

THE EFFECTS OF THE PARENT EMPOWERMENT  
PROGRAMME (PEP) WITH PARENTS OF YOUNG  
MĀORI CHILDREN

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by

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# **The Effects of the Parent Empowerment Programme (PEP) with Parents of Young Māori Children**

## **Abstract**

Parenting programmes have been shown to be effective in reducing children's challenging behaviours and increasing parental use of positive behaviour strategies. However, it is difficult to find a brief group parenting intervention that teaches function-based assessment and from this function-based intervention plans. It is even more difficult to find a programme that has been culturally adapted for a Māori population. The aim of this project was to collect evidence on the effectiveness of the culturally adapted Parent Empowerment Programme (PEP).

The present project used a non-concurrent single case design with a sample of three parent-child dyads and one Playcentre supervisor. Parents self-identified a home routine time where their child engaged in challenging behaviour. Two 2-hour PEP workshops were conducted in the home of one of the participants. Parents undertook a 36 question Knowledge Quiz pre- and post- workshop. From the workshops, the parents identified the function of their child's challenging behaviour and then identified the strategies they would use to decrease this behaviour in the home setting. Video recordings were used to obtain baseline, intervention, and follow-up measures on the percentage of time children engaged in challenging behaviour, and the percentage of parental use of positive behaviour support strategies during the identified home routine time.

The results showed: 1) three of the four participants increased their knowledge of functional behaviour assessment and positive behaviour strategies, 2) parents correctly identified the function of their child's behaviour then identified and implemented a positive behaviour support strategy, 3) children's challenging behaviours decreased and parental use

of positive behaviour strategies increased during intervention phase, this was maintained at follow-up, 4) social validity results were varied with three of the participants finding the PEP socially acceptable, and 5) all participants engaged with and completed the programme.

The findings provide support for the effectiveness of the culturally adapted Parent Empowerment Programme, and showed that three parents can successfully identify and implement a function-based intervention in their own home with success.

## Glossary of Māori Terms

<b>Term</b>	<b>Definition</b>
Awhinatanga	Embrace or support
Hinengaro	Head, mind
Hui	Meeting
Kai	Food
Kanohi ki te kahohi	Face to face
Karakia timatanga	Opening prayer
Karakia whakamutanga	Closing prayer
Karanga	Call to invite guests onto the Marae
Kaupapa	Principle or policy
Koha	Gift of appreciation
Koro	Grandfather
Mana	Dignity, status and power
Manaaki	Take care of, hospitality
Manuhuri	Guests, visitors
Māori	Indigenous people of New Zealand
Marae	Courtyard, meeting place
Mihi or mihimihi	Greetings or introduction
Noa	Free from extensions of tapu

Pakeha	Different, not Māori
Pepeha	A structured way of introducing yourself in Māori
Poroporoaki	Farewell, farewell speech
Powhiri	Welcoming ceremony
Tangata whenua	People of the land
Tapu	Sacred
Te reo Māori	Māori language
Te Tiriti o Waitangi	The Treaty of Waitangi, treaty between the British crown and Māori chiefs.
Tinana	Physical body
Tūrangawaiwai	Place to stand, place of belonging
Urupa	Cemetery
Wairua	Spirituality
Whaikōrero	A formal speech
Whakataukī	Proverb or saying
Whakawhanaungatanga	Process of establishing relationships
Whanau	Extended family or community of related families
Whanaungatanga	Close connections between people

## **Chapter One**

### **Introduction**

*Take care of our children.*

*Take care of what they hear, take care of what they see, take care of what they feel.*

*For how the children grow, so will be the shape of Aotearoa.*

*Dame Whina Cooper (from Schaefer, 2013)*

Children engage in challenging behaviour in many ways such as non-compliance (Owen, Slep, & Heyman, 2012), physical or verbal aggression (Fox, Dunlap, & Cushing, 2002; Fettig & Ostrosky, 2014), and tantrums (Johnson & Katz, 1973). Although children's challenging behaviour can be difficult to manage for family members, appropriate parenting strategies can be utilised and this can lead to the resolution of the child's challenging behaviour (Fox et al., 2002; Johnson & Katz, 1973; Patterson, DeBaryshe, & Ramsey, 1989). Teaching parents' positive behavioural strategies has been found to be effective as this results in both an increase in positive parenting and desired child behaviour, as well as decreases in harsh parenting and children's challenging behaviour (Fettig & Barton, 2014; Kaminski, Valle, Filene, & Boyle, 2008; Thomas, & Zimmer-Gembeck, 2007; Tully & Hunt, 2015; van Mourik, Crone, de Wolff, & Reis, 2016).

Engagement in parenting programmes has been shown to be negatively influenced by factors such as low socio-economic status, ethnic or racial minority, and/ or a history of family mental illness (Duppong-Hurley, Hoffman, Barnes, & Oats, 2015; Ingoldsby, 2010; Sanders & Prinz, 2008). The low engagement rates of these families is of concern within the New Zealand context as Māori, New Zealand's indigenous population, are over-represented in the areas of low socio-economic status and poor mental health (Marie, Fergusson, &

Boden, 2014; Mason, Stefanogiannis, Templeton & Weerasekera, 2012; Wahlbeck, 2015) with Māori having higher rates than non-Māori for child conduct problems (Ritchie, 2016; Sturrock and Gray, 2013). This finding indicates that increasing Māori participation in parenting programmes is important, as they are evidence based interventions which have been shown to be effective.

This introduction is presented in two parts. Part one identifies the cultural lens through which this research has been conducted, providing background information about the researcher, research philosophy, and the historical and social background of Māori in New Zealand. Part two explores the development of children's challenging behaviour, how this impacts on whānau, and interventions to improve outcomes for whānau.

## **Part I**

### **Cultural Lens**

#### **Ko Wai Au? Who am I?**

*Ehara taku toa I te toa takitahi, engari taku toa he toa takitini*

*My strength is not mine alone, but the strength of many*

*(Pihama, Greensill, Campbell, Te Nana, & Lee, 2015)*

Why is it important within an academic forum to start with who I am? Within a Māori context it is important because who I am today is determined by those who have come before me; I am a product of my history and my whakapapa. My personal, ethnic and professional identities stem from my whakapapa. My whakapapa empowers and strengthens me.

Ko Hikurangi toku maunga

Ko Waiapu toku awa

Ko Horouta toku waka

Ko Ngati Porou toku iwi

Ko te whānau a Ruataupare toku hapu

Ko Tuatini toku marae

Ko Corina Landon-Lane toku ingoa.

As a blonde haired, blue eyed child it never occurred to me that I stood out when I was with my whānau. All of my family had blue eyes like me, and I had the same Koro and Nanny as all the other children. Visiting whānau during the summer holidays was a normal part of life for me, as was visiting Tuatini Marae and exploring all of the names in the urupa and how I was related to them with my Nanny. I have always felt that Tuatini Marae was my tūrangawaiwai; my place to stand. Even though I did not grow up on or around the Marae, I was christened there and grew up knowing that Tuatini was my home.

My time with my whānau taught me that relationships were key, identifying oneself in connection with those that have gone before you, and respecting the mana of those around you at all times. As Macfarlane (2004) explained, development for Māori involves wairua, manaaki, and whānaungatanga and these kaupapa (principles) resonated with my own upbringing. I was raised with the understanding that well-being did not just involve an individual's physical and mental health, but also the health of those who went before them, and are with them now. Te Whare Tapa Wha (Durie, 1994) places words around the philosophies that were present during my upbringing, with personal well-being consisting of tinana, hinengaro, whānau, and wairua.

McNeill's Te Ao Tutahi model encapsulated the different facets of my cultural identity (McNeill, 2009). Te Ao Tūtahi contains four different cultural realities that Māori may function in, 1) Te Ao Tawhito, the pre-colonisation Māori world, 2) Te Ao Hou, the synthesis of Māori and Pakeha worlds, 3) Te Ao Pakeha, the European world and, 4) Te Ao Whakanekeneke, the global world. Throughout my childhood I resided in Te Ao Pakeha, the European world, as this is where my mother saw the best possibilities for my future. Her

father, my Koro, had been punished severely for speaking te reo Māori, and he refused to allow his children to speak te reo Māori. The suppression of the language did not lead to the suppression of Māori tikanga in my childhood, as my mother passed down the Māori way to do things, such as our house being open to whanau at all times, and having multiple cousins live with us throughout my childhood. McNeill explains how Māori today are able to easily move between each of the cultural realities, as the need requires (McNeill, 2009). It is Te Ao Hou were I find myself situated for this project.

### **My Research Philosophy**

*E tipu e rea mō ngā rā o tō ao*

*Ko tō ringa ki ngā rākau a te Pākehā*

*Hei ora mō te tinana*

*Ko tō ngākau ki ngā tāonga a ō tīpuna Māori*

*Hei tikitiki mō tō māhuna Ko tō wairua ki tō atua, Nānā nei ngā mea katoa*

*– Tā Apirana Ngata*

*Grow and branch forth for the days destined to you*

*Your hands to the tools of the Pākehā for the welfare of your body*

*Your heart to the treasures of your ancestors as adornments for your brow*

*Your spirit to God, who made all things*

*Sir Apirana Ngata (Ngata, 1949)*

**Research for Māori, by Māori.** Durie (2005) described four approaches to research to consider within the New Zealand context: research not directly relevant to Māori; research involving Māori; Māori centred research; and Kaupapa Māori research. Research that is not directly relevant to Māori still needs to be respectful of the rights and interests of Māori. An area of research that could be placed into this category would be quantum physics. Research involving Māori consists of research which includes Māori as participants and may include

the category of ethnicity in data collection. Māori centred research generally consists of Māori participants and Māori researchers using mainstream methods for research. Lastly, Kaupapa Māori research not only includes Māori participants and researchers but also utilises Māori research methods and analyses data from a Māori perspective (Durie, 2005; Hudson, Milne, Reynolds, Russell, & Smith, 2010; Jones, Ingham, Cram, Dean, & Davies, 2013). Herbert (2001) describes Kaupapa Māori research as upholding Māori culture and values whilst being conducted within a Māori world-view while Walker, Eketone and Gibbs (2006) describe Kaupapa Māori research as research which is conducted for Māori, by Māori, from a Māori cultural perspective. The main critique of Kaupapa Māori research appears to be based in its qualitative nature, with questions around whether this method results in valid and reliable data (Walker et al., 2006). Māori centred research does not generally lend itself to this critique as it utilises mainstream research standards. Evans and Paewai (1999) believe it is important for Māori whānau to have access to interventions which have empirical support and have been shown to be effective with a Māori population. In relation to the Te Ao Tūtahi model (McNeill, 2009), Māori centred research would fit within Te Ao Hou, the synthesis of Māori and Pakeha cultures.

Integrating Māori processes with mainstream research processes has been explored by McClintock and colleagues (2012). They state that researchers need to be aware of cultural protocols when conducting research with a Māori population. Table 1 displays how Māori protocol can complement research protocol. An important Māori protocol is the powhiri process, which is used by tangata whenua (hosts) to welcome manuhiri (visitors) onto the Marae, and values the ideas of respect and positive relationships (McClintock, Mellsop, Moeke-Maxwell, & Merry, 2012). In the case of research, tangata whenua would relate to the prospective participants whilst manuhiri would be the researcher.

Table 1.

*Elements of the Powhiri Process and the Research Process.*

Powhiri Process	Research Process	Comments
Karanga - call to welcome manuhiri onto the marae: reason for visit identified by manuhiri and accepted by tangata whenua	Advertisement for participants, participants express interest, information/ consent forms, receiving consent forms	Consultation with Māori occurs prior to this stage to ensure research is of benefit to Māori.
Mihimihi and whanaungatanga	Introduction and rapport building.  Initial interview: includes demographic information, and discussing with tangata whenua the extent of their involvement, how they would like to participate.	Occurs kanohi ki te kanohi (face to face)  Collaboration, inviting participants to also be partners in the process  Spiritual and emotional support can be acknowledged and provided here.  Opportunity for researcher to show commitment to the project and to the community which participants belong to.
Whaikōrero	In-depth discussion from both parties and respectful listening. Sharing and gathering information for both parties.	The main purpose of the research. Acknowledging that there is much to be learnt from the participants as well as the ability to pass on knowledge to them.
Koha	Thank you for participating	Appreciation for knowledge given

*Karanga* is the call by the guests as they arrive, and it is up to tangata whenua to decide whether to accept the call or ignore it as they often have no idea of the intentions of the visitors. This action can be linked to the returning of a research projects consent form, signalling the acceptance to participate and the acceptance of the call. *Mihimihi* follows the karanga and allows for connections to be made while acknowledging the reason for the meeting. This is a good time to clarify the intent of the meeting and can increase the chances of participant completion especially if participants feel they are partners. It is important for this to be done kanohi ki te kanohi or face-to-face. It is during the mihimihi that the *whanaungatanga* process takes place, this acknowledges the past, maintains strengths of whānau, and provides spiritual and emotional support. It is expected that the researcher has full commitment and involvement in the topic and community as well as common history as the participants. The *whaikōrero* allows for respectful listening, in-depth focused discussion, and the collection of information to occur. Finally, *koha* is the physical demonstration of appreciation for those who have shared their knowledge.

## **Māori Social and Historical Background**

*Piki atu au ki te taumata o tōku maunga,*

*Ka kite au I te mana, I te ihi o te whenua nei nō ōku tīpuna.*

*I climb to the summit of my mountain to see the lands of my ancestors*

*(Grace & Grace, 2003)*

In order for any research to be of value for the Māori community, it is important to understand the social and historical background of Māori (Ofahengaue Vakalahi, & Taiapa, 2013). In New Zealand, research has shown that from prenatal development through infancy, childhood, adolescence, to old age, Māori have a reduced health pattern and are over-represented in many negative indices (Marie et al., 2014; Mason et al., 2012). Only 15% of the New Zealand population identify as being of Māori descent (Statistics New Zealand, 2015) yet statistics for Māori in the areas of health, welfare, education and justice are significantly worse than those for Pākehā (European) (Hirini, Flett, Long & Millar, 2005; Lambie & Stewart, 2010; Liberty, 2014). Table 2 represents the percentage of Māori represented in negative indices across health, education, welfare, and justice in New Zealand (Department of Corrections, 2015; Mason et al., 2012; Ministry of Social Development, 2016). In order to begin to understand how to improve future outcomes for Māori whānau it is important to understand the possible reasons for this over representation of Māori in these sectors.

