviour management strategies, perception of students, and receptiveness to intervention. Each teacher characteristic is explored below with supporting data from interviews and self-reflection responses.

Perceived classroom management capabilities. This code referred to the teacher's belief in her ability to manage her students and classroom. On the IYTCM questionnaire, Mrs Drier rated her ability in managing current and future behaviour problems as "*confident*", stating that classroom discipline should occur naturally; "*you shouldn't be working hard at it... If you are an experienced teacher, you've got ways, your methods already set down.*" In the follow-up interview she maintained this belief, saying, "*I've always been competent. ... Competent and confident. Because I believe in my teaching and I'm a good teacher. I don't feel like I was ever a bad teacher.*" Her belief in her teaching and management abilities was reiterated during PFB sessions;

I know [facilitators would] be giving support indirectly afterwards on managing the class, but I already have that. ... I don't need you to tell me how to manage my class. I've got 28, 30 years' experience. It would be a poor show if I couldn't manage my class.

Perceived behaviour management strategies. The teacher's view of her IYTCM behaviour management strategies and skills were coded from quantitative and qualitative data. Mrs Drier rated various positive, appropriate strategies as a 4 on the 5-point questionnaire scale. This suggests she believed these strategies were 'often' useful and she 'often' employed them in her classroom. Examples of frequently used strategies were elicited from Mrs Drier during the initial interview. When clarifying how positive behaviour was rewarded, the teacher commented that she didn't use star charts but "*if [students] do something, they can get a sticker; but I don't use it often.*" The accumulation of stickers did not equate to a reward. When exploring the use of praise in the classroom, Mrs Drier noted that she used more proximal praise to manage behaviour, later adding that she doesn't "*...praise unnecessarily, just for the sake of it...*"

When asked to indicate on the IYTCM pyramid (Appendix A) which foundational strategies she relied on the most, Mrs Drier seemed to associate the pyramid strategies to the school's initiatives. The teacher mentioned an initiative that encouraged

students to manage themselves, and explained that her current focus in the classroom was on 'listening' and 'problem-solving', and clarified that, *"...I'm trying to get those things [listening and problem solving] coming from the child. ... I'm not saying I rely heavily on those. I mean we do all of these things."* When attempting to establish the IYTCM strategies that Mrs Drier was least competent in or wanted to revisit, she expressed that she would not like to use more incentives (stickers or lollies), and later acknowledged that she would *"...need to go and look into these, go back in the book and see which area I would want more of."*

Perception of students. The teacher's overall opinion of her students, as well as their needs and capabilities were coded as possible teacher's effect. Mrs Drier described her current class as a "likeable bunch" who are good and engaged learners.

They're *really really* manageable, because I set up structures really early on in the year... right from day one, they know my expectations and they know when they're out of line. ... They didn't know these things in the beginning. It's all the things that I've had to implement right from the beginning and be *consistent*.

After receiving PFB where her use of effective and ineffective commands were 67% and 33% respectively, Mrs Drier responded saying, *"...I know I don't praise but they are good, they follow and they have not misbehaved."* The teacher also noted in the follow-up interview that she may be strict with the students, and the way she speaks, *"...might be interpreted as particularly harsh because of my background, but the children get to know me and they understand me. They know that I'm not one to hold a grudge."*

Receptiveness to intervention. Comments and responses that reflected Mrs Drier's acceptance of PFB, or attitude to behavioural change were coded as examples of her receptiveness to intervention. In the initial interview, Mrs Drier expressed that she were facilitating the study, rather than being an active participant, *"whatever you give to me, I will take it on board but I am not expecting anything from you... I feel like I'm helping you rather than you helping me."* This belief persisted throughout the study; with the teacher responding to PFB data during the 2nd session with *"Good, as long as you're getting what you need."* In the follow-up interview Mrs Drier was asked if PFB information was sufficient to change behaviour, she responded,

If you'd shown me the last graph and the first graph, I would have probably just said, 'oh well, so what?' ... In the beginning, I thought I was good, because I don't have a problem with my class or my discipline.

When discussing the convenience of PFB, the teacher was asked how she would have viewed the study if implementation goals were set, (e.g. aiming to increase implementation by an average of 60%). Mrs Drier explicitly stated, "I would not have tolerated that."

Mrs Drier gave the impression that she preferred not to ask for assistance, commenting that "*you don't want to run for help all the time,*" and that she would "*try to sort it out on my own, as best I can,*" before approaching her leader. She also expressed the frustration of receiving advice from an 'outsider' (someone not part of the school staff),

Each teacher is trying to achieve something different with each child and it takes the whole year to get to know that. So an outsider, would not understand those things. So if you're trying to say to me, 'do this with this child,' well no – I know the child better than you. You've come in for a few minutes; I've known the child the whole year, so I would resent any information like that.

During the IY training, facilitators were available to support teachers to implement new strategies and skills. Mrs Drier admitted that she never initiated contact with the facilitators for additional support, noting that she referred to the handouts or IY books if she needed assistance.

Aim 2: To Determine if Providing PFB to An IY Trained Teacher Impacted (Increased/Decreased) Their Use of Effective and Ineffective Commands.

Quantitative data from direct observations were analysed to determine if PFB impacted the teacher's use of IYTCM strategies, specifically whether there was an increase in the use of effective commands, or a decrease in the use of ineffective commands. Event counts of effective and ineffective commands were converted into percentages and compared across baseline and intervention phases. An overall examination of the data is presented, before exploring the types of effective commands and ineffective commands used by Mrs Drier.

General findings. Table 4.2 presents the teacher's frequency of effective and ineffective commands, total counts and averages (avg), during baseline and intervention.

Table 4.2

Frequency of Effective and Ineffective Commands Recorded during Baseline and Intervention.

Type of Command	Frequency of Commands			
	Baseline		Intervention	
	Total	Avg	Total	Avg
Effective	35	11.7	53	10.6
Ineffective	22	7.3	21	4.2
Total	57		74	

The mean count of effective commands decreased from 11.7 commands per baseline session, to 10.6 commands during intervention, whereas ineffective commands decreased from a mean of 7.3 commands at baseline, to 4.2 commands per intervention session. Overall, there was a difference of approximately 10% from baseline to intervention, with frequency of effective commands increasing, and frequency of ineffective commands decreasing.

Effective commands. A total of 53 effective commands were recorded during the intervention phase and comprised of start commands, for example, "come sit in your place", "on task please", and "give me 5", as well as, non-verbal commands, such as "fingers on lips" to indicate silence. A closer examination of the frequency counts

(displayed in Table 4.3), revealed that the third observation session (PFB3) only recorded 4 effective commands, which was lower than the average of 10.6 for effective commands during intervention. Total effective commands ranged from 4 to 15 counts per session. The 3rd session (PFB3) could be treated as an anomaly, and be withdrawn from the dataset, however as it is linked to qualitative information, the data was retained.

Table 4.3

Frequency Counts of Effective and Ineffective Commands Used per Session, including Frequency and Mean Totals for Both Commands for the Duration of PFB.

Type of Command	Frequency counts per PFB session					Total frequency	Mean frequency
	PFB 1	PFB 2	PFB 3	PFB 4	PFB 5		
Effective	15	13	4	12	9	53	10.6
Ineffective	6	2	4	6	3	21	4.2

Effective commands are examined further to identify if particular sub-types may have been affected during the intervention. Table 4.4 presents effective command subtypes, start and non-verbal, accompanied by frequency of praise statements for baseline and intervention phases.

Non-verbal commands. Referring to Table 4.4, there was an increase in the teacher's use of non-verbal commands. At baseline, only 6% of effective commands comprised of non-verbal commands, and none of these commands were accompanied by praise statements. The types of non-verbal commands used included 'finger on lips' to indicate silence, a shaker to attract attention, and a raised hand with spread fingers to show 'give me 5'. After the intervention, the percent increased to approximately 25% of total effective commands, and these included instances of non-verbal commands accompanied by praise statements. Mrs Drier used her shaker regularly to elicit silence, and on two occasions followed her non-verbal command with praise, e.g. *"I quite like the way that group is working."* Non-verbal commands increased, while the number of start commands decreased from 80 to 62% across phases.

Table 4.4

Type of Effective Command with Frequency Count and Percentages for Baseline and Intervention Phase.

Type of effective commands	Comparison Phase			
	Baseline		Intervention	
	frequency	percent (%)	frequency	percent (%)
Start	28	14.29	33	9.43
Start commands with Praise	5	80	2	62.26
Non-verbal	2	0	13	3.77
Non-verbal commands with Praise	0	5.71	2	24.53
Total effective commands	35		53	
Commands with Praise	5		7	
Start & Non-verbal	30		46	

Commands with praise. PFB was specifically provided to Mrs Drier on her use of start commands (verbal and non-verbal) that were accompanied by praise related statements. When examining the frequency of start commands with, and without, praise (Table 4.4), the data showed that before intervention, Mrs Drier has provided 5 start commands with praise, compared to 30 start commands without praise. Her ratio is therefore 6 start commands to 1 start commands with praise. After intervention, the teacher has delivered 7 start commands with praise, compared to 46 without praise. Compared to Mrs Drier's baseline ratio, her intervention ratio had increased to 6.5 start commands without praise, per command with praise. During PFB3 session, Mrs Drier commented, "*I don't think I do follow-up when I give instructions - I need to be more aware of that.*"

Ineffective commands. There were a total of 21 ineffective commands recorded during the intervention, with a mean of 4.2 commands per session. This indicated a decrease from the baseline average of 7.3 event counts per session. Event count data for ineffective commands ranged from 2 – 6 as reflected earlier in Table 4.3. The sub-types of ineffective commands (consecutive commands, questions and stop

commands) were further examined, and notable findings from consecutive commands and questions are presented below.

Consecutive commands. The percentage of consecutive commands used during decreased from 50 % at baseline to approximately 29% (Table 4.5). Some of the consecutive commands delivered by Mrs Drier included, "*Sit flat on your bottom – Give them 5 – Sit flat*" or "*Look at me – Don't move – Give me 5.*" The mean frequency of consecutive commands decreased from approximately 4 commands per baseline session, to a mean of 1 command per intervention session.

Table 4.5

Type of Ineffective Command with Frequency Count and Percentages for Baseline and Intervention Phase.

Type of Ineffective commands	Comparison Phase			
	Baseline		Intervention	
	frequency	percent (%)	frequency	percent (%)
Stop	4	18.18	8	38.10
Question	7	31.82	7	33.33
Consecutive	11	50	6	28.57
Total Ineffective commands	22		53	

Questions. The percentages of question-commands are not visibly different from baseline (31.82%) to intervention (33.33%). Upon closer inspection, the question-commands differed in syntactical nature across observation phases. During baseline, Mrs Drier asked rhetorical questions such as, "*Do we need to talk?*" and "*Why are you not on your bottom?*" Examining the use of questions during the intervention session showed a slight change in the way she presented the question-command. In some of her question commands, Mrs Drier had provided an explanation with the question e.g. "*Are you meant to be talking? No - I'll tell you why. Because other people are still using their thinking brains,*" or an option e.g. "*Are you going to be on task or worrying about what others are doing?*"

Aim 3: To Elicit a Teacher's Perspective of the Process of PFB and Its Effectiveness in Supporting Enhanced Implementation of IY Classroom Strategies.

Interview responses and comments concerning PFB were analysed to determine, if the process of PFB delivered by the researcher was effective, and whether the teacher believed PFB effectively impacted her behaviour. Improvements and challenges to the PFB process are discussed towards the end.

Processes provided by the researcher. PFB as a tool for impacting behaviour was considered "necessary" and delivering feedback face-to-face was convenient and preferred by Mrs Drier. The inclusion of visual information was beneficial for the teacher, *"Because I'm a visual learner. If you'd just given me percentages or whatever - the graph was helpful to see. I found it quite useful"*. Mrs Drier explained that the self-reflection questions and the discussion that accompanied her responses were valuable. *"I think that you couldn't really have a difference if there wasn't that talking and discussing."* Mrs Drier also remarked that delivering PFB during the same day was useful and if feedback was provided any later, it would not have made a difference to her. *"To me, [PFB] needs to be on the spot. Because the day is over. A new day has begun. My head is thinking forward - I'm not thinking back. I'm not dwelling on what's gone..."*

Researcher effects. All data collection, specifically observations and delivery of PFB was completed by the researcher. As an instrument in the PFB process, there were potential aspects that may have influenced the effectiveness of the intervention.

Level of experience. The teacher believed the researcher's limited professional experience was as a barrier to completely understanding classroom interactions or being able to notice the specific strategies and skills the teacher may be implementing. During PFB sessions, Mrs Drier commented, *"...you should try to manage and take sole-charge of the classroom,"* and during the follow-up interview, she stated that if the researcher had completed the IYTCM course, they would have *"more clout."*

You would have more credibility. For me to have you come in and advise and prompt and say, 'look at this and look at that,' it's not as impactful as if you were in the classroom every day, as a teacher, and if you had done the course yourself.

Observer effects. Mrs Drier alluded to the effects of having an observer in the classroom. She noted, *"you don't realise what you use and what you don't use. So when [the researcher was] counting, or aware that someone is in the classroom counting, you tend to revert back and use [strategies] more."*

While Mrs Drier did acknowledge the researcher's aptitude and knowledge of IYTCM content, she did express that the researcher's lack of experience was a weakness of the study.

Effectiveness. When asked about her overall experience of the study, Mrs Drier commented, *"I don't think that I would have used my knowledge from three years ago as much as I have...with you coming in..."* The teacher often expressed that she had more awareness of her performance in class, confirming PFB brought previous knowledge *"...to the top of my mind on how to be more positive and be aware of my instructions."*

Because you learn [techniques] and then you try and implement it. Over three years, you might revert to type – forget everything – but with you coming back in the classroom, just made me aware that I am using some of the strategies – that I haven't forgotten everything.

The main positive from her involvement in the intervention was the awareness, and she expressed, *"...I have been more ... kind, and not negative. So that's helped me tremendously."*

When asked to reflect on noticeable changes in her use of commands, Mrs Drier responded by saying, *"When you're actually in your day and you're getting along with it, you don't...I'm not aware of it. ... I have more awareness in the moment, but I cannot comment on whether it's made a difference overall."* The notion of responding to behaviour as and when it occurs or 'in the moment' may indicate the teacher's intentions to use the information in a proactive manner.

The data in the beginning, when you showed me, 'oh you do this, that many times,' I'm thinking, 'oh well.' If there was an improvement, it didn't make a difference to my teaching. That's quite a harsh thing to say, but because you're in the moment and you're not actually consciously thinking, 'ooh I'm better than in the beginning' or whatever.

Improvements and challenges to effectiveness. Limits to the effectiveness of PFB were communicated through the teacher's opinion of 'outsiders' (someone not employed in the school). The teacher believed that an 'outsider' may not fully comprehend what a teacher is trying to do, or what they may be dealing with on a daily basis. Observers may develop overall impressions of the classroom, students and teaching strategies however this occurs over time. Mrs Drier stated that while trying to teach specific skills (e.g. self-management) in the students, "*[Her approach] might look from an outsider to be not compassionate, but it's not that at all. ... An outsider might not have picked that up; an outsider might not see that. It's all within the dynamics of the classroom.*" When questioned about how different the experience would have been if another teacher or leader in the school had conducted observations and provided feedback, the teacher acknowledged that, "*I don't think my behaviour would have changed, but I would have appreciated the fact that the person had been through what I've been through: walking alongside me, rather than an outsider looking in.*" Mrs Drier noted that even peers or leaders who would come to complete observations were not "*...coming in as a person that's done the Incredible Years programme,*" and that teachers from the school "*...wouldn't know what I'm doing. They would only see it as teacher things – not as behaviour modification or learning...*" Mrs Drier commented that the most meaningful feedback she had received was from a leader who completed the IYTCM programme with her, "*We were on the same page. ... She knew what I was trying to achieve and what I was doing, because we'd been through the programme together.*"

Research Question: Is PFB a Useful Tool to Support an IY Trained Teacher's Classroom Management Skills?

Each objective and the accompanying findings served to adequately address the overall research question i.e. is PFB a useful tool to support an IY trained teacher's classroom management skills? The teacher acknowledged that PFB is a useful and necessary tool, and it was convenient and practical for the classroom environment. Mrs Drier preferred feedback to be provided on the same day and she noted that visual graphs representing percentage of behaviours were helpful. Self-reflection questions and the opportunity to discuss her implementation were worthwhile components of PFB for Mrs Drier.

Overall, the teacher felt PFB was a useful tool for drawing attention to her behaviour, prompting her to be kinder, and more aware. Regardless of these effects, Mrs Drier believed the intervention did not impact her performance. She suggested that another teacher, someone requesting assistance, might have found receiving PFB more beneficial than she did *"...because I never asked for it, I'm in control already, the differences weren't marked on the graph. The before and after [results] weren't huge."* Examination of quantitative data showed no clear association between providing PFB, and increases or decreases in the use of commands.