Table 2.

*Percentage of Māori Represented in Negative Indices across the Health, Education, Welfare, and Justice Sectors of New Zealand.*

Sector	Indices	% Māori population	% NZ population
Health	Psychological distress	9.6	6.2
	Hazardous drinking	32	18
	Unmet need for primary healthcare	33.4	27.1
	Not filling a prescription due to cost	15	7
Education	Stand downs	5.5	2.9
	Suspensions	1.4	0.7
Welfare	Unemployed	12.3	5.8
	Material hardship	20	8
	Perceived discrimination	25.8	17.1
Sector	Indices	% Māori Prison population	% Non-Māori Prison population
Justice	Offenders beginning prison sentence	57	43
	Parole starting	48	52
	Home detention	46	54

**Colonisation and effects on Māori mental health.** According to Mason and colleagues, Māori and Pacific Islanders have higher rates of psychological distress than other adults and are less likely to seek help and/or they face more barriers to accessing mental health services. In fact, Māori and Pacific Island adults generally experience disadvantage across all indicators of health status and access to health services. (Ministry of Health, 2015). Reid and colleagues (2014) state that “over half of Māori become mentally ill during their lifetime, and just under a third will have been diagnosed with a mental health illness within the past 12 months” (p. 515). Results from the 2014/15 New Zealand Health Survey (Ministry of Health, 2015) show that 9.6% of the Māori population suffered from psychological distress; the general population rate was 6.2%.

One explanation for the elevated rates of Māori psychological distress is that of colonialism and historical trauma (Reid, Taylor-Moore, & Varona, 2014). This started from the alienation and confiscation of land, loss of te reo Māori, and disruption to cultural practices (Macfarlane, Blampied, & Macfarlane, 2011). Research indicates that stressors from historical trauma play a role in mental and physical health issues within native populations (Duran, Duran, Heart, & Horse-Davis, 1998). Historical trauma is a relatively new concept that is currently being explored by Māori researchers, a concept which has stemmed from research of the Native American population (Pihama et al, 2014). This research explores the impact of colonisation on indigenous peoples, looking for explanations as to why indigenous populations have poorer health and more psychological challenges generations after the traumatic event occurred (Pihama et al, 2014; Reid et al, 2014; Sotero, 2006).

Reid et al (2014) suggested that the colonisation process may be directly responsible for the social, economic, cultural, and political marginalisation of Māori in New Zealand. As a result, Māori are disadvantaged especially in the areas of poverty, social isolation and poor education (Wahlbeck, 2015). It is well known that economic and social disadvantage are risk factors for marital conflict, emotional strain, and psychological distress (Conger, Ge, Elder, Lorenz, & Simons, 1994) which in turn effects the psychological and behaviour problems of Māori children. The rates for conduct problems are higher for Māori children (15-20%) than they are for the general New Zealand population (10%) (Ritchie, 2016; Sturrock and Gray, 2013). Acknowledging New Zealand's history and how the marginalisation of Māori may have resulted in an increase of possible risk factors for psychological and behaviour problems for Māori children is important (Reid et al, 2014).

**Te Tiriti o Waitangi.** When looking in the New Zealand context it is important to acknowledge Te Tiriti o Waitangi (the Treaty of Waitangi). Te Tiriti o Waitangi is an important living document that consists of three articles. Article one assigns the British

Monarchy kawanatanga or governance over those who live in New Zealand, article two places tino rangitiritanga or sovereignty for Māori over their lands, villages, and treasures, and article three ensures that all people who live in New Zealand will have equal rights. These three articles have been summed up with three principles; Partnership, Participation, and Protection (Herbert, 2001; Hudson & Russell, 2009; Evans & Paewai, 1999). The three principles are reflected within the New Zealand government sector policies and codes of ethics (Kumar, Dean, Smith, & Mellsop, 2012). When Te Tiriti o Waitangi principles are upheld, then Māori have equal rights with Pakeha in deciding the type of services provided, culturally specific behaviours used, and bicultural procedures available. Māori also have the right to have access to validated treatments which are respectful of Māori tikanga (Evans & Paewai, 1999; Macfarlane et al., 2011).

In the New Zealand health sector, Māori researchers have been exploring Māori mental health for over 30 years and have developed models which are believed to reflect a Māori perspective on mental health (Bennett, 2009; Waitoki & Levy, 2016). Te Wheke (Pere, 1982), Te Whare Tapa Wha (Durie, 1994), and the Meihana model (Pitama et al, 2007) are three well known Māori models of health and wellbeing which have resulted from this research. A thorough examination of these health models is not within the scope of this research project, although it is important to note that each of these models highlight the importance of considering the individual within the context their whānau.

**Cultural processes.** An integral aspect to all three principles of Te Tiriti o Waitangi is to ensure that Māori cultural processes are honoured, respected, and adhered to (Hudson & Russell, 2008). An important process for Māori occurs whenever Māori gather together to discuss important matters at a hui/ meeting. Lacey, Huria, Beckert, Gilles, & Pitama (2011) explain how Māori traditionally meet or come together. Please refer to Table 3 for an overview of this process from a Māori and Pakeha perspective. *Mihi* is the initial greeting and

engagement of the participant. It is important to clearly introduce yourself, the specific purpose of the meeting, and to confirm that the participants identify as Māori at this time.

*Whakawhānaungatanga* is about making a connection at a personal level, taking into account both parties connection to the land, whānau involvement, and use of te reo Māori. *Kaupapa*, or attending to the main purpose of the meeting, takes into consideration both current and historical factors to gain a broader understanding of the issue, and, finally, *poroporoaki* concludes the meeting. It is important that the meeting is ended so that both parties are aware that they are free to go and that they know what the next steps are for them.

### **Summary**

Creating a cultural lens is important when working with individuals and whānau/families (Brislin, 1983). This requires researchers to not only understand their own cultural lens but to also be open to a different cultural perspective and way of doing things (Evans & Paewai, 1999; Moreno, Wong-Lo, & Bullock, 2014). With an understanding of the social and historical context of Māori, it is possible to explore interventions that improve future outcomes for Māori (Reid et al., 2014). The beginning point to improving future outcomes starts with acknowledging the importance of Te Tiriti o Waitangi and using this document to help inform research and intervention practice (Hudson & Russell, 2008). Understanding the meaning behind the powhiri and hui processes allows research to be conducted in a respectful manner which is empowering of Māori and researchers as well

Table 3.

*The Hui Process and Workshop or Meeting Process from a Māori and Pakeha Perspective.*

Hui Process	Pakeha Meeting Process	Difference of practice
Mihi	Introducing facilitator, reasons for meeting	This is an appropriate time for participants to identify as Māori
Karakia timatanga	Opening prayer	This may be to Māori or European spiritual beings. A karakia ensures that the right spirits are in the room and guiding the meeting.
Whakawhanaungatanga	Group introductions, icebreaker	Getting to know each other, making connections. More than just stating your name and your favourite food.
Kaupapa	Group agreement	Rules for how the group will work together, may encompass the values of the group (respect one another, care for the tamariki, have fun). Not just rules.
Whaikōrero	Content of the meeting	Involves in-depth discussion and respectful listening. Group work, as all members of a meeting are important and may have something important to add. Māori use a consensus process for decision making, Pakeha tend to vote.
Poroporoaki	Close of meeting – summary and where to next	It is important to ensure participants are aware of what the next steps for them are and for them to have the opportunity to reflect on the meeting content.
Karakia whakamutanga	Closing prayer	To the same spiritual beings as the karakia timatanga.

## Part II

### Challenging Behaviour and Intervention

*Ko tā te tamariki he wāwāhi taha.*

*A child's role is to break the calabash.*

*(Pihama et al., 2015)*

#### **Children's Challenging Behaviour.**

As the above whakataukī suggests, it is natural for children to be inquisitive and break things as they learn to explore their world. It is the role of those around them to teach them how to explore while showing respect for people, places, and things (Dunlap et al., 2006a; Fettig & Ostrosky, 2011).

**Typically developing behaviour.** Challenging behaviour is developmentally normal for young children with tantrums, non-compliance, and aggression all part of typical child development (Breitenstein, Hill, & Gross, 2009; Keenan, Shaw, Delliquadri, Giovannelli, & Walsh, 1998). Tantrums should occur with less frequency as the child's self-regulatory system develops. Non-compliance can be seen as a child learning to respond to limits and boundaries which parents have placed around them, and aggression should decline as children develop the ability to communicate in a socially acceptable manner (Breitenstein et al., 2009; Keenan et al., 1998). Research suggests that children tend to grow out of challenging behaviour (Breitenstein et al., 2009; Fettig & Ostrosky, 2011). It is when challenging behaviour becomes persistent, or the child relies on challenging behaviour to have their needs met, that children may be at risk of future academic and/or vocational failure, problems with socialisation, and mental health concerns (Dunlap et al., 2006a; Meadan, Ayvazo, & Ostrosky, 2014). When challenging behaviour begins to have an adverse

effect on the child or those around them, intervention is recommended (Fettig & Ostrosky, 2011; Papatheodorou, 2005).

**Risk factors.** Risk factors are factors which, if present in a child's life, increase the possibility of a negative outcome (Cicchetti, 1989; Cicchetti & Cohen, 2006). It has been suggested that risk factors do not act in isolation, that is, the more risk factors a child is exposed to, the higher the likelihood of adverse outcomes (Atzaba-Poria, Pike, & Deater-Deckard, 2004). Risk factors that impact on a child's future behavioural path can be individual, familial, or societal. Individual risk factors include physical disorders (Lavigne & Faier-Routman, 1992) and temperament (Caspi, Henry, McGee, Moffitt, & Silva, 1995). Familial risk factors include parenting style (Darling & Steinberg, 1993; Deater-Deckard, Dodge, Bates, & Pettit, 1996), parent and child relationship (Patterson, Forgatch, & DeGarmo, 2010), parental stress (Conger, Patterson, & Ge, 1995), parental alcohol dependency (Siegenthaler, Munder, & Egger, 2012), and poor parental mental health (Bennet, Barlow, Huband, Smailagic, & Roloff, 2013; Lovejoy, Graczy, O'Hare, & Neuman, 2000). Lastly, societal risk factors can include belonging to an ethnic minority or indigenous status (Ritchie, 2016; Sturrock and Gray, 2013), and socio economic status (Dodge, Pettit, & Bates, 1994). It is, therefore, important to consider possible risk factors when identifying children's challenging behaviour and working with them and with their whānau.

**Impact on families.** A child's challenging behaviour is often a source of frustration for families with a prevalence of 6-25% engaging in this form of behaviour (Dunlap, Ester, Langhans, & Fox, 2006; Fettig & Ostrosky, 2011, 2014). Children with challenging behaviours impede a family's quality of life, impacting on their participation in community and family activities (Doubet & Ostrosky, 2015; Fettig & Barton, 2014; Fettig & Ostrosky, 2014), family routines (Doubet & Ostrosky, 2015; Fox, Dunlap, & Cushing, 2002) and also on the parents' feelings about their own parenting competency (Doubet & Ostrosky, 2015). A

child's challenging behaviour can lead to family isolation as the family is reluctant to take the child to the playground, church, or family events (Fox, Vaughn, Wyatte, & Dunlap, 2002a). Teaching parents' strategies to use in these situations can help them to feel more confident in their parenting practices and can help create a positive environment in the family home. (Doubet & Ostrosky, 2015; Fettig & Ostrosky, 2014; Fox et al., 2002a).

### **Effective Parent/Home Interventions.**

It is important that when a child engages in persistent challenging behaviour intervention occurs as early as possible so that they do not follow a negative life trajectory. (Powell et al., 2006; Reid & Patterson, 1989). This negative trajectory can be at great cost to both the individual and society (Blissett et al., 2009). For the individual, their whanau, and those around them, there can be added stress from having to live with the consequences of the challenging behaviour (Curtis et al., 2002; Fox et al, 2002a). Cost for society can come in the form of teen pregnancy, criminal offending, suicidal behaviours, and mental health problems (Fergusson, Horwood, & Ridder, 2005). Research shows that parenting programmes are an effective intervention to avoid this trajectory (Fergusson, Stanley, & Horwood, 2009; Fettig & Barton, 2014; Fettig, Schultz, & Ostrosky, 2013; Sanders, 2008; Tully & Hunt, 2015; Wittkowski, Dowling, & Smith, 2016), with parenting interventions based on social learning and cognitive-behavioural theory being the most effective in both the short and long term (Fettig & Barton; 2014; Tully & Hunt, 2015).

**Theoretical underpinnings of parenting programmes.** Including whanau in the planning and implementation of interventions for children is of importance within the area of child behaviour problems (Buschbacher, Fox, & Clarke, 2004; Clarke, Dunlap, & Vaughn, 1999; Dunlap & Fox, 2007; Dunlap, Newton, Fox, Benito, & Vaughn, 2001; Frea & Hepburn, 1999). It is important to collaborate with whanau as they understand the child's strengths, needs, characteristics, and history, as well as being invested the most in a positive

outcome for the child (Buschbacher et al., 2004; Dunlap & Fox, 2007). Through collaboration with whanau, an intervention may be more effective and sustainable as the individuals involved in the child's life have been able to contribute to the intervention design and implementation (Dunlap & Fox, 2007). An established method for collaborating with whanau are parenting programmes, also referred to as parent management training (PMT) or behavioural parent training (BPT), which teach parents strategies to shape their child's appropriate behaviour and decrease their inappropriate behaviour. Originating from Skinner's (1938) operant conditioning and Bandura's social learning theory (Bandura, Ross, & Ross, 1963), parenting programmes teach parents to positively reinforce appropriate behaviour and select positive behaviour support strategies for reducing challenging behaviour (Fisher & Gilliam, 2012).