Mrs Drier recognized that certain factors influenced the classroom dynamics (students' anticipation of school trip or impromptu sports activity) and influenced the class' daily routine. Analysis of qualitative data and frequency counts of commands indicated possible influential factors associated with implementation; such as, Mrs Drier's perception of her classroom management capabilities, her use of behaviour management strategies, opinions of credibility, and consultants of PFB. The teacher's receptiveness to intervention was also likely to intervene with implementation, as she did not intend on acting upon PFB information.

I've never changed *anything* for you.... So if I had to prepare and change stuff, it would have been really burdensome for me ... if I felt that you needed me to be something that I was not, and be false for that time, I would have found that *very* cumbersome and very difficult.

Summary of Findings

The data collected through qualitative and quantitative approaches were presented as a mixed methods analysis, with one or both datasets complementing the other and providing supplementary information to determine findings. Even though data indicates Mrs Drier found PFB practical and useful in prompting awareness of her behaviour, and encouraging positive, kind interactions, PFB did not elicit behaviour change or enhanced implementation. Exploration of teacher identified factors, aspects from data, and the processes of PFB, revealed factors that may have impacted the intervention. The teacher's perceptions of her management capabilities, her implementation of IYTCM strategies, and her attitude towards PFB intervention are explored as contributing factors that may hinder the effects of PFB. Further, the perception of 'outsiders' is considered, with reference to teachers' efficacy. The interactions of the identified factors are discussed in the following chapter.

CHAPTER FIVE - Discussion and Conclusion

The integrated analysis of data assisted in identifying aspects that potentially influenced the PFB intervention. These aspects are described in relation to the presented provision of PFB and associated findings from this study. Research literature is incorporated to understand the factors that hinder or facilitate implementation, before briefly acknowledging issues with sustainability. The limitations of the study are described prior to concluding this research thesis, and suggestions for practice, and future research are outlined. It is important to note that the experiences and perspectives represented within this chapter, have been conveyed by a single participant, and therefore cannot be generalised to other teachers or situations. Nonetheless, the insights and ideas to emerge do provide some understanding of intervening aspects for programme implementation.

Provision of Performance Feedback

The intervention examined Mrs Drier's use of commands to determine if PFB could facilitate implementation fidelity, however, Coe (1998) surmised that the way an individual responds to PFB may depend on the way feedback is provided, and that individual's perceptions of feedback.

To facilitate performance of IYTCM strategies, appropriate and evidence-based components of PFB were incorporated into the provision of the intervention. The presentation and delivery of PFB were suitable for the teacher and the environment. Visual and verbal PFB was able to be delivered conveniently, and the teacher appreciated the inclusion of coloured graphs that tracked her performance. Visual and verbal feedback has been included in studies that demonstrated the effectiveness of PFB (Fallon et al., 2015; Reinke et al., 2007). The time between observations and delivery of PFB was also examined, and demonstrated an association between PFB effectiveness and the immediacy of feedback delivery (Duchaine et al., 2011; Scheeler et al., 2004; Solomon et al., 2012). Unfortunately due to teacher commitments, this study delivered PFB within two hours of the observation session. Self-reflection questions were incorporated for the teacher with the aim of, creating a space for Mrs Drier to consider personal and/or professional factors impacting on her performance, and to collect qualitative data using similar techniques from IYTCM training (Webster-

Stratton, 2012; Webster-Stratton & Reid, 2002). Previous studies have used self-report or self-monitoring measures with PFB (DiGennaro et al., 2007; Noell et al., 2005). These measures served to gather treatment fidelity information (Fallon et al., 2015; Reinke et al., 2007). As a separate fidelity checklist was included in the study, self-reflection responses contributed to enhancing the understanding of the participant's experience.

The feedback Mrs Drier received on her use of command strategies provided her with an increased awareness of her behaviour. Unfortunately, behavioural awareness did not affect her implementation, and the frequency counts of the teacher's effective and ineffective commands did not appear to change. Even though some effective commands were used more and ineffective commands were used less; the opposite also occurred. For example, Mrs Drier's use of effective commands with praise statements worsened during the intervention phase, whereas her frequency of ineffective question-commands remained the same, however, the nature of the command had changed. Implementation practices, feedback design and delivery, and participant characteristics may have interacted with each other to produce unusual results. A meta-analysis concluded that under certain conditions, feedback interventions can have adverse effects on performance Kluger and DeNisi (1996). Because of the ambiguity of findings, Coe (1998) suggested that a focus on identifying conditions that facilitate improved performance may benefit research.

Consultants of PFB. An aspect, which may have facilitated and/or hindered the impact of PFB, was concerned with the individual providing feedback, i.e. the consultant. Self reflection and interview responses provided an insightful account of Mrs Drier's experience of classroom observation and feedback. The teacher's opinion about the quality and credibility of PFB was strongly associated with her evaluation of the individual delivering the feedback. Credibility, according to Brinko (1993), is an important aspect in determining if feedback is likely to improve performance. Although accurate data should suffice in prompting behaviour change, the source of feedback (i.e. the consultant) is assessed according to expertise, reliability and belief (Coe, 1998). Hence, four categories of consultants were identified in a discussion of possible providers of feedback; the inexperienced outsider, the inexperienced insider, and the experienced outsider, and experienced insider.

The researcher was viewed as an inexperienced outsider due to the lack of formal teaching experience and training in the IY programmes. While Mrs Drier considered inexperience as a barrier to understanding, research in single-case designs

with PFB has showed that 69% of consultants were graduate students or professors from universities (Fallon et al., 2015). The negligible impact of PFB in the present study is likely to be a consequence of the teacher's perceived notion of credibility, and the value she placed on the feedback she received. The supposed value and credibility of feedback may have also affected her performance, i.e. limited credibility, limited change in behaviour (Brinko, 1990).

When exploring credibility of school leaders and peers (inexperienced insiders), the teacher voiced *"I don't think my behaviour would have changed, but I would have appreciated the fact that the person had been through what I've been through: walking alongside me."* Mrs Drier explained that her colleagues would not view the strategies she used as specific IYTCM strategies; nevertheless, she would still value their feedback as they had spent time managing classrooms and student behaviour. Fallon et al. (2015) noted zero school personnel were involved as providers of feedback in their single-case study review, whereas findings from Sanetti et al., (2014) mentioned intervention implementation with school staff improved, but was unable to be maintained. Mrs Drier stated that the most suitable person to deliver feedback to her was a colleague, who completed the IYTCM programme alongside Mrs Drier. The colleague was in a position of authority at the school, and was therefore able to conduct observations, provide PFB, and assist with implementation and behaviour support plans.

The experienced outsider is possibly the most common type of consultant in PFB research (Fallon et al., 2015). From the teacher's comments, it seemed that previous feedback received from professionals was hesitantly accepted, and potentially ineffective. The teacher believed that because observers spent brief amounts of time in the environment, they were unable to fully understand the classroom dynamics, *"...I know the child better than you. You've come in for a few minutes; I've known the child the whole year, so I would resent any information like that."* Feedback from professional others is necessary to ensure fidelity as implementation deteriorates over time (Noell et al., 2005). PFB is the most effective method to increase fidelity through direct assessment of intervention practices (Fallon et al., 2015; Noell et al., 2005). As Jones, Wickstrom, and Friman (1997) found, initial discussions on implementation improved the mean level of performance however when PFB was introduced, fidelity of implementation increased between a range of 60 to 83%. The provision of PFB and its impact on implementation may have been hindered by Mrs Drier's opinions of

researchers, programme facilitators and other trained professionals providing feedback. If Mrs Drier's opinions are likely to be shared by other teachers, this would have implications for receptiveness of feedback and continued implementation of learning or behavioural programmes.

Teacher efficacy. An alternative explanation for the seemingly weak impact of PFB is linked to the teacher's sense of efficacy. Teacher efficacy (TE) is "the judgment of personal competence *in light of* an analysis of the task and situation," (Tschannen-Moran et al., 1998, p. 233). In other words, a teacher's belief about their teaching ability as well as their belief in successfully attending to teaching tasks, constitutes the concept of TE. Teacher's self-esteem and TE are associated with acceptance of PFB (Tschannen-Moran et al., 1998) although teachers with high self-esteem were more likely to rely on their own self-perceptions than accept PFB from a less credible source (Ilgen, Fisher, & Taylor, 1979; cited in Coe, 1998). Increased teacher efficacy was found to be associated with reduced number of perceived concerns, such as maintaining classroom behaviour, completing paperwork, and planning lessons (Ghaith & Shaaban, 1999). Mrs Drier's belief in her capabilities and competence in teaching and behaviour management was prominent throughout the study. *"I've always been competent. ... Competent and confident. Because I believe in my teaching and I'm a good teacher."* According to Tschannen-Moran et al., (1998) this belief is likely to remain stable even after exposure to new teaching practices or behaviour management techniques. Teacher efficacy is also associated with a teacher's perception of new practices, and the subsequent implementation of such practices. Teachers with greater efficacy are more likely to perceive new practices as important and congruent with their own methods, thus implementing practices with less difficulty (Guskey, 1988; Zee & Koomen, 2016). On the one hand, Mrs Drier's perception of her capabilities and classroom management strategies were favourable, hence supporting the notion of high TE and self-esteem. On the other hand, the findings on Mrs Drier's IYTCM implementation did not indicate high fidelity or intentions to implement foundational practices. This contradictory finding may indicate the presence of other aspects that are interacting with credibility and TE factors.