*Coercion Model.* In addition to Skinner's and Bandura's contribution, Patterson's (1982) Coercion Model has greatly influenced parenting programmes. The Coercion Model focuses on the moment-to-moment interactions of a parent and child and involves the parent interacting in such a way that does not reinforce their child's challenging behaviour but concentrates on attending to the child when they are 'good'. In this manner, the interactions of the parent and child are changed with the result of more positive interactions between both and reduced negative interactions. For example, the parent requests the child do something, the child refuses or ignores the request, the parent makes the request again usually with a raised voice, and the child continues to refuse either by continuing to ignore the request or by raising their voice to match that of their parents. The cycle tends to end when the child reacts in such a way that the parent withdraws the request to reinstate calm into the situation. The next time the parent makes a request of the child, the child has learnt that by escalating the situation quickly they will not have to comply with the request. The child has been reinforced for responding negatively to the situation by not having to comply with the parental request

and thus continues with their coercive behaviour to 'get what they want'. The parent continues to 'give in' thus teaching the child that in order to get what they want, they coerce their parent until they give in (Patterson, 2002; Patterson et al., 1989). Parenting programmes tend to address aspects of parenting where parents inadvertently reinforce inappropriate behaviour and ignore appropriate behaviour. Parenting programmes change this cycle (Fisher & Gilliam, 2012). The Coercion Model has laid the foundation for well-known parenting programmes such as Parent Management Training- Oregon Model (Patterson, 2005), Incredible Years (Webster-Stratton, 2005), and the Triple P Program (Sanders, 1999).

*International group parenting programmes.* Parent Management Training-Oregon Model (PMTO) consists of 6 – 14 parent group sessions. Parents are taught effective parenting strategies (such as skill encouragement, effective discipline, positive involvement), and support parenting components (such as identifying and regulating emotions, enhancing communication, tracking behaviour). PMTO has been empirically shown to reduce antisocial behaviour in children (Patterson, Chamberlain, & Reid, 1982). The Basic Incredible Years (IY) parenting program is a 12 – 20 session, group program which is based on social learning theory. IY targets parenting skills by teaching parents how to play with their child, effective praise, tangible rewards, limit setting, dealing with noncompliance, avoiding and ignoring misbehaviour, time out, and preventative strategies (Webster-Stratton, 2005). IY has been empirically shown to be an effective intervention for children with conduct problems (Webster-Stratton, & Herman, 2010). Triple P, or Positive Parenting Program, (Sanders, 1999) is a multilevel support system which becomes more intensive at each of the levels. The group parenting programme is situated at level 4, and consists of up to 12 1-hour sessions. This level teaches parents to monitor their child's behaviour, identify causes of child behaviour problems, teaches positive parenting strategies (i.e. quality time, positive attention, behaviour charts), and how to manage misbehaviour (i.e. timeout), and show parents how to

develop planned activity routines (Sanders, Markie-Dadds, Tully, & Bor, 2000). Triple P has been empirically shown to reduce harsh parenting and challenging behaviours in children (Sanders et al., 2000).

There are many benefits to providing parent training in a group situation. Group parenting programmes can be cost effective as they train a number of families at one time, as opposed to spending time with each family individually, reducing professional time costs (Christensen, Johnson, Phillips & Glasgow, 1980). Group parenting programmes can also provide social support for those involved in the group (McGaw, Ball, & Clark, 2002), reduce parental stress (Pisterman et al., 1992), and increase parent competency (McConachie & Diggle, 2007; Pisterman et al., 1992).

*Positive behaviour support.* A systematic approach also to emerge in the area of parenting programmes, combined with the inclusion movement (Wolfensberger, 1983) and person-centred values (Kincaid, 1996), is that of Positive Behaviour Support (PBS) (Carr et al., 2002). The aim of PBS is to help achieve a better quality of life for both the individual concerned and those around them. This is mostly due to teaching parents to attend to the child when they are 'good' via the process of positive reinforcement, and changing the environment, or antecedents, so that challenging behaviours do not occur. (Carr et al., 2002). In order to do this, it is important to identify the purpose of the challenging behaviour; what is reinforcing the behaviour, and what is the child trying to achieve by displaying the challenging behaviour? (Fettig & Ostrosky, 2014; Fisher & Gilliam, 2012; Marcus, Swanson & Vollmer, 2001).

*Functional behaviour assessment.* Functional behaviour assessment (FBA) is a tool used to determine environmental variables that may impact on a child's behaviour, as well as determining what function or purpose the behaviour is serving (Fettig & Barton, 2014). Using

an ABC methodology, a FBA consists of identifying the target behaviour (B), what happened immediately before the behaviour or the antecedent (A), and what occurs after the behaviour or the consequence (C) (Meadan et al., 2014). From this information and through informal interviews with the parents and child (where age applicable) it is possible to determine what the function or purpose of the challenging behaviour is. According to Frea and Hepburn (1999) the three main types of function are 1) acquiring attention, 2) escaping or avoiding a request or task, and 3) gaining access to a tangible item.

FBA has successively been used to change children's challenging behaviour by practitioners, professionals, and researchers but has only recently been used with parent implementation (Duda, Clarke, Fox, & Dunlap, 2008; Fettig & Barton, 2014; Frea & Hepburn, 1999; Vaughn, Clarke, & Dunlap, 1997). Recent research has shown that teaching parents individually to implement their own function-based intervention is effective in increasing appropriate child behaviour and decreasing challenging child behaviour (Fettig and Barton, 2014; Galensky, Miltenberger, Stricker, & Garlinghouse, 2001). Galensky et al. (2001) involved the parents of three typically developing children with mealtime behaviour problems implementing a function-based intervention with their own child. The results of the study suggested that parents implementing function based interventions are effective in changing children's behaviours at home during mealtimes, as bites per minute increased, and inappropriate play decreased at this time. Fettig and Barton (2014) reviewed the literature on parent-implemented functional-based interventions for reducing challenging behaviour in children. Thirteen studies met the review inclusion criteria and showed that there is evidence that supports training parents in FBA to increase children's appropriate behaviour and decrease children's challenging behaviour. Teaching FBA based intervention has also been shown to be more effective than teaching non-FBA based interventions to reduce children's challenging behaviour (Ingram, Lewis-Palmer, & Sugai, 2005). In their study of two boys,

Ingram and colleagues (2005) implemented both a function based and a non-function based behaviour intervention plan with each boy using an ABCBC / ACBCB design. Results show that the function-based behaviour intervention plan was more effective in reducing problem behaviour for both boys than the non-function based behaviour intervention plan.

*Group functional behaviour assessment.* The literature suggests that group parenting programmes are effective for teaching parents how to conduct a FBA in the home setting (Fettig & Ostrosky, 2014; Fettig et al., 2015; Lindsay, 2016; McNeill, Watson, Henington, & Meeks, 2002; Shayne & Miltenberger, 2013). The Fettig and Ostrosky (2014) study involved parents from eight families attending four 1-hour group parenting sessions. The content contained four main topics 1) children's social and emotional development, 2) functional assessment and functional assessment based strategies, 3) designing functional assessment based parent intervention strategies, and 4) how to implement and monitor the chosen strategy. Results from the study show that implementation of functional assessment strategies increased for parents, and challenging behaviours decreased for children, from baseline to post-intervention. The findings from Fettig and Ostrosky (2014) provide strong support for a causal relationship between parent implemented functional based strategies and a decrease in children's challenging behaviours.

*Parent Empowerment Programme.* Lindsay, Tyler-Merrick, & Walker (2016) developed the Parent Empowerment Programme (PEP) to provide a New Zealand based functional behaviour assessment and intervention parenting programme specifically for New Zealand parents. The PEP consists of two 2-hour group sessions where parents learn how to identify and measure problem behaviour, what antecedents, consequences and intervention strategies are, functions of behaviour, how to conduct a functional behaviour assessment, and how to develop, implement, and monitor a behaviour support plan. Preliminary data show

that parents were able to generalise knowledge from the PEP workshops to their home environment and implement an appropriate intervention with their child (see Lindsay, 2016).

### **Parent Programme Engagement.**

Even though parenting programmes have been shown to be effective, participation and engagement rates are low (Tully & Hunt, 2015). Free and universally available parenting programme participation rates remain low for most socioeconomically disadvantaged families (Heinrichs et al., 2005; Sanders & Prinz, 2008). Heinrichs et al. (2005) explored the recruitment rates for a parenting programme, Triple P, offered to parents from low socio-economic preschools compared to those from high socio-economic preschools. Results showed that 44% of parents from high socio-economic preschools showed interest in attending the parenting programme, opposed to only 27% of parents from the low socio-economic preschool. Research shows that participation in, and successful outcomes of, parenting programmes is influenced by many factors, such as family characteristics, practical reasons, and the programme approach (Duppong-Hurley et al, 2015; Gross, Julian, & Fogg, 2001; Ingoldsby, 2010; Sanders & Prinz, 2008; Tully & Hunt, 2015). Parents less likely to complete parenting programmes are those whose family characteristics include: low socio-economic status, families with three or more children, an ethnic or racial minority, and/or a family history of mental illness (Duppong-Hurley et al, 2015; Gross et al., 2001; Ingoldsby, 2010). These are all indices where Māori are highly represented. Practical reasons which have been related to high attrition rates (participant non-completion rates) were scheduling difficulties, lack of transport and child care, and high programme costs (Sanders & Prinz, 2008). The specific programme approach and staff were also contributing factors to the high attrition rates as the programme's approach may not be compatible with a family's needs and the staff may be viewed as judgemental or as outsiders (Duppong-Hurley et al., 2015;

Ingoldsby, 2010). Programme approach also includes the frequency, duration, and location of sessions (Ingoldsby, 2010). Documented attrition rates for parent training programmes are high, ranging from 30–80 %, even when transport, financial incentives, and child care are offered (Duppong-Hurley et al., 2015).

**Engaging families.** Engaging families in parenting programmes is important. Lees and Ronan (2008) found that focusing on how to better engage parents in a 20 session Incredible Years parenting programme, and remove potential barriers, saw 100% participation in their study of four solo mothers of children with ADHD in New Zealand. In a report to the New Zealand Ministry of Education on the Incredible Years parenting programme retention rates for Māori (n = 56) and non-Māori (n = 109), Dunn (2012) found that, a relaxed course style which included group discussions and roleplays, and relationship with facilitators who responded to participants as equals and joined in the group discussion, were two aspects that were found to help parents engage. Māori participants commented on their preference for a Māori facilitator, with three who withdrew early specifying difficulties with cultural aspects of the programme. In New Zealand it is important for cultural competence to be at the forefront of practitioners' and researchers' minds when engaging with a Māori population (Skogstad, Skogstad & Britt, 2005).

### **Cultural Adaptations to Parenting Programmes.**

Research indicates that culturally adapting interventions to match cultural beliefs, language, and cultural processes with the family improves the acceptability and effectiveness of the intervention (Baumann et al., 2015; Butler & Titus, 2015; Griner & Smith, 2006; Huey & Polo, 2008; van Mourik et al., 2016). Baumann et al. (2015) conducted a literature review on the use of cultural adaptation models when culturally adapting evidence based parenting programmes. Of the 610 culturally adapted articles only eight articles met criteria for

inclusion in their study. Cultural adaptations that were made included changes in language such as translating materials (Bjorkness & Manger, 2013; Matos, Bauermeister, & Bernal, 2009, Matos, Torres, Santiago, Jurado, & Rodriguez, 2006; Turner, Richards, & Sanders, 2007), changes to persons such as using facilitators from the community (Turner & Sanders, 2006; Turner et al., 2007), including culturally appropriate metaphors such as programme name change or pictures in manuals (Matos et al., 2006; Turner et al., 2007), including culturally relevant content (Parra Cardona et al., 2007), and changes in delivery methods such as extended discussion times and building rapport with facilitators (Matos et al., 2009; Turner et al., 2007). The Baumann review did not report on the effectiveness of the culturally adapted interventions on positively changing parent or child behaviour, or on engagement and retention rates of participants.

In a literature review by van Mourik and colleagues (2016), Resnicow and colleagues' (1998) cultural sensitivity model was used to categorise cultural adaptations made to parenting programmes into two types, surface structure adaptations and deep structure adaptations. Surface structure adaptations include matching people, locations, and language to that of the target population, such as ethnically matching the facilitator to the participants, translating course materials i.e. manuals, and locating the workshops within a community building which is of significance to that population. Deep structure adaptations involve intertwining the social, cultural, environmental, and psychological elements that influence the target populations behaviour, such as including cultural process within the delivery of the workshop (prayers, proverbs), culturally adapting resources to include the target population (ethnic representation in vignettes), and introducing culture specific content within the workshops (racial socialisation, emotion control, large sibling groups). The van Mourik review concluded that culturally adapted parenting programmes were more effective than non-culturally adapted parenting programmes in improving parenting behaviour.

**Parenting programmes and Māori.** International group parenting programmes have been trialled in New Zealand (Robertson, 2014). Due to the unique bicultural nature of New Zealand, it has been highlighted that it is important that consultation and participation of Māori occurs prior to, and during, implementation of parenting programmes (Blissitt et al., 2009). Skills in cultural competence can increase parental/whānau engagement in parenting programmes as can the frequency, duration and location of the sessions (Ingoldsby, 2010). The Incredible Years Parenting Programme and Triple P have both been implemented in New Zealand.

*Incredible Years.* The Incredible Years (IY) programme (Webster-Stratton & Reid, 2003) has been trialled in New Zealand by the Ministry of Education and has been shown to be just as effective for Māori as it was for non-Māori families (Fergusson et al., 2009). By using a collaborative approach between parents and facilitators, the programme is said to be culturally sensitive, respecting each participant's goals and values, and how their connections to the past are relevant to their current attitudes and perspective (Fergusson et al., 2009; Sturrock, Gray, Fergusson, Horwood, & Smits, 2014). IY uses Māori tikanga or protocol, such as karakia, whakataukī, and waiata, as well as including the principles of manaakitanga (hospitality), tautoko (support), whakawhānaungatanga (relationship, connectedness), and tino rangitiratanga (self-determination). The New Zealand Incredible Years Parent programme utilises Durie's (2001) Te Whare Tapa Wha model where the four aspects to a person's wellness – tinana (physical), hinengaro (mental), wairua (spiritual), and whānau (social) are acknowledged (Ministry of Education, 2014). Intensive consultation with Māori occurred prior to the implementation of IY in New Zealand to ensure the cultural acceptability of the programme (Herewini & Altena, 2009). The IY group parenting programme does not teach parents to identify the function of their child's behaviour, or teach

them how to develop or implement a behaviour intervention plan in their home setting to address this function.

*Triple P.* Unlike the Incredible Years programme, the Triple P programme (Sanders, 2008) does not appear to have been trialled specifically with Māori. Sanders (2008) states that Triple P is culturally relevant as they have solicited opinions from consumers, conducted focus groups to identify if there are any concerns with implementing Triple P with specific ethnic groups, and they have updated their video material to include images of a range of ethnic families. Sanders also states that Triple P has been trialled successfully in New Zealand and cites a study by Venning, Blampied, and France (2003) which involves two boys who were not ethnically identified (Sanders, 2008). Triple P does address the function of the child's behaviour and requests that parents complete an Antecedent, Behaviour, Consequence monitoring form (Sanders, Turner, Markie-Dadds, 2001) during the first session, but it is not until the third session that parents look at addressing any misbehaviour. With this time lapse, it is possible that families may not realise the importance of identifying the function of their child's behaviour.

*Whānau Whakapakari.* Programmes have also been developed specifically by Māori for Māori using standard parent training (SPT) strategies, such as the Whānau Whakapakari programmes (Herbert, 2001). Herbert (2001) developed a three session SPT programme which was integrated with culturally specific content and developed into two parenting programmes specifically for Māori whānau. Intensive consultation with Māori occurred to establish Māori parenting values as well as content acceptability of SPT's. The Whānau Whakapakari Matuatanga Relationships Model and Values Model were both reportedly well received by participants and showed improved outcomes for parents (Herbert, 2001). The Relationship model consisted of SPT combined with culturally specific content which

explored whānau relationships in parenting in regard to child development, communication, and positive interactions. The Values model explored Māori identity and connections through the concepts of whakapapa (place in whanau as child develops, community connections), whanaungatanga (personal goals for whanau, how we learn), and awhinatanga (support, understanding how we communicate). Herbert (2001) did not report on child behaviour outcomes.

### **Summary.**

A child engaging in challenging behaviours is part of typical child development. It is when children use challenging behaviour to have their needs met that problems can occur. If early intervention is not received at this time, these children are more likely to experience negative interactions from family, peers, and teachers, and they are at a higher risk of school failure. The persistence of challenging behaviour throughout childhood can put a child at risk of negative long-term outcomes to their health and wellbeing. This places considerable costs to society in terms of additional social, educational, health and justice intervention.

Parenting programmes have been shown to be effective in helping parents to decrease their child's challenging behaviour whilst increasing desirable behaviour, especially if they teach parents how to identify the function of the challenging behaviour and teach how to implement a function-based intervention plan in their home. As parenting programmes have high attrition rates, especially in areas that affect Māori, it is important to focus on aspects that will increase engagement of parents with a relevant, culturally responsive programme.

## Chapter 2

### Literature Review

*Kohikohia ngā kākano, whakaritea te pārekereke, kia puāwai ngā hua*

*Gather the seeds, prepare the seedbed carefully,*

*And you will be gifted with an abundance of food*

*(Pihama et al., 2015)*

#### **Functional Behaviour Assessment.**

**Group parenting programmes.** As the above whakataukī suggests, it is important to gather articles on the proposed research topic and explore what has already been discovered in order for future research to be fruitful. Research analysing the effectiveness of parent-implemented FBA and function-based interventions in the home setting have been recently completed (Fettig & Barton, 2014; Lindsay, 2016) and reported in Chapter 1. The findings indicate that parents can learn functional assessment strategies, and implement a function-based intervention plan in the home setting which successfully reduced children's challenging behaviour and increased positive interactions between parents and child(ren). However, these findings suggest that refinement of the process still needs to occur (Fettig & Barton, 2014; Lindsay, 2016). These findings are important when deciding on what type of group parenting programme to use, but they do not address ethnic, geographic, or cultural limitations of the programmes.

**Māori and FBA parent programmes.** Searches for peer reviewed research from 2000 to 2016 using multiple databases (PsycINFO, ERIC, Google.scholar, NZresearch.org.nz and CINAHL) were performed, relating each of the following descriptors: 'challenging behav\*', 'parent training', 'parenting program\*', and 'parent intervention' with: 'functional behav\*', 'functional behav\* assessment,' and 'function-based intervention.' None of the resulting articles included a cultural adaptation of a parenting programme. Searches on the

same databases were performed using the terms functional assessment (and FBA) and Māori, ethnicity, and culture resulting in 54 articles, none of which applied to group parenting interventions. The purpose of this literature review is, therefore, to explore the effectiveness of the cultural adaptation of established group parenting programmes.

### **Cultural adaptation of established parenting programmes.**

As research on culturally adapting group parenting programmes which specifically teach parents to identify the function of their child's behaviour and then implement a function-based intervention plan was unable to be found, it was important to explore whether other group parenting programmes have been adapted internationally to address family cultural needs. An electronic search was conducted using the key descriptor terms of: 'parenting program\*', 'parent intervention', 'parent training', 'culture', 'trial', 'ethnic\*', 'indigenous', and 'group'. Experimental studies were included if they involved group parent training with parents of typically developing children aged between 3-10 years, and were developed or adapted for indigenous populations or ethnic minorities. Studies were excluded if they did not report on child behaviour. After reviewing the full text copies, seven studies were included.

Table 4 provides a summary of the seven sourced studies. Characteristics of the culturally adapted intervention include session number and length, location, and cultural adaptations made. Participant characteristics include ethnicity, age of child participants, number and gender. Parent results include positive parenting practices (PPP), harsh discipline (HD), parental over-reactivity and verbosity. Child results were sourced from measures such as the Eyeberg Child Behaviour Inventory (ECBI) subscales of problem and intensity, and the Child Behavior Checklist (CBCL) internalising and externalising subscales. Parent and child results displayed are from the within-group data as opposed to the between-group data, and Cohen's *d* is shown. Lastly, engagement rates are displayed.

Table 4.

*Included Studies, Characteristics of the Adapted Intervention, Participants, and Significant Results.*

Study	Intervention Adapted	Participants			Intervention Total Time (Number/Duration)	Location of Intervention	Cultural Adaptation		Mean Results: Reported Significant Differences Pre-Post		Parent Satisfaction	Parent Engagement Rates
		Number (Gender)	Ethnicity (Country)	Child age range years			SS	DS	Parenting Practices	Child Behaviour		
Bjorknes & Manger 2012	Parent Management Training – Oregon Model	96 (F)	Pakistani and Somali (Norway)	3-9	18 hr (Nine/2 hr)	NR	EMF, T	CP	Parent Practices Interview: PPP Pre = 67.24 Post = 72.29 ( <i>d</i> = 0.46) HD: Pre = 31.14 Post = 26.85 ( <i>d</i> = 0.27)	Conduct problems composite: Pre = 52.33 Post = 46.58 ECBI problem: Pre = 13.67 Post = 7.35 ( <i>d</i> = 0.45)	Family Satisfaction Survey: Quality Excellent = 83% Good = 17% Recommend Yes = 88% Probably = 12%	66%
Coard et al, 2007	Parenting the Strong Willed Child	30 (F)	African American (USA)	5-6	24 hr (12/ 2 hr)	NR	CR, EMF	CP, CSC	Parent Practices Interview: PPP Pre = 0.73 Post = 1.01 ( <i>d</i> = 0.92) HD Pre = 2.80 Post = 2.60 ( <i>d</i> = 1.46)	BASC-P Pre = 54.94 Post = 51.31 ( <i>d</i> = 0.32)	PSQ PC: High PD: High Recommend Yes = 100%	88%

Herewini 2014	Incredible Years	5 (F) 1 (M)	Māori (New Zealand)	3-5		Community buildings	EMF	CP		ECBI intensity* A: 67-55 B: 68-71 C: 64-45 E: 56-45 F: 47-34	Parent Programme Satisfaction Questionnaire: 7-pt Likert Overall: 7: Recommend: Yes = 67% Probably = 33%	83%
Kim, Cain, & Webster- Stratton, 2008	Incredible Years	29 (F)	Korean (USA)	3-8	(12)	NR	EMF, T		Parent Practices Interview: PPP Pre = :4.44 Post = 5.16 ( <i>d</i> = 1.13) HD Pre = 2.49 Post = 2.02 ( <i>d</i> = 0.4)	ECBI intensity Pre = 80.50 Post = 72.18 ( <i>d</i> = 0.51) ECBI problem: Pre = 13.09 Post = 5.17 ( <i>d</i> = 1.05)	PSQ: Satisfaction 7-pt Likert Overall: 6.03	96%
Lau et al, 2011	Incredible Years	54 (NR)	Chinese (USA)	5-12	(14)	Community clinic and school sites	EMF, T	CSC	Alabama Parenting Questionnaire: PI Pre = 59.45 Post = 61.81 ( <i>d</i> = 0.71) ND Pre = 14.28 Post = 12.48 ( <i>d</i> = 0.95)	CBCL externalising: Pre = 54.27 Post = 53.30 ( <i>d</i> = 0.78) CBCL internalising: Pre = 54.40 Post = 50.90 ( <i>d</i> = 0.7)	NR	83.3%

Matsumoto Sofronoff & Sanders, 2007	Triple P	50 (F)	Japanese (Australia)	2-10	11.5 hr (five/ 2 hr and 3/ 30 min)	NR	EMF, T	CSC	Parenting Scale over reactivity: Pre = 3.4 Post = 2.84 ( <i>d</i> = 0.68)	ECBI intensity: Pre = 110.80 Post = 94.12 ( <i>d</i> = 0.65)	CSQ: Satisfaction 7-pt Likert  PC: 5.70 PD: 5.65	100%
Turner, Richards, & Sanders, 2007	Triple P	22 (F) 4 (M)	Indigenous Australians	1-13	16 hr (6/ 2.5 hr and 2/ 30 min)	Community health sites	CR	CP	Parenting Scale verbosity: Pre = 4.08 Post = 3.39 ( <i>d</i> = 0.65)	ECBI intensity: Pre = 150.05 Post = 124.14 ( <i>d</i> = 0.75) ECBI problem: Pre = 19.81 Post = 14.49 ( <i>d</i> = 0.62)	CSQ: 68.5/91	77%

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*Note.* BASC – P = Behavioral Assessment System for Children – Parent, CBCL = Child Behavior Checklist, CP = cultural processes, CR = cultural resources (i.e. vignette), CSC = culturally specific content, CSQ = Client Satisfaction Questionnaire, *d* = Cohen’s *d*, DS = deep structure adaptation, EB = externalising behaviour, ECBI = Eyeberg Child Behavior Inventory, EMF = ethnically matched facilitator, F = female, HD = harsh discipline, IB = internalising behaviour, M = male, ND = negative discipline, NR = not recorded, PC = programme content, PD = programme delivery, PI = positive involvement, PPP = positive parenting practices, PSQ = Parent Satisfaction Questionnaire, R = Recommend, T = translation, SS = surface structure adaptation. \* = single case design study, individual results reported.

## **Programmes culturally adapted.**

Three studies adapted the Incredible Years (IY) parent programme (Herewini, 2014; Kim, Cain, & Webster-Stratton, 2008; Lau, Fung, Ho, Liu, & Gudino, 2011), two adapted the Triple P – Positive Parenting Programme (Matsumoto, Sofronoff, & Sanders, 2007; Turner, Richards, & Sanders, 2007), one adapted the Parent Management Training – Oregon Model (PMTO) (Bjorknes, & Manger, 2012), and one adapted the Parenting the Strong Willed Child programme (PSWC; Coard, Foy-Watson, Zimmer, & Wallace, 2007).

## **Study design**

**Randomised control trials.** Randomised control trials (RCT) were used by all but one study (Herewini, 2014) as RCT's were considered the 'gold standard' of evidence based practice (Kratochwill & Levin, 2014). Waitlist control groups were utilised by five of the six RCT studies (Bjorknes & Manger, 2012; Coard et al, 2007; Lau et al 2011; Matsumoto et al, 2007; Turner et al, 2007), with Kim et al. (2008) using a control group who were not offered treatment afterwards.

**Single case design.** Herewini (2014) was the only study to utilise a single case design. Six families were included in the Herewini study. Due to the real world application of parenting programmes, the fact that this literature search only resulted in one single case design was surprising. Research on teaching parents functional behaviour assessment (FBA) tend to utilise single case, multiple baseline design (Duda et al., 2008; Dunlap et al., 2006; Fettig et al., 2015; Galensky et al., 2001; Vaughn, Wilson & Dunlap, 2002). Causal inference may then be established from a single case design (Kratochwill et al., 2010) as opposed to statistical trends (Baumeister, Vohs, & Funder, 2007).