Aspects Contributing to Performance

Although Mrs Drier expressed high levels of confidence in managing her classroom, and believed her use of behaviour management strategies was optimal; her implementation of IYTCM foundational strategies were questionable. Ajzen's (1991) theory of planned behaviour posits that the willingness an individual has to perform a particular behaviour can be predicted by their attitude towards the behaviour, subjective norms, and perceived behavioural control. The individual's behavioural intention is then directly associated with the likelihood of her/him performing the behaviour. Subjective norms refers to the apparent social pressure felt by an individual to perform (or not perform) certain behaviours (Ajzen, 1991). Given that Mrs Drier generally taught without additional people in her classroom, subjective norms were thought to be less influential than attitude and perceived behavioural control.

Attitude. The teacher's attitude (value judgement or affective response) to certain IYTCM strategies may have influenced her implementation of these strategies. The attitude an individual has towards a new programme has been associated with the likelihood of that programme's implementation (Ghaith & Yaghi, 1997; Kennedy & Kennedy, 1996; Kim & Hunter, 1993) with individual's attitude being positively and strongly associated with their intention to perform behaviour (Kim & Hunter, 1993). For Mrs Drier, her attitude towards particular strategies may be linked to; the context which she implements IYTCM strategies and, the congruency of these strategies to her behaviour management practices.

Interactions of context and congruency. Mrs Drier acknowledged that classroom factors, such as curriculum topics and irregular events, may account for her use of effective command strategies. While it is possible that some curriculum areas required less teacher-student interactions (e.g. writing sessions), a closer look at the irregular events did not show a noticeable difference between Mrs Drier's behaviour when she was 'unfocused' and when she was 'relaxed'. It is possible that particular teacher-student contexts elicited the use of IYTCM strategies, rather than curriculum areas. The teacher noted during a PFB session, "*...I know I don't praise but they are good, they follow and they have not misbehaved.*" This may infer that Mrs Drier viewed behaviour management strategies, and their subsequent use, as a response to misbehaviour. Inappropriate and disruptive behaviours are more likely to attract teacher attention, hence eliciting a response. Reflecting on the findings, the teacher's infrequent and tentative use of praise, and her objection to using incentives in her

classroom, suggests that she may not view positive and proactive approaches as useful or effective. As Mrs Drier acknowledged that her use of strategies or reactions to behaviour occurred "*in the moment*", it could be that her habitual responses were typically targeted towards inappropriate behaviour.

If Mrs Drier was more inclined to respond to inappropriate behaviour, opportunities to respond to appropriate, positive behaviours or use proactive approaches, may have been missed. Further, Mrs Drier's attitude to implementing proactive strategies was compatible with her perception of her students. Although the teacher did not have visible classroom rules, she believed her students were conscious of the behavioural expectations she established at the beginning of the year, "*they know my expectations and they know when they're out of line... They didn't know these things in the beginning...*" She also thought that her students were responsive to her personality, "*They know that I'm not one to hold a grudge.*" Mrs Drier interacts with her students and manages her classroom in ways that are congruent with her current practices; unfortunately these practices do not correspond to the underlying principles of the IYTCM programme. The strategies on the IYTCM pyramid illustrate a hierarchy of intensity for various behaviour management skills (Webster-Stratton, 2012; Appendix A). Strategies and skills on the foundational level (for example: empathy, positive attention, praise, incentives etc.) are designed to be used liberally and consistently with all students (Webster-Stratton, 2012). Frequent use of these strategies ensures that more intensive management techniques can be applied with favourable outcomes; hence such strategies are necessary to produce positive outcomes associated with the IYTCM programme.

Even though PFB increased her awareness of her performance in class, as Guskey (1988) found, implementation can be negatively impacted if the programme practices were not congruent with teachers' current practices. This mismatch may account for her hesitation or minimal intention to use positive, proactive IYTCM strategies, therefore reducing the potential of favourable programme outcomes for students.

Perceived behavioural control. Mrs Drier's behavioural intention is also related to her belief of how easy or difficult implementation is in the presence of anticipated external factors (Ajzen, 1991; Kennedy & Kennedy, 1996). It is possible that Mrs Drier was unable to implement foundational strategies regularly due to her perceived behavioural control over influencing factors. An individual's degree of

perceived behavioural control is affected by internal (skills or abilities) or external (resources, environment, teacher time) sources. As Mrs Drier believed her skills and abilities are competent, potential difficulties with implementation may result from external factors. Teacher time is a valuable resource that is spread among a range of activities such as; delivering instruction, collecting student data, planning and preparing for lessons, managing behaviour etc, and consistent implementation of classroom behaviour management programmes may therefore easily be overlooked in a busy and demanding day. Ajzen (1991) believed that the link between behavioural intentions and the actual performance of behaviour could be directly determined by the teacher's perceived behavioural control. This idea can be extended to the earlier discussion on TE and concerns around consultants of PFB. In Mrs Drier's experience, her high level of TE, and the task of carrying out strategies that may not be congruent with her own practices, may be negatively affected by her perceptions of behavioural control, especially in the presence of an 'outsider'.

Poor programme knowledge and benefits. In addition to Mrs Drier's perception of behavioural control and attitude toward implementation, ineffective or poor of knowledge may have contributed to performance. The knowledge and theory that supports the design of the IYTCM pyramid may not have been thoroughly explained and promoted during training, and therefore was unable to ensure the consistent and liberal use of foundational strategies. The application of proactive strategies could be viewed (by facilitators and/or teachers) as easy to implement, and thus the importance of these behaviours may not be emphasised during workshops, or coached in the classroom. An alternative explanation is that Mrs Drier may have forgotten the importance of universal strategies, and her willingness to use behaviour that was non-congruent with her current practices, may have resulted in minimal programme implementation. The teacher commented that she hadn't reviewed the IYTCM material since she completed the programme in 2014, *"I don't think that I would have used my knowledge from three years ago as much as I have...with you coming in..."*

It is possible that the teacher's participation in the IYTCM programme may not have produced the intended behavioural change to Mrs Drier's practices. The benefits of the programme for Mrs Drier were related to her disposition in the classroom. For example, she noted that IYTCM training made her approach toward students and their behaviours, softer. The teacher was also comforted by listening and sharing

experiences of other teachers, and adopted some behaviour tools (give me 5) from the programme. Her teaching experience over the years, her strong TE and, perception of consultants and facilitators, may have reduced her receptiveness to the IYTCM programme, therefore influencing her behavioural intentions. For Mrs Drier, the IYTCM training may have only facilitated a minimal shift in the teacher's attitude, with further shifts and changes impeded by her personal characteristics.

Facilitating performance. Following Ajzen's (1991) theory, attitude towards behaviour is necessary for behavioural performance. For this study, a change in attitude is possibly the key factor contributing to performance. Even though the IYTCM programme may have softened the teacher's approach, a shift in attitude and a follow-through to behavioural change may not have occurred. Behavioural intentions may have been impacted by various aspects as mentioned throughout this discussion: the teacher's opinions about 'outsiders', high teacher efficacy, perceived behavioural control, influence of external factors, and incongruent practices, may all have the potential to hinder programme implementation. Teachers participating in classroom behaviour management programmes attend workshops with varied personal characteristics, some of which may have been seen in Mrs Drier. Therefore the intention to implement new practices and approaches needs to be facilitated through the programme.

For attitudinal change to reach maximum impact, emphasis needs to be placed on the benefits of the behaviour, and the necessity of performing the behaviour. By creating positive affect and explicitly demonstrating appropriateness, programme acceptance is established, and this opens avenues for influencing behavioural intentions therefore leading to behavioural change (Ajzen, 1991). The details of whether attitudinal change techniques are used during IYTCM training, or if it is a component of the programme, is unknown. Mrs Drier's experience of implementing IYTCM strategies and the inferences made from the findings, prompt important questions regarding the sustainability of classroom behaviour management programme.