## **Study populations.**

**Ethnicity.** Table 4 indicates the participant ethnicity for each of the culturally adapted parenting programmes included in this review. All of the studies included an ethnically specific selection criterion. How ethnicity was determined varied across studies and included born in specified country (Kim et al., 2008), met definition set by study such as “maternal and paternal familial history reported to be U.S. born and solely of African American ancestry for at least three generations” (Coard et al., 2007, p. 803), or self-identified as being of selected ethnicity (Herewini, 2014). Four studies did not state how ethnicity was determined (Bjorknes & Manger, 2012; Lau et al., 2011; Matsumoto et al., 2007; Turner et al., 2007).

Defining ethnicity can be problematic. It is difficult to identify a person’s ethnicity by observation alone. Ethnicity is defined on the Statistics New Zealand website as “a measure of cultural affiliation, as opposed to race, ancestry, nationality or citizenship. Ethnicity is self-perceived and people can belong to more than one ethnic group”. Statistics New Zealand acknowledges that collecting ethnicity data can be difficult as people may cite one ethnicity but identify with more than one. Furthermore, some people may object to answering the ethnicity question thus reporting accurate figures can be problematic (Statistics New Zealand, n.d.).

**Recruitment.** Studies recruited participants from local community groups (Bjorknes & Manger, 2012; Herewini, 2014; Kim et al, 2008; Lau et al, 2011; Matsumoto et al, 2007), local community agencies such as the YMCA (Bjorknes & Manger, 2012; Coard et al, 2007; Herewini, 2014; Lau et al 2011; Turner et al, 2007), and schools (Bjorknes & Manger, 2012; Coard et al, 2007; Lau et al, 2011). Recruitment strategies were specifically directed to ethnic groups. This included the researchers using personal contacts (Bjorknes & Manger, 2012;

Herewini, 2014; Kim et al, 2008), word of mouth (Bjorknes & Manger, 2012), written material such as newsletters (Coard et al, 2007; Herewini, 2014; Matsumoto et al, 2007), community presentations at local schools (Coard et al, 2007), and agency referral (Coard et al, 2007; Lau et al, 2011).

### **Cultural adaptations**

**Consultation.** Only two of the seven sourced studies reported a consultation process with members from the target population prior to implementation of the parenting programme (Herewini, 2014; Turner et al., 2007). Turner et al. (2007) described a five-year consultation process which involved indigenous community members and the Aboriginal and Islander Community Health service. Consultation ensured that programme content, resources, and delivery format were appropriate for the indigenous people of Australia. Herewini (2014) consulted Māori group leaders and Māori whanau to ensure the cultural appropriateness of the programme in relation to Te Tiriti o Waitangi, te reo Māori, and Māori tikanga.

**Surface structure adaptations.** Surface structure adaptations include translating materials, creating culture specific resources, ethnically matching a facilitator with participants, and providing the programme locally. All of the sourced studies used surface structure adaptations when culturally adapting the selected parenting programme. Bjorknes and Manger (2012), Kim et al. (2008), Lau et al. (2011), and Matsumoto et al. (2007) translated existing materials, whilst Coard et al. (2007) and Turner et al. (2007) created culture specific resources, such as culturally tailored video and workbook. With the exception of Turner et al. (2007), all the remaining studies reported matching the ethnicity of at least one of the facilitators with participants (Bjorknes & Manger, 2012; Coard et al, 2007; Herewini, 2014; Kim et al, 2008; Lau et al, 2011; Matsumoto et al, 2007). The programme facilitator in the Turner et al. (2007) study was an Indigenous Health Worker but it was not

clear if that person identified as being indigenous. Only three studies (Herewini, 2014; Lau et al, 2011; Turner et al, 2007) reported the location of the parent group workshops. These were all from the community where the participants were recruited, such as a local religious building (Herewini, 2014), community centres (Herewini, 2014; Turner, 2007), and a school (Lau et al, 2011).

Surface structure adaptations involve identifying social and behavioural characteristics and matching intervention materials and messages to these characteristics. This means that on the surface it appears that the intervention has been culturally adapted to the target population, it does not indicate that the intervention is culturally sensitive. A culturally sensitive programme will include deep structure adaptations which include an appreciation for the cultures spiritual beliefs, family structures, social and economic history, and beliefs about parenting (Resnicow, Soler, Braithwaite, Ahluwalia, & Butler, 2000).

**Deep structure adaptations.** Deep structure adaptations include culture specific content, and cultural processes. Culture specific content was developed and included in the parenting programmes by Bjorknes and Manger (2012), Coard et al. (2007), Lau et al. (2011), and Matsumoto et al. (2007). The culturally specific topics included identifying cultural barriers, communication training, identifying and responding to racial socialisation, emotion control, developing positive self-image in African American children, and working with large sibling groups. Four studies stated that they took into consideration the cultural processes of participants (Bjorknes & Manger, 2012; Coard et al, 2007; Herewini, 2014; Turner et al, 2007) by incorporating cultural and/or religious elements to the delivery of the programme. Specific cultural elements reported were proverbs/ whakataukī (Coard et al, 2007; Herewini, 2014; Turner et al., 2007), prayer/ karakia (Coard et al, 2007; Herewini, 2014), female only group (Bjorknes and Manger, 2012), and extended family participation (Coard et al 2007).

Only Kim et al 2008 did not report making any deep structure adaptations to their parenting programme (Kim et al, 2008).

**Summary.** Ethnically matching the facilitator to the target population was the most utilised surface structure adaptation. Incorporating cultural processes into the delivery of the programme was the most utilised deep structure adaptation. All but one of the sourced studies (Kim et al, 2008) included cultural elements/responsiveness both at surface structure and deep structure adaptation level.

### **Parenting and Child Behaviour Measures**

All of the included studies utilised parent report measures to obtain parent and child change data from participants. No studies used direct observation to determine change in either parent or child behaviour. Herewini (2014) did not include a parenting measure. Parenting measures include the Alabama Parenting Questionnaire, the Parent Practices Interview, and the Parenting Scale. Child measures include the Child Behaviour Checklist, the Behavioral Assessment System for Children - Parent, and the Eyeberg Child Behaviour Inventory. The measures are described below:

*Alabama Parenting Questionnaire.* This is a 42-item questionnaire that uses a 5-point Likert scale (never, almost never, sometimes, often, always) and was used by Lau et al. (2011). It contains a positive involvement scale of 16-items (I drive my child to special activities), and a negative discipline scale of 7-items (I spank my child with my hand).

*Parent Practices Interview.* This is a 72-item questionnaire which uses a 7-point Likert scale and consists of seven subscales; harsh discipline (14-items i.e. spanking, yelling, threatening), harsh for age (9-items), inconsistent discipline (6-items), appropriate discipline (16-items i.e. correction, take away privileges, timeout), positive parenting (15-items i.e.

praise, hug/kiss/pat, sticker charts), clear expectations (3-items), and monitoring (9-items). Coard et al. (2007) focused on the monitoring, positive parenting, and harsh discipline subscales for their study. Kim et al. (2008) focused on positive parenting, appropriate discipline, and harsh discipline.

*Parenting Scale.* This is a 30-item questionnaire which measures three dysfunctional parenting styles; laxness (permissive discipline), over-reactivity (displays of anger, authoritarian), and verbosity (reliance on talking, overly long reprimands). Turner et al. (2007) and Matsumoto et al. (2007) both use this scale.

*Child Behaviour Checklist (CBCL).* The CBCL contains 118 behavioural and emotional problems, and parents indicate if each item is true (2), somewhat or sometimes true (1), or not true (0) of their child in the preceding six months. Two scales are reported on from this measure; Internalising (anxious/ depressed, withdrawn, and somatic complaints), and Externalising (aggressive and rule breaking behaviour). Lau et al. (2011) was the only study to use this measure.

*Behavioral Assessment System for Children – Parent.* The parent report version measures emotional, behavioural, and social functioning in children. It contains 131-items which are rated by parents on a 4-point scale (never to almost always). Four composite scores result from this measure; Externalising Problems (hyperactivity, aggression, and conduct problems), Internalizing Problems (anxiety, depression, and somatic complaints), School Problems (attention and learning problems), and Adaptive Skills (social skills and leadership). Coard et al. (2007) focused on the conduct problems subscale within the Externalising composite score for their study.

*Eyeberg Child Behaviour Inventory*. This is a 36-item measure which uses a 7-point Likert scale. Two scores can be obtained from this measure, an Intensity score and a Problem score. The Intensity score indicates the frequency that problem behaviours occur, and the Problem score indicates the total number of behaviours that parents perceive as problems. Bjorknes and Manger (2012), Herewini (2014), Kim et al. (2008), Matsumoto et al. (2007), and Turner et al. (2007) used the Eyeberg Child Behaviour Inventory to measure child behaviour change.

## **Results**

**Parent findings.** Six of the seven studies measured aspects of parenting practices (positive parenting practices, positive reinforcement, harsh or negative discipline, or dysfunctional parenting styles), which, post-intervention, had a positive influence on parent's perception of their child's behaviour (Bjorknes & Manger, 2012; Coard et al, 2007; Kim et al, 2008, Lau et al, 2011; Matsumoto et al, 2007; Turner et al, 2007). The seventh study did not include a parenting measure (Herewini, 2014).

*Positive parenting practices.* Strategies such as praise, hug/kiss, reward, compliment, sticker charts, increased in three of the studies (Bjorknes & Manger, 2012; Coard et al, 2007; Kim et al, 2008) with  $d$  values of 0.46, 0.92, and 1.13 respectively. Bjorknes and Manger's (2012) found a large effect size ( $d = 1.35$ ) when comparing parents who had attended more than 50% of the session with those in a waitlist control group.

*Positive involvement.* Strategies such as "I drive my child to special activities" showed an increase, with a medium effect size ( $d = 0.71$ ) in Lau et al's (2011) study.

*Harsh discipline.* Behaviour such as yelling, spanking, threatening, hostility, decreased in four studies with both Coard et al. (2007) and Lau et al. (2011) reporting large a

effect size ( $d = 1.46$  and  $d = 0.95$  respectively). Smaller effect sizes were found in both the Bjorknes and Manger (2012), and Kim et al. (2008) studies ( $d = 0.27$  and  $d = 0.4$  respectively).

*Dysfunctional parenting styles.* These were reduced in the two Triple P studies (Matsumoto et al, 2007; Turner et al, 2007) with a medium effect size. Matsumoto et al. (2007) showed a reduction in parenting over-reactivity ( $d = 0.68$ ) and Turner et al. (2007) indicated a reduction in parental verbosity ( $d = 0.65$ ).

**Child findings.** Parent's perceptions of their child's challenging behaviour changed in all seven studies (Bjorknes & Manger, 2012; Coard et al, 2007; Herewini, 2014; Kim et al, 2008, Lau et al, 2011; Matsumoto et al, 2007; Turner et al, 2007), with decreases in behaviour intensity, problem behaviours, externalising behaviours, internalising behaviours, and conduct problems. As mentioned previously, all child behaviour measures were parental report, with none of the studies using direct observation techniques.

*Behaviour intensity.* There was a decrease in the parent perception of intensity of child behaviour in four of the studies (Herewini, 2014; Kim et al, 2008; Matsumoto et al, 2007; Turner et al, 2007) with  $d$  values of 0.89, 0.51, 0.65, and 0.75 respectively. This reflects at least a medium effect size for each of these studies.

*Problem behaviours.* Parents reported a decrease in the number of child behaviour problems in four of the studies (Bjorknes & Manger, 2012; Herewini, 2014; Kim et al, 2008; Turner et al, 2007) with varied  $d$  values of 0.45, 0.58, 1.05, and 0.62 respectively.

*Externalising and internalising behaviours.* Parents reported decreases for both internalising and externalising behaviours in the Lau et al. (2011) study with medium  $d$  values of 0.78 and 0.7 respectively.

*Conduct problems.* Parents reported that conduct problems decreased from pre- to post- test by  $d = 0.32$ , a small effect size, in the Coard et al. (2007) study.

### **Parent Satisfaction with Culturally Adapted Parenting Programmes.**

**Measures and results.** Parent satisfaction was recorded using a variety of satisfaction and social validity measures, via the Parent Satisfaction Questionnaire, Family Satisfaction Survey, and the Client Satisfaction Questionnaire. Only Lau et al. (2011) did not report participant satisfaction of the parenting programme.

*Parent Satisfaction Questionnaire.* This measure was used by three studies (Coard et al., 2007; Herewini, 2014; Kim et al., 2008). It contains 39 items which are answered on a 7-point Likert scale. Herewini (2014) and Kim et al. (2008) both report that items include measures of parents' general satisfaction, programme delivery usefulness, and satisfaction with leader. Results from these studies show high levels of satisfaction with programme content and delivery (Coard et al., 2007), and overall programme experience ratings of 7 (Herewini, 2014) and 6.03 (Kim et al., 2008). Coard et al. (2007) reported that 100% of participants would recommend the programme to others.

*Family Satisfaction Survey.* This measure was completed by mothers in the Bjorknes and Manger (2012) study on completion of treatment. The Family Satisfaction Survey contained 12 items which were answered on a 4-point Likert scale. Overall satisfaction rates showed that 83% of participants rated the programme as 'excellent', while the remaining 12% rated it as 'good.' Recommendation rates were high for this study, with 88% definitely would and 12% probably would recommend this programme to others.

*Client Satisfaction Questionnaire.* This measure was used by both of the Triple P studies (Matsumoto et al., 2007; Turner et al., 2007). The questionnaire consists of 13-items

which were measured on a 7-point scale, and evaluated parent satisfaction with the parent training programme. Items include how well the programme met the parent's needs, and whether the parent would recommend the programme to others. Results from these two studies show an above average satisfaction with Matsumoto et al. (2007) reporting a programme delivery satisfaction rate of 5.65 and programme content satisfaction rate of 5.70. Turner et al. (2007) report that participants rated their overall satisfaction with the programme at 5.23.