Sustainability of Classroom Behaviour Management Programmes

The sustainability of teachers' use of IYTCM strategies is a topic of discussion and concern among IY programme providers (i.e. group leaders and facilitators). In NZ, a seventh, non-compulsory workshop is held three-months after the completion of the programme. The agenda for the three month follow-up is determined by the facilitators and may explore ways to keep IY alive in the classroom and in the school (MOE, 2015a). However these approaches to sustainability are teacher-driven, and given the possible presence of performance-hindering factors - implementation fidelity and maintenance of sustainability plans may not be guaranteed.

When investigating PB4L, Elder and Prochnow (2016) stated that supportive leadership is an essential contributing factor for sustainability. The authors explained that supportive leadership consists of receiving practical and effective support from management, as well as having a team that is knowledgeable and skilled in the programme techniques. This type of leadership may therefore be essential for sustaining IYTCM and similar behaviour management programmes in classrooms. As reflected by Mrs Drier, the most beneficial support she received was from a colleague who had completed the IYTCM training and went into a leadership role in the school. Her colleague was able to observe the teacher's class and provide quality feedback that Mrs Drier valued and appreciated. While it may seem that the pragmatic solution is to ensure that one teacher and a school leader complete behaviour management training, the problem arises when the school leader relocates – as was the case with Mrs Drier's colleague.

Consistent and accurate implementation of classroom behaviour management programmes may be impacted by many interacting, and contributing, environmental and individual variables. Different techniques and tools to sustain implementation fidelity have been researched; programme follow-up procedures (Ford et al., 2012), check-ins with teachers (Kallestad & Olweus, 2003) and delivery of PFB (Cavanaugh, 2013; Sanetti et al., 2014). PFB is an evidence-based tool to enhance implementation, however, this study's findings showed minimal impact of PFB on the use of behaviour management strategies. Nonetheless, this research provides necessary insight of an IYTCM trained teacher, and the influential factors that could intervene with programme implementation. The inferences and discussion in this chapter are defined by the limitations of the study. Before conclusions can be drawn regarding the research, the limitations of the study are presented.

Limitations

Sample size. All data collection and procedures were completed with one primary school teacher. It is therefore necessary to explicitly acknowledge that the opinions and inferences expressed reflect the experiences of one teacher, in her current school, at a point in time. Therefore, these opinions and implications cannot be generalised to other teachers or environments.

Timing. The study was conducted in term three of the school year which implies that the teacher had 6 months to establish appropriate classroom behaviour. The types of behaviours exhibited by students, and strategies used by the teacher, may have been impacted by the time of year data was collected, i.e. differing from the beginning or the end of the school year.

Inter-observer agreement. The validity of the data is questionable given the lack of inter-observer agreement. Although inter-observer data could have ensured observation recordings were completed accurately, the inclusion of another researcher in the classroom would have been too intrusive and may have jeopardised the continuation of the research project.

Scope of intervention. This research was conducted to determine the practicality and usefulness of PFB and therefore focused on specific IYTCM strategies (e.g. use of commands and praise statements). Inferences about the teacher's use of IYTCM strategies, is therefore restricted. It is possible that Mrs Drier used other behaviour management approaches but these were not recorded or directly observed during data collection.

Conclusions from Research

Consistent and positive behaviour management strategies are important in promoting protective factors for students. Protective factors may, in turn, mitigate potential negative outcomes in students' later life. The link between classroom behaviour management programmes, implementation fidelity, and expected outcomes for students, has been supported and demonstrated (NIRN, n.d.; Webster-Stratton, 2011; Wilson et al., 2003). As fidelity is a key component to producing favourable outcomes, regular and authentic implementation needs to be assured. In this study, PFB was explored as a means to support a teacher with behaviour management

implementation; three fundamental conclusions of this research thesis are outlined below.

First, the provision of PFB for an IYTCM trained teacher facilitated awareness of the teacher's practices and actions. Prior to the PFB intervention, the teacher's self-report on her use of behaviour management strategies and implementation was rated optimally. Nevertheless, evidence-based PFB components - verbal and visual features - assisted in the teacher being more conscious of her actions. Self-reflection questions served to further focus the teacher's attention on her use of strategies in class. The intervention was successful in bringing about more awareness of behavioural practices for the teacher. The provision of PFB to teacher implementers may therefore be able to narrow the distinction between what strategies teachers believe they display in the classroom, and what strategies they utilise in reality.

Second, the impact of PFB may be impeded by various teacher characteristics. By aiming to establish if PFB is supportive – i.e. useful, practical, and effective – to a teacher, factors contributing to the effectiveness of the intervention were identified. The range of factors, specifically those associated with the teacher's efficacy and attitudes towards behaviour management strategies were influential in establishing the teacher's willingness to perform such actions. Further it could be inferred that the interactions between attitude and efficacy is a crucial aspect that should be considered when delivering classroom management programmes. The presence and interactions of teacher characteristics is confounding, resulting in performance: remaining the same, improving, declining, or enhancing/worsening and then reverting back to its initial state.

Third, the mixed method approach was valuable in providing insights to teacher's perspective and attitude towards PFB. Pragmatic philosophy and principles directed the research to adopt a design and methods capable of producing problem-solving results. A mixed methods approach was the most suitable to provide detailed and accurate accounts of PFB and participant's experiences. A single methodological approach would not have provided sufficient information to, (a) support delivering the intervention; (b) accurately assess the usefulness of PFB and; (c) provide the insights attributed to the integration of both methods. Mixed methods knowledge collected in real-life settings may be able to determine results that could be utilised in bridging the gap between research and practice.

The contributing factors that surfaced through the delivery of PFB, and the subsequent inspection of teacher characteristics, identified potential implications for practice and suggestions for future directions.

Implications for Practice

Facilitators of behaviour management programmes. Dynamic classroom environments and expectations on teachers from parents and management may be common for primary school educators; however, this does not alleviate the pressure in the classroom. Requiring teachers to then apply a programme or use different strategies, which may not be congruent with their current practices, may be met with frustration. Compounding this feeling with teachers' beliefs in their efficacy and capabilities may make it difficult to control in research or programme participation. Awareness of these factors and, how they may facilitate or hinder programme implementation fidelity, is necessary for providers of behaviour management programmes. Facilitators may need to spend dedicated time in promoting programme benefits and motivating teacher use, in the hopes of establishing attitudinal change and behavioural intentions.

Teachers. The daily activities of a teacher are non-stop, and time-consuming. Environmental and institutional influences outside of the teacher's direct control may impact teachers' capabilities to accurately and consistently provide appropriate behaviour management techniques. While implementation may last for the duration of the programme; increases in teachers' expectations, limited support and infrequent reinforcement of appropriate strategies, may reduce implementation fidelity. Further, demand placed on academic ability and assessment outcomes during the first years of primary school may overshadow the importance of social, emotional and behavioural well-being of students. A pragmatic solution may be to incorporate daily teaching of social, emotional and behavioural expectations, allowing teachings to practice their strategies and maintain consistency and fidelity in implementation.

Recommendations for Further Research

Future PFB research may benefit from a mixed method design, in the hopes of identifying similar effects and aspects found in this research. Replicating this study with different teachers may provide further understanding of PFB as an evidence-based

tool for enhancing implementation, as well as, complementary data that may indicate the presence of contributing factors.

Given the affect of possible impeding perceptions of consultants of PFB, it may be worthwhile for teachers with high teacher efficacy to video record their performance in class and conduct their own critique and feedback. As Brinko (1990) noted, feedback from the self is more credible than feedback from any leader and significantly improves performance. This variation of the study may also include a credible individual completing the same video critique and PFB could be shared and explored.

With regards to the IYTCM programme, suggestions for the delivery and implementation would be short-sighted given the limitations of this research. Nevertheless, there is evidence that efficacy enabling programmes are best suited to pre-service and student-teachers (Ghaith & Shaaban, 1999). The provision of IYTCM programme to a cohort of teachers in training may reduce the impact of influential factors (incongruence of practices) and assist in the maintenance of regular use of programme foundational strategies. As Zee and Koomen (2016) found, teachers who displayed high levels of efficacy were able to cope with challenging behaviours by using proactive behaviour management strategies. It would also be valuable for future research to examine current IYTCM programme implementation, and level of fidelity in NZ. This research would assist in identifying if there is a need for more supportive measures to enhance application of appropriate, proactive strategies in classrooms.

Final thoughts

This research thesis' conclusions and implications are valuable to the educational and child-development fields. Similar findings may be able to expand existing knowledge of PFB, and/or highlight potential areas that may impede its effectiveness. While the focus of the study was on the teacher, the ultimate intention is for students to have access to positive and appropriate interactions with teachers, in the hopes of enhancing protective factors that will enable opportunities for favourable life outcomes.

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APPENDIX A

IYTCM Pyramid Framework

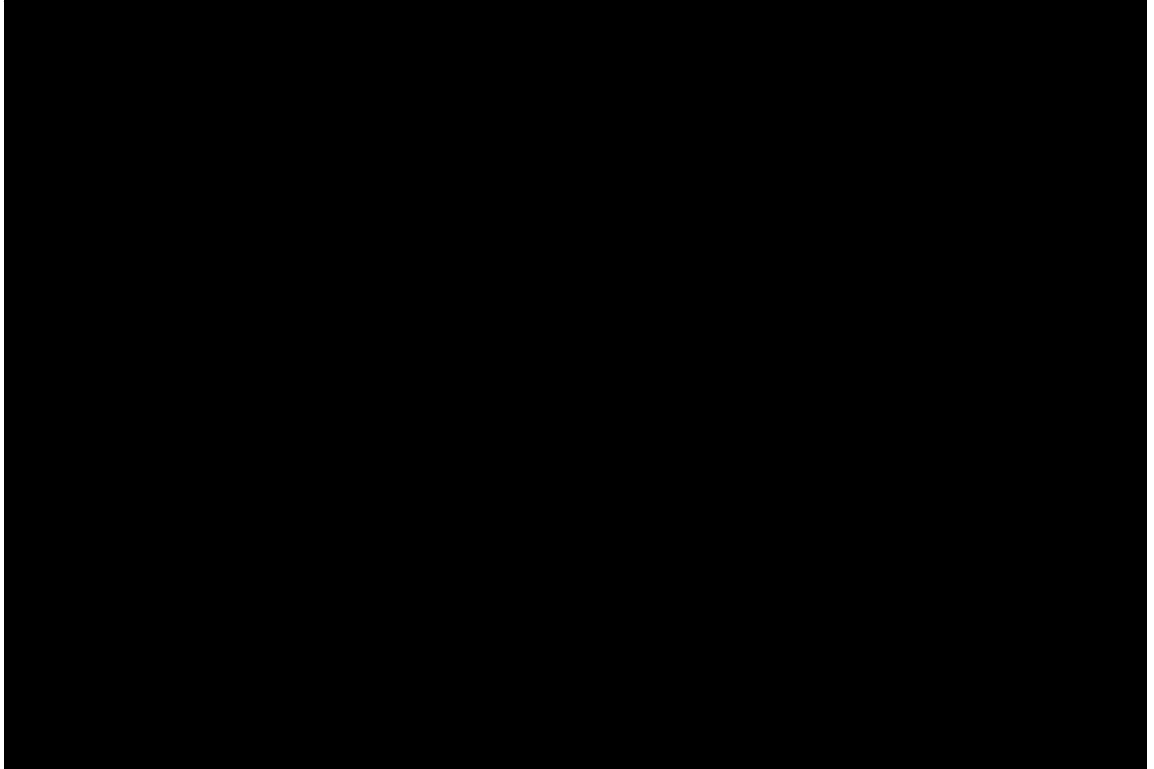


Fig. Incredible Years Teacher Classroom Management Programme pyramid framework. Developed by C. Webster-Stratton, 2012.

APPENDIX B

Table of Pilot Study Decisions

Table 3a

Table Detailing Processes Completed in the Pilot Study, and the Subsequent Implications and Decisions for the Current Study

PILOT RESEARCH PROCESSES	IMPLICATIONS FROM PILOT	PRESENT RESEARCH
SELECTION PROCESS		
<ul style="list-style-type: none"> • Contacted school through Deputy Principal (DP) • Discussed study with DP to determine if teachers matching the selection criteria. • DP had potential participant in mind and would approach participant. 	<ul style="list-style-type: none"> • Word of mouth <ul style="list-style-type: none"> - R to contact teachers and DP of known schools. - R to follow-up with school and contact interested participant. 	<ul style="list-style-type: none"> • Draft letter appealing for participants <ul style="list-style-type: none"> - detail benefits to T and students • P will be chosen based on criteria in Ethics and first come first serve.
INITIAL CONTACT AND CONSENT		
<ul style="list-style-type: none"> • R was introduced to potential P. • Arranged a time to chat to T about the study • Information about the study was delivered in T's classroom with student present. • Explained purpose of study, benefits, structure, time commitments, and T's rights. • Gave T copies of the consent form, information sheet to read over. • R contacted T a week later to determine interest • Verbal consent to participate was received from T and written consent form was signed before interview. 	<ul style="list-style-type: none"> • Discussion may have been too brief <ul style="list-style-type: none"> - did not emphasize confidentiality and the benefits. • T expressed concerns regarding: <ul style="list-style-type: none"> - senior leaders accessing information - the number of observation sessions needed for the study. • To make the study viable for T and R, number of sessions were reduced however T still found duration of study too long. 	<ul style="list-style-type: none"> • Initial discussion with P needs to be more detailed to ease concerns around data and recorded information. • Discussion about the study should be carried out in a quiet place so T is not rushed for time or cannot be disturbed. • R to go through the info sheet and consent form before handing them to T. • Arrange a time to contact T to determine interest. • Number of sessions could be reduced to 4 – 6 – 3 depending on the number of foundational strategies being targeted.
PRE-QUESTIONNAIRE		
<ul style="list-style-type: none"> • R delivered questionnaire to T's pigeon hole • Followed up with T by email to arrange convenient time for interview. 	<ul style="list-style-type: none"> • Questionnaire needed to be returned before interview <ul style="list-style-type: none"> - however questionnaire was returned late - questions were poorly integrated 	<ul style="list-style-type: none"> • More time to be allowed between receiving questionnaire and interview <ul style="list-style-type: none"> - an electronic version of the questionnaire may be an option

Table 3a cont.

PILOT RESEARCH PROCESSES	IMPLICATIONS FROM PILOT STUDY	PRESENT RESEARCH
PRE-INTERVIEW		
<ul style="list-style-type: none"> Conducted in T's classroom during school hours with no students around. Interview was tape recorded. Interview schedule was underdeveloped to adequately address RQ. 	<ul style="list-style-type: none"> Environment was comfortable for T and she was able to point at things in her classroom that related to the questions. Underdeveloped interview schedule provided surface level responses and ignored the importance of in-depth discussion and rapport building with P. 	<ul style="list-style-type: none"> T will be invited to choose interview space that is quiet / outside of school hours Develop more robust interview schedule <ul style="list-style-type: none"> - learn schedule to allow free flowing conversation.
MIXED METHODS		
<ul style="list-style-type: none"> Measurement tool was tested during the observation and was not compatible classroom. Qualitative data and information needs to inform the quantitative collection of data. 	<ul style="list-style-type: none"> R decided to use a tally counter which allowed R to move around the room if needed. More time needs to be given to the analysis of the questionnaire, interview to determine which strategies PFB would be helpful in supporting. 	<ul style="list-style-type: none"> Rough analysis of the interview may target the researcher's initial observation in the classroom. <ul style="list-style-type: none"> - Analyze data before intervention. - Meet with teacher before observation sessions to determine if selected strategies are suitable. - Strategies need to be operationally defined before meeting with T.
BASELINE & WITHDRAWAL PROCESS		
<ul style="list-style-type: none"> Baseline (4) and withdrawal (4) sessions were conducted in 20 mins blocks. <ul style="list-style-type: none"> -R recorded data using the tally counter. -R took brief notes of # students, adults, times and activity. -R attempted to remain unobtrusive Graph of baseline scores were shown to T and a goal was set to increase average # of skills. 	<ul style="list-style-type: none"> Sessions were conducted too close to each other Researcher notes were too simple to contribute to RQ's and data interpretation. 	<ul style="list-style-type: none"> Collaborate with T regarding number of session and spread observations out. R to use a template to record general information and examples of T's behaviour/students response.

Table 3a cont.