### **Engagement.**

The engagement rates of parents ranged from 50-100%. This result may indicate that making cultural adaptations to parenting programmes appears to lead to good engagement rates by parents who are indigenous peoples or an ethnic minority. Matsumoto et al. (2007) had all of their participants remain for both the post, and follow-up measures. Coard et al (2007) had only 50% of their participants completing all measures. Out of six participants, Herewini (2014) reported only one did not complete the required number of sessions, resulting in an engagement rate of 83%. Kim et al (2008) and Lau et al (2011) reported high engagement rates of 96% and 83.3% respectively, while slightly lower engagement rates were recorded by Turner et al (2007), and Bjorknes & Manger (2012).

### **Limitations of Sourced Studies.**

**Parent report measures.** The sole use of parent report measures in six of the seven sourced studies is a limitation (Bjorknes & Manger, 2012; Coard et al. 2007; Kim et al. 2008; Lau et al. 2011; Matsumoto et al., 2007; Turner et al., 2007). Parent report measures can be easier to use in the clinical setting, but it is well-known that most measures have not been standardised with ethnic minorities or indigenous populations. Interpreting these measures

with ethnic minorities or indigenous populations must be done with caution. As the direct observation method has been considered the ‘gold standard’ for assessment methods of objective data on parent/ child interactions and child behaviour (Hawes and Dadds, 2006), it is surprising that none of the sourced studies utilised this method.

**Small sample size.** Small sample sizes provide limited power when analysing studies statistically. Alongside this, small study size can also lead to large standard of error for estimates of effect size. This is why it was a surprise that these studies did not utilise the single case design method, which does not rely on statistical analysis.

## **Summary**

In conclusion, the literature review above indicates that culturally adapting a parenting programme does not appear to reduce the effectiveness of the programme as positive parenting practices increased, and children’s challenging behaviours decreased in all of the sourced studies. These results were all obtained from parent report measures, so there is the possibility that there may be perceived parental change as opposed to actual change. Of importance is that the engagement rates of parents remained high in the sourced studies, with engagement rates above 85% for six of the seven sourced studies.

## **Rationale for the Current Project**

**Effectiveness of cultural adaptation.** The findings from the seven sourced studies are promising. Culturally adapting already developed parenting programmes does not appear to decrease the effectiveness of the intervention. Children’s challenging behaviours decreased, and positive parent-child interactions increased significantly in the sourced studies. Whether adaptations were surface structure or deep structure the results appear to be consistent over the sourced studies in that, parents reported child behaviour decreased and

their positive parenting practices/interactions increased and/or dysfunctional/ harsh parenting decreased. This is important because it adds to the empirical evidence which shows that the content of parenting programmes, which are based on behavioural and social learning theory principles, is effective across cultures in improving outcomes for families.

**Engagement.** Parent engagement in parenting programmes has been problematic but it appears promising that adapting parenting programmes to be culturally responsive seems to have a positive impact on parent engagement. These findings indicate that taking culture into consideration when providing programmes for indigenous populations and ethnic minorities is important if practitioners wish parents to attend these programmes.

**Measures.** Findings from the sourced studies were mostly parent self-report and did not use direct observation to record parent or child behaviour. If more studies utilised single case design, then it would have been possible to directly observe individual parent and child behaviour change. Single case design also makes the use of direct observation techniques possible to obtain objective data as opposed to that gained from just parental report.

The aim of this project was to collect evidence on the effectiveness of the Parent Empowering Programme for parents of Māori children. Two research questions emerge from this aim:

**Research Question 1:** Can parental knowledge of functional behaviour assessment and function-based intervention strategies increase and be maintained over two PEP group workshops?

**Research Question 2:** Can this new knowledge be generalised to the home environment via a parent implemented function-based intervention programme?

## **Chapter Three**

### **Method**

#### **Definition of parent**

For the purposes of this project and due to cultural considerations, the term parent will be used to refer to any adult who has consistent daily responsibility for the target child in question. Daily decision making within a Māori context often includes individuals who are close to the child through familial links whether blood or relationship. The whānau takes on the roles of supporting, disciplining and nurturing the child as interdependence is encouraged (Kumar et al., 2012; Herbert, 2001).

#### **Research Design**

This project assessed the change in parent-child dyads over time using repeated measures of the dependant variables, thus a single-case multiple baseline design across participants was chosen (Kazdin, 2011; Blampied, 2008). Participants were their own control as behaviour change was measured against their own baseline in much the same way as they are in the clinical setting (Horner & Odom, 2014; Kratochwill et al., 2010; Morgan & Morgan, 2001; 2008). This allows for a control to be established within the project without having to withdraw treatment (Blampied, 2008) as withdrawal of treatment may increase parent and child stress levels within the household. The single case study methodology allows for the individual to be the focus of the research as opposed to taking averages across groups (Blampied, 1999; Kazdin, 2011). Single case designs have also been shown to provide strong evidence for causal inference between the dependent and independent variables (Kratochwill et al., 2010).

Research in the area of Functional Behaviour Analysis has utilised multiple baselines across participants to assess the effects of the intervention and to demonstrate that the effects are not a product of other variables (i.e. Marcus et al., 2001; Galensky et al., 2001). A non-concurrent multiple baseline procedure will be used as the intervention will start at the same time for all participants (Lees & Ronan, 2008; Watson & Workman, 1981). As this project is utilising a single-case multiple baseline design, a larger participant group is not needed to gather significant results due to the gathering of repeated individual measures for each participant across baseline, intervention, and follow-up (Blampied, 2008; Kratochwill et al., 2010).

### **Cultural Considerations and Ethics**

There were three steps required for obtaining ethical approval with the University of Canterbury's Human Ethics Committee (HEC), 1) Māori consultation, 2) Organisation consultation and, 3) HEC approval.

1. Prior to the commencement of this project, following Māori research protocol (Durie, 2005), consultation was undertaken with the Ngai Tahu Consultation and Engagement Group. Consultation consisted of contacting local Māori academics to discuss the proposed project then submitting a brief research proposal to inform the Ngai Tahu Consultation and Engagement Group of the purpose for the research. The Ngai Tahu Consultation and Engagement Group acknowledged the potential value for Māori and supported the continuation of this project. A copy of the Ngai Tahu Consultation and Engagement Group letter can be found in Appendix A.

2. Contact was then made with the New Zealand Playcentre Federation (NZPF) to gauge the organisations interest in participating in the project. The New Zealand Playcentre Federation expressed interest in the project, providing research guidelines to be followed

throughout the project. Consent to use NZPF members was granted once approval had been obtained from a Human Ethics Committee, as is shown in Appendix B. A member of the NZPF Te Whare Tikanga Māori group was appointed for consultation purposes prior to parent and child recruitment to ensure that the content of the Parent Empowerment Programme was culturally sensitive.

3. Finally, consent was sought and obtained from the University of Canterbury Human Ethics Committee, New Zealand. A copy of the letter of approval can be found in Appendix C.

Participants received consent, assent, and information sheets prior to the initial interview, with clarification occurring during the interview. Informed consent was obtained from parents, and assent from children, prior to baseline commencing. All participants were informed of their right to withdraw from the project at any time (refer to Appendices D-G).

A parent choice of video, audio, and/or written recording occurred during baseline, intervention and follow-up phases of the project. Parents recorded themselves and their child(ren) in their home environment for approximately 20-minutes during their nominated routine time of concern. Recordings were sent from parents to the researcher by email or mass storage device (USB), then coded to ensure confidentiality of names. If any illegal or inappropriate behaviour was observed, then the researcher would contact her supervisors and they would take the necessary steps to address this behaviour. If recordings showed that the parent was not implementing the behaviour strategies correctly, additional coaching was to be provided to ensure the behaviour strategies and interventions were implemented correctly.

## **Recruitment**

**New Zealand Playcentre Federation.** The researcher had been involved with the New Zealand Playcentre Federation for 12 years. Playcentre is a bicultural organisation which utilises a two house model for consensus decision making. Playcentre is both an early childhood and tertiary provider with a three-part mission statement which aims to strengthen and enrich communities:

- *we empower adults and children to play, work, learn and grow together*
- *we honour Te Tiriti o Waitangi and celebrate people's uniqueness*
- *we value and affirm parents as the first and best educators of their children*

*(New Zealand Playcentre Federation, 2016)*

As the researcher had strong connections with the organisation, they were approached to obtain access to the Playcentre membership to recruit participants. The researcher believed this project met with Playcentre's mission statement so therefore would be beneficial to their community and members. An advertisement was placed in 22 Playcentre early childhood centres and circulated via their email networks to parents within the Canterbury Playcentre Association (refer Appendix J).

**Criteria.** Participants for this project were selected if they were parents of children (3-10 years) who were experiencing mild to moderate behaviour difficulties during a home routine time (getting ready for preschool/ school, bed times). The child needed to consistently reside with the parent, and on a normative developmental pathway without any known psychological, physical or medical diagnosis. Originally participants were requested to have children who were identified as Māori by their parents, but, due to recruitment difficulties, this criterion was not able to be fully met. Parents also needed to be available to attend the two training workshops and video their child during the home routine time which they found difficult due to their child's challenging behaviour.

**Karanga.** Parents expressed their interest in the project to the researcher by email or phone and were provided a detailed information sheet which outlined the requirements and procedures of the project. When participants agreed to participate they were given consent and child assent forms to sign. Participants were accepted on a first come basis.

### **Mihimihi and Whanaungatanga**

Once parents (and their child) had consented to participate they were requested to attend a semi-structured initial interview with the researcher. Each participants initial interview was conducted *kanohi ki te kanohi* at the participants Playcentre. Time was allowed for relationship building between the participants' and the researcher, for participants to ask questions or gain clarification about the project, to discuss the aim and purpose of the research, and to complete the FACTS demographic questionnaire and Knowledge Quiz.

### **Participants and Sample Size**

Typically, 4-10 participants are the norm for single case design parent/child dyad studies (Fettig et al., 2015; Li, 2011; Marcus et al, 2001; McNeill et al., 2002; Stokes & Luiselli, 2008). Four participants were selected for the project, three were parent/ child dyads from the same Playcentre and the fourth was the centre supervisor. The centre supervisor was accepted due to the sense of *whanau* that the participants held of her. The ethnicity criterion was not able to be fully adhered to due to difficulty with recruitment.

Table 5 contains parent and child participant demographic information. Participants were given pseudonyms by the researcher to ensure their anonymity and confidentiality. Three participants were mothers with preschool and/or school aged children and their *whanau/ families* comprised of Mum, Dad, and children. The fourth participant, Lydia, was the centre supervisor from the local Playcentre which the other participants attended. Lydia only attended an initial interview, completed both Knowledge Quizzes, attended the

workshops, and completed the Social Validity questionnaire. Mary identified herself and her children as being of European Māori descent, whilst Jane identified herself and her children as being of New Zealand descent (refer table 5).

Table 5.

*Parent and Child Participant Demographics.*

	Participant Pseudonym	Gender/Age	Ethnicity	Highest Qualification	No. of Children in Family	Target Routine	Target Behaviour
Parent	Elizabeth	F/39	Pakeha	Master's Degree	2	Bedtime Routine	Arguing and Tantrums with Mother
	Mary	F/34	European Māori	National Nanny Certificate NZQA Level 5	3 + expecting	Bedtime Routine	Defiance - Persistent coming out of bedroom
	Jane	F/32	New Zealander	C3: Playcentre Sessions NZQA Level 4	3	Breakfast Routine	Defiance - Not listening
	Lydia	F/44	New Zealander	C4: Playcentre Practice NZQA Level 5	ND	ND	ND
Child	Aria	F/5.11	Pakeha				
	Manawa	F/3	European Māori				
	Jack	M/3	New Zealander				

*Note.* F = female, M = male

**Elizabeth and Aria.** Elizabeth was a married 39-year-old Pakeha mother with two children. She had a Masters level qualification and had chosen to be a stay-at-home parent

with her preschool son while her daughter, Aria, attended the local primary school. Aria was five years 11 months at the beginning of this project and was a typically developing child. Elizabeth reported that Aria engaged in persistent challenging behaviour during her bedtime routine. This behaviour consisted of tantrums when she believed that something was not fair or had not occurred how she anticipated it would. Elizabeth also believed that Aria tried to negotiate more time to finish playing before completing the requested task. Elizabeth said she negotiated to try and maintain peace in the house.

**Mary and Manawa.** Mary was a 34-year-old stay at home mother of European and Māori descent. She was in a de-facto relationship with the father of her three children and expecting their fourth child. Manawa was three years old and the middle child in her family at the beginning of this project. Mary reported that Manawa's challenging behaviour occurred during the bedtime routine with persistent coming out of her room. This resulted in Mary becoming frustrated with Manawa, yelling at her to stay in her room. Manawa shared a room with her elder sister who did not display any challenging behaviour during this routine time. Mary had completed the National Nanny Certificate (Level 5) which included a behaviour management component. Mary had also previously attended five sessions of the Incredible Years (IY) Basic Parent Programme. Mary reported that she was unable to complete the IY programme due to the time requirement of 18 2.5 hour sessions.

**Jane and Jack.** Jane was a 32-year-old, married, stay at home mother of three who identified herself as of New Zealand descent. Jane's eldest two children attended the local primary school and Jack attended their local Playcentre. Jack was two years and 11 months at the start of this project. Jane reported difficulty with the breakfast routine as she felt none of her children listened to her instructions, and they were easily distracted by each other. She chose Jack as her target child. Jane had completed Playcentre Sessions (Level 4), part of the Playcentre Education Diploma. Playcentre Sessions contained a positive behaviour

management component but did not cover the function of the child's behaviour or how to implement a function based strategy.

**Lydia.** Lydia, was a Playcentre supervisor from the centre which the other three participants attended. Elizabeth, Mary, and Jane considered Lydia to be a part of their whanau and considered her an integral member of their support network. Lydia selected to attend the two workshops to gain professional development in the area of behaviour management, and to help in the implementation of the behaviour plans of the other children in the centre. Lydia had completed the Playcentre Practice (Level 5) of the Playcentre Education Diploma. At this level there are behaviour management components but it did not cover the function of a child's behaviour.