PILOT RESEARCH PROCESSES	IMPLICATIONS FROM PILOT STUDY	PRESENT RESEARCH
INTERVENTION PROCESS		
<ul style="list-style-type: none"> Observations were conducted over 3 weeks, sometimes with no days in between. PFB presented to T when convenient but within two hours of the observation PFB consisted:- <ul style="list-style-type: none"> a coloured paper graph showing T her skills count (visual) R verbally giving T her score (verbal) R providing an example of how T used skill with class/students (verbal) 	<ul style="list-style-type: none"> T may feel that she is receiving the same information <ul style="list-style-type: none"> effect of PFB may dwindle if T is not given time to improve. PFB needs to be more rigorous <ul style="list-style-type: none"> what examples were provided to T along with her score? 	<ul style="list-style-type: none"> Allow at least 2 days between observations. Record notes on template used to support rigor Graph could be displayed on a tablet, making PFB delivery more flexible. Self-reflection questions could be included <ul style="list-style-type: none"> gauge teacher's experience of the day how she felt using strategy how she felt the students responded her response to her score etc.
POST-QUESTIONNAIRE		
<ul style="list-style-type: none"> Follow-up questionnaire was completed to compare ratings. 	<ul style="list-style-type: none"> Questionnaire showed minimal changes in the way T rated her behaviour and use of strategies. Information from the questionnaire was not used to inform the interview. 	<ul style="list-style-type: none"> Questionnaire will be left out. Strategies identified in the pre-questionnaire, and strategies targeted for support during intervention can be questioned in the follow-up interview.
POST-INTERVIEW		
<ul style="list-style-type: none"> Schedule focused on <ul style="list-style-type: none"> T's opinion of the study whether it was beneficial or supportive for her. 	<ul style="list-style-type: none"> Follow-up interview needs to be more robust <ul style="list-style-type: none"> assess how supportive T felt PFB was to their use of strategies factors influencing use of strategies 	<ul style="list-style-type: none"> Develop solid interview schedule <ul style="list-style-type: none"> may incorporate questionnaire items.

ABBREVIATIONS

T = Teacher

R = Researcher

RQ = Research questions

Teacher Classroom Management Strategies Questionnaire
Adapted from the Incredible Years Teacher Training Programme



Date: ____/____/____

This questionnaire aims to identify the teacher's classroom management strategies, specifically how *often* the teacher uses particular strategies and how *useful* she/he finds these strategies in their current classroom.

In completing this questionnaire, think about your general strategies for managing your entire classroom and not a specific child.

Please complete section A and B and return to the researcher.

Thank you.

A. Managing Classroom Behaviour

1. How confident are you in managing current behaviour in your classroom?	1	2	3	4	5	6	7
2. How confident are you in your ability to manage future behaviour problems in your classroom?	1	2	3	4	5	6	7

Very unconfident
Unconfident
Somewhat Unconfident
Neutral
Somewhat Confident
Confident
Very Confident

Teacher Classroom Management Strategies Questionnaire

Adapted from the Incredible Years Teacher Training Programme



B. Specific Teaching Techniques		Frequency					Usefulness				
In this section, I'd like to get your idea of how often you use the following techniques, and how useful you find each one for managing your classroom.		Frequency					Usefulness				
		Rarely/Never	Sometimes	Half the time	Often	Very Often	Rarely/Never	Sometimes	Half the time	Often	Very Often
1.	Coach positive social behaviours (helping, sharing, waiting).	1	2	3	4	5	1	2	3	4	5
2.	Describe or comment on bad behaviour	1	2	3	4	5	1	2	3	4	5
3.	Reward targeted positive behaviours with incentives (e.g., stickers)	1	2	3	4	5	1	2	3	4	5
4.	Praise positive behaviour	1	2	3	4	5	1	2	3	4	5
5.	Use Time Out (Time Away to calm down) for aggressive behaviour	1	2	3	4	5	1	2	3	4	5
6.	Single out a child or group of children for misbehaviour	1	2	3	4	5	1	2	3	4	5
7.	Reprimand in a loud voice	1	2	3	4	5	1	2	3	4	5
8.	Warn or threaten to send child out of classroom if s/he doesn't behave	1	2	3	4	5	1	2	3	4	5
9.	Ignore misbehaviour that is non-disruptive to class	1	2	3	4	5	1	2	3	4	5
10.	Use verbal redirection for child who is disengaged	1	2	3	4	5	1	2	3	4	5
11.	Prepare children for transitions with predictable routine	1	2	3	4	5	1	2	3	4	5
12.	Use group incentives	1	2	3	4	5	1	2	3	4	5
13.	Set up individual incentive programme (e.g., stickers, prizes)	1	2	3	4	5	1	2	3	4	5
14.	Give clear positive directions	1	2	3	4	5	1	2	3	4	5
15.	Warn of consequences for misbehaviour (e.g., loss of privileges)	1	2	3	4	5	1	2	3	4	5
16.	Use clear classroom discipline plan and hierarchy	1	2	3	4	5	1	2	3	4	5
17.	Use persistence coaching (focusing, being patient, working hard)	1	2	3	4	5	1	2	3	4	5
18.	Teach specific social skills in circle time	1	2	3	4	5	1	2	3	4	5
19.	Promote respect for cultural difference in my classroom	1	2	3	4	5	1	2	3	4	5
20.	Teach children to ignore disruptive behaviour	1	2	3	4	5	1	2	3	4	5

APPENDIX D

Interview Schedules

Initial Interview Schedule

General Questions

1. Tell me about your teaching career?
 - # of years teaching?
 - # of years in current school?
 - year group/ages?
2. How has your experience been this year with your current classroom?
3. On average, how do you feel your classroom responds to your use of classroom management strategies?

IY General Questions

4. When did you complete your IYTCM training? (month/year)
5. Did you attend all 6 workshop sessions?
6. Before the IY programme, how confident did you feel managing classroom behaviour?
7. And after completion of the programme?
8. What is your overall opinion of the IYTCM programme?
9. If I were participating in the programme, what would a whole day workshop look like?
10. Could you go into detail regarding particular content or aspects of the programme you found beneficial?
11. Did anyone else in your current school participate in the programme with you?
12. Do you know of any other teachers in your school who have been IY trained?

Coaching

In between workshops, coaches are available to support teacher's completing the programme.

13. Did you coach contact you? If N → Did you have any interaction with the coach outside of the workshops? How often?
14. Could you describe the role of your coach in between workshops?
15. During a typical coaching session, what would you and the coach do/discuss?
16. How did you find the coaching experience?
17. How often did you request support/assistance during training?

Accessing Support

18. Have you requested support from RTLB services since completing the training?
19. Within your teaching space (whānau, year level), how could you access support if you needed?

20. What about outside of your teaching space (junior level, whole school), how could you access support?
21. This year specifically, have you required additional support with students? What kind of support did you desire? Who did you request support from? How was this experience?

One of the benefits of delivering the IY programme in groups is that teachers can form networks to support each other. Would you agree?

22. Could you describe the experience of having fellow teachers completing the programme alongside you?
23. Do you/have you previously sought support from IY trained teachers that completed the programme with you?
24. Do you collaborate with other teachers for solutions and support? And how likely is it that this problem-solving would include IY strategies and skills?
25. Could you please describe what "support" would look like for you in your classroom?

Questionnaire

26. I would like to get an idea of what I would expect when I visit your classroom. Could you describe the structure/activities of an average day?
27. In the IY questionnaire, you had to rate the usefulness and frequency of foundational strategies.
Usefulness: are there any positive strategies that have been rated low? Or negative strategies rated high?
28. Could you please give me an example of how you use X strategy?
29. How do the students respond to you when you use X strategy?
30. What does X strategy look like when you use it?
31. Can you provide an example of how you have demonstrated X strategy in your classroom?
32. Can you talk me through when you've had to use X (neg) strategy?
33. How often would you say you use X (pos) strategies? (Daily, every hour)

Managing Self

34. If you are having a particularly stressful day, how do you go about regulating your stress in the classroom?
35. Since completing training, have you reviewed the IY classroom management book?
Y → How frequently? When was this? What were your reasons for reviewing the book?
36. Reflecting on this year, how often would you say you used the IY self-reflective inventories to plan personal teaching goals?
Never / Once / 2-3 times / Once a month / Once a week / Daily

Targeted areas

The IY training pyramid displays the foundational strategies necessary for a positive learning environment with minimal behavioural challenges (show teacher pyramid)

37. Of these foundational strategies for classroom management, which do you rely on the most?
38. Of these strategies, which do you feel you could develop more competence in?

Follow-Up Interview Schedule

Teacher's experiences

1. What was your overall experience of the study?
2. Did you feel the study focused on the areas you needed support?
If No → Where did it fall short?
3. During our first interview, you mentioned you relied on ____ strategy the most in your classroom. Could you comment if this has changed?
4. And the strategy you felt you could develop more competence in was ____.
How do you feel this has changed?
5. In the questionnaire, you rated your confidence to manage classroom behaviour as _____. How would you say this rating has changed given your participation in the project?