### **Settings**

The project was carried out over three settings. Firstly, the initial interviews were conducted at the participants local Playcentre. The Playcentre was located in a low socio-economic suburb of a large New Zealand city. Secondly, the Parent Empowerment Programme workshops were conducted at the home of one of the participants, Elizabeth, as this was the location chosen by all the participants. Thirdly, the home recordings were taken in each participant's home environment during the nominated home routine time for baseline, intervention and follow-up phases.

### **Cultural Adaptation of the Parent Empowerment Programme**

The Parent Empowerment Programme (PEP) was specifically developed for the New Zealand population by Lindsay (2016) and is designed to help parents identify the function of their child's challenging behaviour, develop a function-based behaviour support plan, and implement a function-based intervention. A number of functional behaviour assessment and function based intervention studies informed the development of the two workshops. McNeill

et al (2002) and Shayne and Miltenberger (2013) were used predominantly to inform the procedures and design utilised for the PEP. However, these studies did not focus on a minority or indigenous population. The Māori health models and the Hui process are mentioned in the PEP development literature but do not appear to be prioritised in the delivery of the workshops (Lindsay, 2016). PEP was chosen due to the stage of development the programme is currently at, the brevity of the programme, and the fact that it has been designed with a New Zealand population in mind.

***PEP Workshops.*** The workshops lasted approximately two hours each, and English was the predominant language spoken with te reo Māori incorporated throughout. Workshop content remained the same as the original PEP but the Hui process was adhered to and each part explained to participants as the workshop progressed:

- *Mihi* – facilitator introduced themselves and described their role and the purpose of the workshops.
- *Karakia timatanga* was performed to ask for blessings and guidance throughout the workshops:

*Manaakitia mai matou I tenei hui*

*Kei whakaaro matou mo te kaupapa*

*O nga tamariki*

*Bless us all at this gathering*

*Our thoughts are for the rights of the children*

- The chosen *whakataukī* was one which was familiar to the participants as it is used by Canterbury Playcentre's bicultural group.

*He waka eka noa*

*A canoe which we are all in with no exception (Ihaka, 1959)*

- *Whakawhanaungatanga* – facilitator lead this with their pepeha and encouraged participants to introduce themselves using a format they felt comfortable with.
- *Kaupapa* – how we will work as a group
- Break for *kai* – to establish noa (break free from restrictions of tapu)
- *Whaikōrero* – workshop content from original PEP. Due to the reciprocal nature of whaikōrero it was important for the delivery of the workshop to be responsive to participants, respecting the knowledge that the participants brought with them.
- *Poroporoaki* – concluding the time together and ensuring there was clarity about the next steps for the participant
- *Karakia whakamutanga* to close the meeting and to release the spirits who had been guiding the meeting.

*E te Atua*

*Manaakitia mai a matou hokinga ki a maatau kainga*

*Amine*

*To our higher power*

*Bless and be with us on our journey home*

*Amen*

***The Workshop Handbook.*** One of the key materials used by PEP is the parent handbook. This was developed specifically for Aotearoa/ New Zealand parents. To ensure that the content was culturally responsive to Māori the researcher sought consultation with a New Zealand Playcentre Federation Te Whare Tikanga Māori representative. As a result of this consultation, no cultural adaptations were made.

The handbook contained all the written materials needed for the two workshops. Between workshops, participants were instructed to take the handbook home to assist their learning and to bring it with them to the second workshop.

***Development of cultural responsive video vignettes for PEP:*** The video vignettes developed and used by Lindsay (2016) to aid participants with their learning used Pakeha New Zealand models. In the two workshops participants were shown the vignettes alongside the written materials (CAST, 2011). The video vignettes contained a variety of scenarios which involve positive and negative interactions between parent/s and child/ren during normal household routines. As the original set of video vignettes did not contain Māori whānau, this project developed for the Māori population a set of vignettes depicting a Māori whanau.

The original storyboards and vignette from the Lindsay (2016) study were viewed by the researcher and the actors to ensure consistency with the original vignette. Filming took approximately 1 hour with 20 different shots recorded. A selection of shots were edited together by the researcher to complete two 1-minute vignettes. The actors in the new vignette consisted of a Nanny, Koro, and Moko to model that whanau was not homogenous.

***Knowledge Quiz:*** A review of Lindsay's Knowledge Quiz occurred, but all questions were determined culturally relevant, thus no cultural adaptations were made (Refer Appendix K).

***Social Validity Questionnaire:*** To obtain feedback from participants on the cultural relevance of the programme, two additional questions were included (refer Appendix L).

1. The components of the workshop were relevant to my tamariki
2. The video resources were relevant to my whanau

## Measures

In order to answer the two research questions, the following measures were undertaken:

**PEP Demographic FACTS Questionnaire.** At the pre-baseline initial parent interview, the researcher requested parent information on occupation, age, ethnicity, education level, and whanau composition. It also gathered specific information regarding the home routine of concern and the child's behaviour during this time. The PEP used an adapted version of the Functional Assessment Checklist for Teachers and Staff (FACTS) by March et al. (2000) and the Parent Questionnaire used in Li (2011) (refer Appendix M).

**Knowledge Quiz.** The quiz contained 21 questions which consisted of multiple choice, open, and closed questions. The questions were based on behavioural principles such as the function of behaviour, reinforcement, antecedents, and intervention strategies (Lindsay, 2016).

**Home Recordings.** During the initial intake interview, parents were offered the choice of video, audio, or written diary to record their child's behaviour during the routine of concern. Recordings were requested post initial interview for three baseline recordings; three post workshop recordings; and one follow-up recording and occurred over a period of 12 weeks. Three options were provided to give the participants a choice of how they wished to record their child's behaviour.

1. *Video* was provided to capture visually and with audio what was occurring without interference from an outside observer. A small USB spy camera was provided by the researcher. Parents were requested to record their chosen home routine for 20 minutes. The 20-minute time limit was chosen because it

was long enough to capture the behaviour of concern and identify if change occurred, but not too long that it became inhibitive for the whanau.

2. *Audio* was offered to participants if they did not wish to use the video option. Audio recordings allowed the researcher to hear what was going on in the home at the routine time.
3. *Written diary*. The last option was a *written* diary. The diary was organised in an antecedent, behaviour and consequence format. A blank diary example is available in Appendix N.

Baseline recordings were collected at the first workshop, intervention recordings were picked up by the researcher from the participant's home, and follow-up recordings were given verbally over the phone to the researcher. For the rest of this project, the parent's choice of video/audio/ written home recordings will be referred as 'recordings'.

***Behavioural Definitions.*** The dependent variable measured in the recordings was children's challenging behaviour. The parents use of positive behaviour strategies was the independent variable. Definitions for each are provided below:

*Challenging behaviour* was defined as any occurrence of one or more of the following inappropriate behaviours; tantrums, physical aggression towards self or others, inappropriate vocalisations, non-compliance, being out of an area, and inappropriate use of materials (Duda et al., 2008; Fettig et al., 2015).

- *Tantrums* were defined as physically resisting, behaviour that disrupts the continuation of home routine time, and/or high intensity screaming and crying that lasts for at least ten seconds.

- *Physical aggression* was defined as any behaviour that could physically hurt themselves or somebody else such as grapping, hitting, kicking, or biting.
- *Inappropriate vocalisations* included whining, yelling, and screaming as well as hurtful comments (e.g., “You hate me”).
- *Non-compliance* was defined as not following an adult instruction within five seconds.
- *Being out of an area* was defined as the child not remaining or entering the area where they have been instructed to be by an adult (e.g., bedroom at bedtime, or dinner table for meals).
- *Inappropriate use of materials* included not using the material in the way it was intended for, such as slamming doors or spitting out food.

Challenging behaviours were coded using ten second interval recordings if challenging behaviour occurred during a ten second block then the response was scored as having occurred. A percentage of time that the child displayed the challenging behaviour was obtained by dividing the number of intervals with challenging behaviour by the total number of intervals and multiplying by 100 (Fettig et al., 2015). For a copy of the recording form please refer to Appendix O.

*Parents use of positive behaviour strategies (PBS)*. Parents use of positive behaviour strategies is a discrete categorisation (Kazdin, 2011) which was defined as the use of clear, concise instructions, clear transition times, giving positive attention, planned ignoring, follow through with requests, and use of the Sit, Wait, and Show strategy.

- *Clear, concise instructions* include gaining the child’s attention before giving the instruction, giving instructions that are developmentally

appropriate for the child and explain the behaviour that the adult would like to see.

- *Clear transition times* is defined as making the child aware that a transition time is coming up with a five-minute warning and sticking to the transition time.
- *Positive attention* strategies include using contingent praise and encouragement, positive body language when the child is showing desirable behaviour, and descriptive praise when they are behaving appropriately or have completed a required instruction. Positive attention must be given within five seconds of the desirable behaviour.
- *Planned ignoring*, or extinction, is a strategy which is used when there is no risk of harm to the child, property, or others. It involves ignoring minor challenging behaviour by not giving eye contact, maintaining a neutral expression, and continuing with a task which does not involve the child.
- *Following through with requests* requires the adult to expect the child to comply when given a clear and concise instruction. If the child does not comply within five-seconds, then the parent should restate the request. For example, the adult uses a clear and concise instruction for the child to put their toys in the toy box and the child ignores the adult, the adult should get down to the child's level, make eye contact, and then restate the request. If this occurs, they will be marked as using follows through with requests.
- *Sit, Wait, and Show*, or inclusive time out, is a strategy which is only used when the child is engaging in dangerous behaviour which may cause harm to self, property, or others. It involves stating the behaviour that is

required, removing the child to the side of the activity if they do not comply, state that they will sit and wait with the adult until they have calmed down. Once the child is calm, the adult then re-engages with them by explaining what they did wrong and then clearly explaining the desired behaviour. The child then has the opportunity to return to the activity to show the desired behaviour and the adult has the chance to provide descriptive praise of the desirable behaviour.

Parents use of these behaviours were recorded as either a positive tally mark, or if they use the strategies inappropriately or fail to use them a negative tally mark was recorded. Total percentage of PBS used was calculated using positive tally divided by negative tally plus positive tally multiplied by 100.

**Social Validity Questionnaire.** Post follow-up phase participants completed the PEP Social Validity Questionnaire which was adapted Li, (2011). The adapted questionnaire contained 17 questions and referred to the content of the workshops and rated the participant's overall satisfaction with the workshop materials. Responses were recorded on a 5-point Likert-scale with 1 = strongly disagree, 3 = neutral, 5 = strongly agree. A section for comments and/or suggestions was available. Two additional cultural questions were added to the Social Validity Questionnaire for the purpose of this project.

### **Procedures.**

This project included pre-baseline, baseline, teaching, intervention, and follow-up phases over 12 weeks. Details of each phase are given below:

**Pre -baseline.** Each parent participant met with the researcher *kanohi ki te kanohi* to *mihimihi* during the initial interview. This occurred at the participant's local Playcentre and

took approximately 1 hour. Participants completed the Knowledge Quiz during the initial interview to obtain pre-test scores. They were given the opportunity to answer orally as their children were present at the Playcentre and required attention at times during the interview. They all preferred to write their own answers. Baseline recordings were explained to participants, and cameras provided.

**Baseline.** Three baseline recordings were requested from three participants. They all recorded their selected disruptive whanau routine time for 10 minutes with a discreet camera which they set up in their home. The device was placed in a manner that allowed the visual and audio of the child and parents behavioural interactions. Baseline recordings were collected at the first workshop.

**Teaching.** Whaikōrero occurred during the teaching phase. This phase occurred over a four-week period due to postponements by participants. During this time, parents attended two 2-hour workshops. The researcher was the lead facilitator at both workshops. Teaching methods included oral and visual presentations, and group discussions. At the conclusion of the second workshops, participants completed the Knowledge Quiz for post-test scores.

**Workshop one.** The Hui process (Lacey et al, 2011) was adhered to for the first workshop, refer to Table 3 for details. The first workshop began with casual introductions and conversation until all participants had arrived. To officially begin the workshop, the lead facilitator completed a mihi, introducing themselves and the purpose for coming together. This was followed by karakia timatanga and whakataukī, to create a spiritually safe space for the workshop to continue. Time was set aside for a comprehensive whakawhanaungatanga to occur. Kaupapa were then discussed, with the group creating the values for this meeting. Parent Empowerment Programme content was now able to be introduced to participants, this included:

- Goal setting – what they wanted to gain from the programme for their whanau,
- Importance of routines,
- What is problem behaviour and how to identify it,
- Antecedents and consequences to problem behaviour, and
- Behaviour management and intervention strategies.

Participants were encouraged to relate all topics to their own situation. Group discussion occurred around possible functions to their child's behaviour and strategies that may be appropriate for their situation. Each topic had a corresponding written task in the handbook, vignette, and group activity to reinforce learning. Poroporoaki concluded the workshop. Poroporoaki included an explanation of the home task that participants were encouraged to complete (practicing some of the strategies which had been discussed in the workshop), setting the day and time for the second workshop, and a chance for each participant to share a piece of their learning with the group. Finally, karakia whakamutanga was cited to release the spirits from their guidance and bless the group on their journey home.

In the time following the first workshop a reminder texts were sent to participants about the day, time, and location of the second workshop. The second workshop was postponed twice due to sickness and meeting conflict.

**Workshop two.** The Hui process (Lacey et al 2011) was not strictly adhered to for the second workshop due to the fact it was a continuance of the previous workshop. A short mihi by the lead facilitator thanked participants for attending the second night and gave a brief recap of the first workshop. Karakia timatanga was cited to ask for guidance on the second night. In lieu of an official whakawhanaungatanga, the lead facilitator and participants shared how their whanau had been since the last workshop, including whether the home task had

been attempted. The participants agreed to follow the same kaupapa as the first workshop.