Performance Feedback

6. How necessary do you think performance feedback is for impacting behaviour?
7. Describe your experience receiving feedback? (apprehensive, good because it provided a snapshot of you in class, or dismissive)
8. Did you feel that PFB made a significant change to your use of IY strategies?
Explain.
9. Did the feedback provide the necessary information for you to impact your performance?
10. Was the information provided through feedback sufficient to allow you to manage classroom behaviour? If N → what further information would you have preferred?
11. Did you notice particular behavioural changes in your students? Did behaviour improve / worsen? How so?
12. On average, how do you feel your classroom now responds to your use of IY strategies and skills?

Support and usefulness

13. During our initial interview, we discussed what support provided in the project would look like in the classroom. According to this understanding, do you feel performance feedback was supportive for you?

14. We had also discussed what support would look like to you in the classroom. You said ... Do you believe that type of support was available to you through the project? Which particular aspects of the project provided that support?
15. If we understand PFB as a tool that could be used in educational settings, how convenient was it for you to receive feedback and impact your performance?
16. Did you feel that PFB was a useful tool in supporting your use of IY skills? (explain / give examples on how it was useful)
17. Would PFB have a space in this school to be used among teachers?
18. Would you consider using this tool with other teachers? If N → Explain why? (practicality)

Stress

19. Could you describe how you felt having a researcher in your classroom observing you?
20. Did you feel as though my presence influenced the students' behaviour? In what way?
21. If the observation and feedback was provided by another teacher or a senior leader, how would that change your experience of the study?
22. Could you describe your stress levels during the project?

Project questions

23. What would you say were the benefits of the project for you?
24. Any benefits for the students? Other teacher's in your learning space?
25. What do you think were the strengths of the study?
26. What do you think were the weaknesses of the study?
27. What aspect of the feedback was most helpful for you noting your performance?
28. What aspect of the feedback was least helpful for you noting your performance?
29. Given the option, what would you like to have improved or changed in the study or with the feedback?
30. Any further comment or areas you would like to discuss?

APPENDIX E

Observation Schedule

DATE:		TIME entered c/room:		TIME left c/room:	
SESSION TIME:		ADULTS (excl researcher):		# of STUDENTS total:	
CURRICULUM TOPIC / ACTIVITY:					
Students:	In groups? How many?	Working individually?	Seated? Moving around?	Av behaviour: On task? Appropriately engaged? Disruptive?	
Teacher:	Position in c/room.	Delivering instruction?	Supervising work? How?	Level of engagement with students:	
EXAMPLES of IYTCM strategies / student response	#1				

Observation Schedule						
START COMMANDS (action verb + positive alternative behaviour)			STOP COMMANDS	QUESTIONS	NON-VERBAL COMMANDS (shaker / hand signals)	
Command	Command + Praise	Consecutive commands	(Don't! Negative)	(Why? Where?)	Command	Command + Praise

APPENDIX F

Self-Reflection Questionnaire and Fidelity Checklist

DATE:	Where is PFB delivered:	
TIME:		
QUESTIONS		
1) Would you like to reflect and comment on your performance this session?		
2) Where there any factors that may have influenced today's performance? Could you please explain?		
3) Can you recall using a particular strategy and the response you received from the students?		
CHECKLIST		COMMENTS/NOTES
1 – Two hours		
2 – Visual graph		
3 – Verbal score		
4 – Example		
4) Could you comment on how you feel about the PFB?		
RESEARCHER NOTES		

APPENDIX G

Project Forms

Information Sheet

Researcher Introduction

My name is Melanie Govender. I am a Massey University graduate student currently enrolled and completing a Masters in Educational Psychology (267.882). This research project has been designed to determine if providing feedback to an Incredible Years (IY) trained teacher is an effective and useful tool to support the teacher. Through a collaborative relationship with the teacher, the research aims to sustain the positive behaviour growth in the classroom and assist the teacher in dedicating more time to instruction than behaviour management of the students.

Project Description and Invitation

The project will explore the impact of providing feedback to an IY trained teacher on their use of foundational strategies and skills, such as praise statements, positive attention and use of proactive teaching strategies.

Information will be gathered through interviews, questionnaires, direct in-class observations, and teacher comments. The project seeks to determine whether providing visual (graphs) and verbal feedback on teacher's performance of IY strategies is effective and useful in supporting the teacher.

As an Incredible Years trained teacher, I would like to invite you and your class to participate in this project.

Participant Identification and Recruitment

Potential participants will be selected on a first come, first serve basis and it is preferable that they fulfil the following requirements:

- Completed Incredible Years Teacher Classroom Management (IY TCM) training before 2015.
- Currently teaching year 1 - 4 full-time
- At least 3 years teaching experience

The design of the project allows the researcher to gather and record information on the participating teacher, as well as allow the teacher to collaborate by sharing their experiences and opinions. Involvement in the project may produce increased levels of stress for the teacher which may be brought on by being observed in class, or by the process of receiving feedback. The researcher will address the concerns before the information gathering, however if a high level of stress is experienced during the project, the researcher will be able to refer the teacher to a senior management team member who will be able to offer further support. The school has been contacted to obtain permission to conduct the study, and students and parents/caregivers may receive a letter letting them know that their teacher is participating in a research project.

Project Procedures

The project uses interviews, questionnaires, in-class observations and teacher comments to gather information and impact foundational classroom management

strategies. The duration of the project is expected to take approximately a term (9 weeks) to complete.

Outlined below is a proposed schedule for information gathering which shall be negotiated prior to commencing the study.

W k	Mon	Tues	Wed	Thurs	Fri
1		Interview			Meeting
2		Observation		Observation	
3	Observation				Observation
4		Observation			Observation
5			Observation		Interview
6	No in-class observations for 2 weeks.				
7					
8	Observation			Observation	

An IY questionnaire will be completed before the study and gathers information on the teacher's frequency and use of foundation classroom management strategies. The questionnaire contains 22 rating questions and should take 15 minutes to complete. The teacher can be supplied with an electronic or hard-copy for their convenience.

An initial interview will be conducted to explore teacher's experiences in their classroom, their opinions of the IY teacher training programme, responses on the questionnaire and areas where the teacher requires support. A follow-up interview will be conducted to determine if feedback on performance offered support to the teacher and the teacher's experience in the project. Interviews are expected to take between 40 – 50 minutes and will be audio recorded for accuracy. A brief meeting to collaborate with the teacher on the areas the study will be attempting to support will occur before any observations.

A total of 9 x 20-minute observation sessions will be carried out over a term (9 weeks). For 5 of the observation sessions, the teacher will receive 10-minutes of visual and verbal feedback on IY strategies observed during the session. Included in the feedback is an opportunity for the teacher to reflect on the session and provide comment. Feedback on performance is required to take place within 2 hours of the observation session and this shall be arranged at the teacher's convenience. The remainder of the observations will be for the researcher to collect and record information. The last 2 observations will be conducted 2 weeks after the last feedback session. Observations are aimed to not disrupt classroom routine and will be carried out at different times of the day at the teacher's convenience.

Data Management

Information from questionnaires and interview notes will be stored on a password protected computer and only the researcher will be able to access these files. Name of the participant and other identifying information will be removed and replaced with pseudonyms. Observational information will be stored separately and converted into digital information which will be used to explore any changes in teacher performance. All data will be stored for 5 years and then destroyed; paper data will be shredded and electronic files deleted. The storage of all data and consent forms for the duration of the project is the responsibility of the researcher, however at the completion of the

project, responsibility transfers to Tracy Riley, Associate Professor in the Institute of Education at Massey University.

Participant's Rights

You are under no obligation to accept this invitation. Completion and return of the consent form will indicate your willingness to participate in this project. If you decide to participate, you have the right to:

- decline to answer any particular question;
- withdraw from the study at any time;
- ask any questions about the study at any time during participation;
- provide information on the understanding that your name will not be used unless you give permission to the researcher;
- be given access to a summary of the project findings when it is concluded.

Project Contacts

If you have any queries or wish to know more about the project, you are welcome to contact me on:

Mobile: 021 XXX XXXX

Kind regards,
Melanie Govender

Committee Statement of Approval

This project has been reviewed and approved by the Massey University Human Ethics Committee: Southern A, Application 14/88. If you have any concerns about the conduct of this research, please contact Dr Brian Finch, Chair, Massey University Human Ethics Committee: Southern A, telephone [06 350 5799 x 84459](tel:063505799x84459), email humanethicsoutha@massey.ac.nz

Participant Consent Form

- I have read the Information Sheet and have had the details of the study explained to me. My questions have been answered to my satisfaction, and I understand that I may ask further questions at any time.
- I agree to participate in this study under the conditions set out in the Information Sheet.
- I agree / do not agree to have my interview recorded for the purposes of this study.
- I wish / do not wish to have the recordings of my interview returned to me.

Teacher Signature:

Date:

Full Name - printed