Whaikōrero included:

- Function of behaviour – attention, escape/avoidance, and tangible,
- Functional behaviour assessment – ABC,
- Developing a behaviour support plan

Participants were again encouraged to relate each topic to their home situation. As with workshop one, each topic had a corresponding written activity in the handbook, vignette, and group activity. At the end of the workshop, participants completed the Knowledge Quiz for post-test scores. Poroporoaki included requesting participants to complete three more in home recordings for intervention phase, which would be picked up from participants at a time and place suitable to them. Participants were also given the Social Validity Questionnaire to complete and return to the researcher in the provided self-addressed envelope. All four participants chose to place their name on the Questionnaire. A round was then completed in which the researcher thanked the participants for their contribution to far and participants had the opportunity to feedback whatever they thought was appropriate to the researcher. Finally, karakia whakamutanga was cited to close the workshop.

**Intervention.** Participants recorded the same disruptive family routine as selected for baseline. Participants were requested to record three 10-minute recordings of their chosen routine for the fortnight following the second group workshop (three recordings in total). Recordings were picked up by the researcher from participants' homes, where they were reminded that a follow-up recording would be requested in one month. All participants chose to hand the researcher their completed Social Validity Questionnaire at this stage.

**Follow up.** One follow-up recording was requested, one month after the final post intervention recording was made. The follow up phase was used as a means of determining

whether the parents FBA skills had been maintained and generalised over an extended period of time.

**Project debrief.** In line with Kaupapa Māori principles, participants were offered the opportunity to meet with the researcher as a group to discuss the project and subsequent findings. They declined this offer as they each had the opportunity to discuss the project with the researcher when recording data was submitted. A small koha of a \$50 supermarket voucher was given to each participant as an acknowledgment of appreciation for the information they had shared with the researcher.

### **Data analysis**

The following analysis of the data occurred:

**Demographic and FACTS questionnaire.** Demographic information and behavioural concerns were gathered from participants. The data from these interviews is presented in Table 5.

**Knowledge Quiz.** The Knowledge Quiz pre- and post-intervention corrects and incorrect scores for each individual were compared to see if there was improvement in scores.

**Recordings.** Seven recordings were obtained from participants. Ten-second intervals of time were taken over 20 minutes each day to record the percentage of time the child spent in challenging behaviour. Data was collected from baseline, intervention, and follow-up recordings of the parent's interactions with their child during the family routine where the child engaged in challenging behaviour. The number of times the parent used positive behaviour support strategies was counted (frequency) during the 20-minute video/or diary recording. This score was then collated to make a total for each recording.

Recordings were coded using the below formulae:

- *Challenging behaviour (CB):*

Intervals with CB	X	100
Total Interval		1

- *Parent use of positive behaviour strategies (PBS):*

Positive tally	X	100
Negative tally + Positive tally		1

Recording data was displayed visually in a non-concurrent multiple baseline over the three parent-child dyads to allow for visual analyse of the median level of occurrence of challenging behaviours and parental use of PBS (Lane & Gast, 2014). Variability will be analysed in terms of reduction in variability from baseline to intervention (Kazdin, 2011).

**Social Validity Questionnaire.** Each participants' score was recorded on a table for analysis. Due to the small group size, and the possible effect that an outlier could have on the overall group score, the median of all participants scores for each item will be calculated for analysis.

**Reliability.**

The researcher was the primary data collector for this project. A Child and Family Psychology student served as secondary rater and observer for 50% of all data collected for inter-rater reliability and inter-observer agreement. The secondary rater/observer was trained by the researcher in all data collection codes prior to the project. This took one hour. An information sheet was provided to ensure the student understood the aims and purpose of the

project (Appendix H) and a research assistant consent form was also signed to ensure confidentiality would be maintained (refer Appendix I).

**Inter-rater Reliability.** Knowledge Quizzes were randomly selected to be marked by the secondary rater using an answer sheet which had been compiled by Lindsay (2016). Knowledge Quiz inter-rater reliability was computed by dividing the number of agreements on each item by the number of agreements plus disagreements on each item x 100 (McNeill et al., 2002). Fifty percent of the pre- and post-test KQ's were selected at random and scored by an independent scorer.

$$\frac{\text{Agreements}}{\text{Agreements} + \text{Disagreements}} \times \frac{100}{1}$$

An average score of 98% was achieved, with scores ranging from 94-100%. This is above the acceptable range of 80%-90% (Kratochwill et al., 2010).

**Inter-observer Agreement.** Recordings were coded by the researcher and were used as the primary data for inter-observer agreement (IOA). Fifty percent of recordings were then randomly selected to be coded by the secondary observer to assess IOA. The recordings selected were from across phases and across participants. The student was trained by the researcher using recordings which had not been randomly selected for IOA of the participants.

Recordings inter-observer agreement was computed by dividing number of agreements by number of agreements plus disagreements x 100 (Kazdin, 2011; Wood, Blair, & Ferro, 2009).

$$\frac{\text{Agreements}}{\text{Agreements} + \text{Disagreements}} \times \frac{100}{1}$$

The researcher and secondary observer reached a criterion of 90 – 100% reliability on all participants across phases. This is above the acceptable range of 80%-90% (Kratochwill et al., 2010).

## Chapter 4

### Results

Data was collected from three parent/child dyads over a 13-week period. Group and individual results are presented. Data was collected from the demographic FACTS questionnaire, pre- and post- intervention Knowledge Quiz, home video recordings, and the Social Validity questionnaire. Jane and Mary both encountered problems while video recording their home routine during session 10, so completed the study by using the written ABC diary for the remaining observations. Elizabeth, Mary, and Jane completed all recordings with the exception of one each. As previously reported, Lydia only participated in the PEP workshops and completed both the Knowledge Quizzes and the Social Validity Questionnaire. Data collected from each participant is presented in Table 6.

Table 6.

*Data Collected from each Participant*

	Participant Data Collected										
	KQ		Baseline Recording				Intervention Recording			FR	SV
	pre	post	1	2	3	4	1	2	3	1	post
Elizabeth	✓	✓	✓	✓	✓	✓	✓	✓	✓	-	✓
Mary	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓
Jane	✓	✓	✓	✓	✓	-	✓	✓	✓	✓	✓
Lydia	✓	✓	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	✓

*Note.* FR = follow-up recording, KQ = Knowledge Quiz, N/A = not applicable, SV = Social Validity questionnaire.

#### **Knowledge Quiz (KQ).**

Overall the group findings showed that three of the four participants increased their knowledge of functional assessment and positive behaviour support strategies. Pre- and post-test scores are outlined below in Figure 1. For the pre-test, scores ranged from 4 to 18 correct out of a possible 36 points. Lydia made the greatest increase of correct responses of 15

points, followed by Mary and Elizabeth with an increase from their pre- to post-test score of 10.5 and 7 points respectively. Jane had a small decrease of one point between her pre- and post-test score.

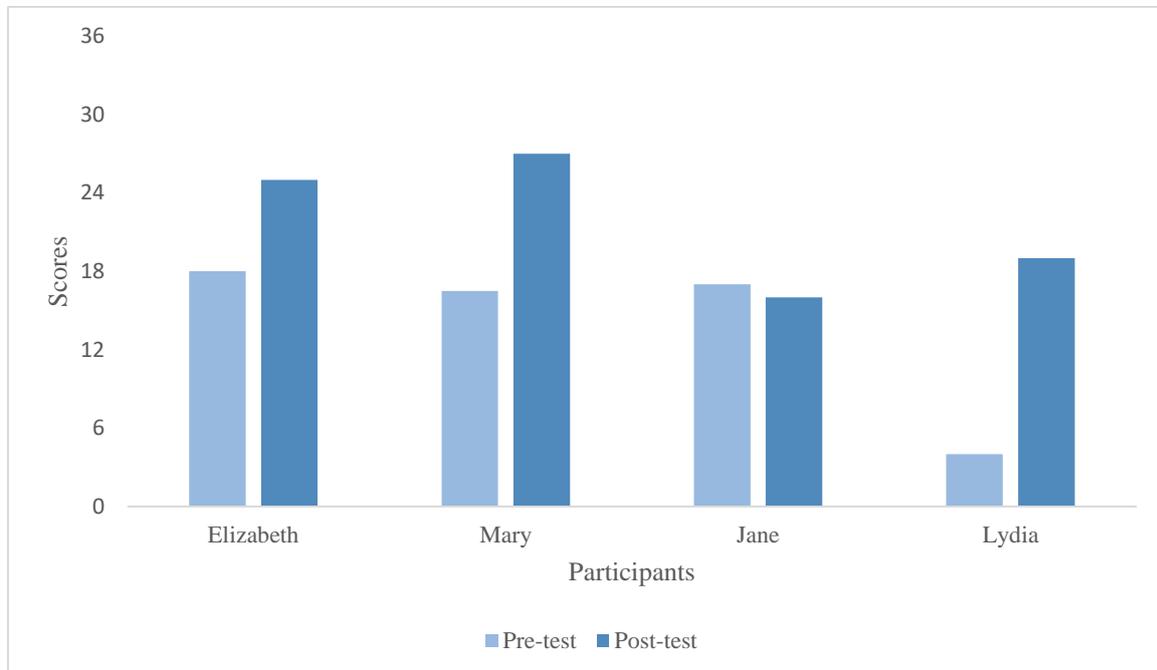


Figure 1: Participant total scores on the PEP Knowledge Quiz pre-test and post-test.

### **Functional Behaviour Assessment.**

Table 7 provides an overview of each participants' identified home routine, PBS strategies selected, and the PBS strategies used in the home setting. Elizabeth and Mary selected the bedtime routine, and Jane selected the breakfast routine as their home routine during the initial interview. Participants' correctly identified the function of their children's behaviour, attention for Mary and Jane, avoidance and attention for Elizabeth, during the two workshops. Mary and Jane both asked for support from the researcher during the workshops when selecting the positive support strategy to use. Elizabeth and Mary selected both antecedent and consequence strategies while Jane selected just antecedent strategies. Home video recordings showed that the chosen PBS strategies were effective.

Table 7.

*Participant Selected Home Routine Time, Identified Function of Behaviour, and Positive Support Strategies (PBS) selected and implemented.*

Participant	Home Routine	Identified Function of Child's Behaviour	Parent identified PBS Strategies	Researcher Assisted	PBS Strategies Used at Home
Elizabeth	Bedtime	Avoidance/Escape Attention	Antecedent strategies: <ul style="list-style-type: none"> <li>Go to the child and give clear, concise instructions.</li> <li>Explain clearly what will come next</li> </ul> Consequence strategy: <ul style="list-style-type: none"> <li>Bed time story if in bed by certain time.</li> </ul>	No	Antecedent strategies: <ul style="list-style-type: none"> <li>Went over to the child, got down to her level giving the child her full attention.</li> <li>Gave clear, concise instructions about what the child needed to do before bedtime.</li> <li>Explained clearly what came next.</li> </ul> Consequence strategy: <ul style="list-style-type: none"> <li>Bed time story if in bed by certain time.</li> <li>No bed time story if not in bed by certain time.</li> </ul>
Mary	Bedtime	Attention	Antecedent strategy: <ul style="list-style-type: none"> <li>Engage in quality playtime</li> </ul> Consequence strategy: <ul style="list-style-type: none"> <li>Planned ignoring</li> </ul>	Yes	Antecedent strategy: <ul style="list-style-type: none"> <li>Spent time down with the child building blocks or completing a puzzle as part of bedtime routine.</li> </ul> Consequence strategy: <ul style="list-style-type: none"> <li>Ignore the child when she comes out of her room after being put to bed. Put her to bed with no eye contact, neutral face, and no conversation</li> </ul>
Jane	Breakfast	Attention	Antecedent strategies: <ul style="list-style-type: none"> <li>simplify the task</li> <li>Develop routine</li> <li>Ensure child not tired</li> <li>Prepare breakfast ahead of time</li> </ul> Consequence strategy: <ul style="list-style-type: none"> <li>Not identified</li> </ul>	Yes	Antecedent strategies: <ul style="list-style-type: none"> <li>Ensure child is not tired by giving him a nap during the day.</li> <li>Simplify the breakfast routine by getting up early to prepare breakfast for the children.</li> <li>Give them easier options, such as cereal.</li> </ul> Consequence strategy: <ul style="list-style-type: none"> <li>Not identified</li> </ul>

## Home Recordings.

Three participants, Elizabeth, Mary, and Jane consented to providing in-home video recordings during their selected routine time. Evidence provided, both anecdotally at the two workshops and from the recordings, indicated that all the children’s challenging behaviours decreased, and parent use of positive behaviour strategies increased over the 32 days of the Parent Empowerment Programme. Figure 2 and Table 8 both indicate that children displayed less challenging behaviour after the second workshop, and parents increased their use of positive support strategies. The mean and range data for percentage of time child displayed challenging behaviour and percentage of parent use of positive support strategies is displayed in Table 8 below.

Table 8. *Mean and range data of percentage of time children displayed challenging behaviour and percentage of parent use of positive behaviour support strategies during baseline, post workshop intervention, and follow-up phases.*

Parent/child dyad	Baseline		Intervention		Follow-Up	
	% Mean (% range)		% Mean (% range)			
	CB	PBS	CB	PBS	CB	PBS
Elizabeth/ Aria	28 (4 – 40)	50 (33 – 80)	3 (0 - 8)	87 (60 – 100)	-	-
Jane/ Jack	12 (0 – 19)	37 (30 – 40)	0 (0 – 0)	100 (100 – 100)	0	100
Mary/ Manawa	18 (17 – 20)	49 (40 – 56)	6 (0 – 12)	90 (70 – 100)	0	100

*Note.* CB = children’s challenging behaviour; PBS = parental use of positive behaviour support.

Figure 2 below shows the percentage of time each of the children displayed challenging behaviour and the percentage of parent use of positive behaviour strategies (PBS) across the three parent-child dyads in a non-concurrent multiple baseline design. Follow-up occurred 7-weeks after the intervention phase, and 9-weeks after the second workshop. Forecast trend lines are also included from baseline phase to intervention phase.

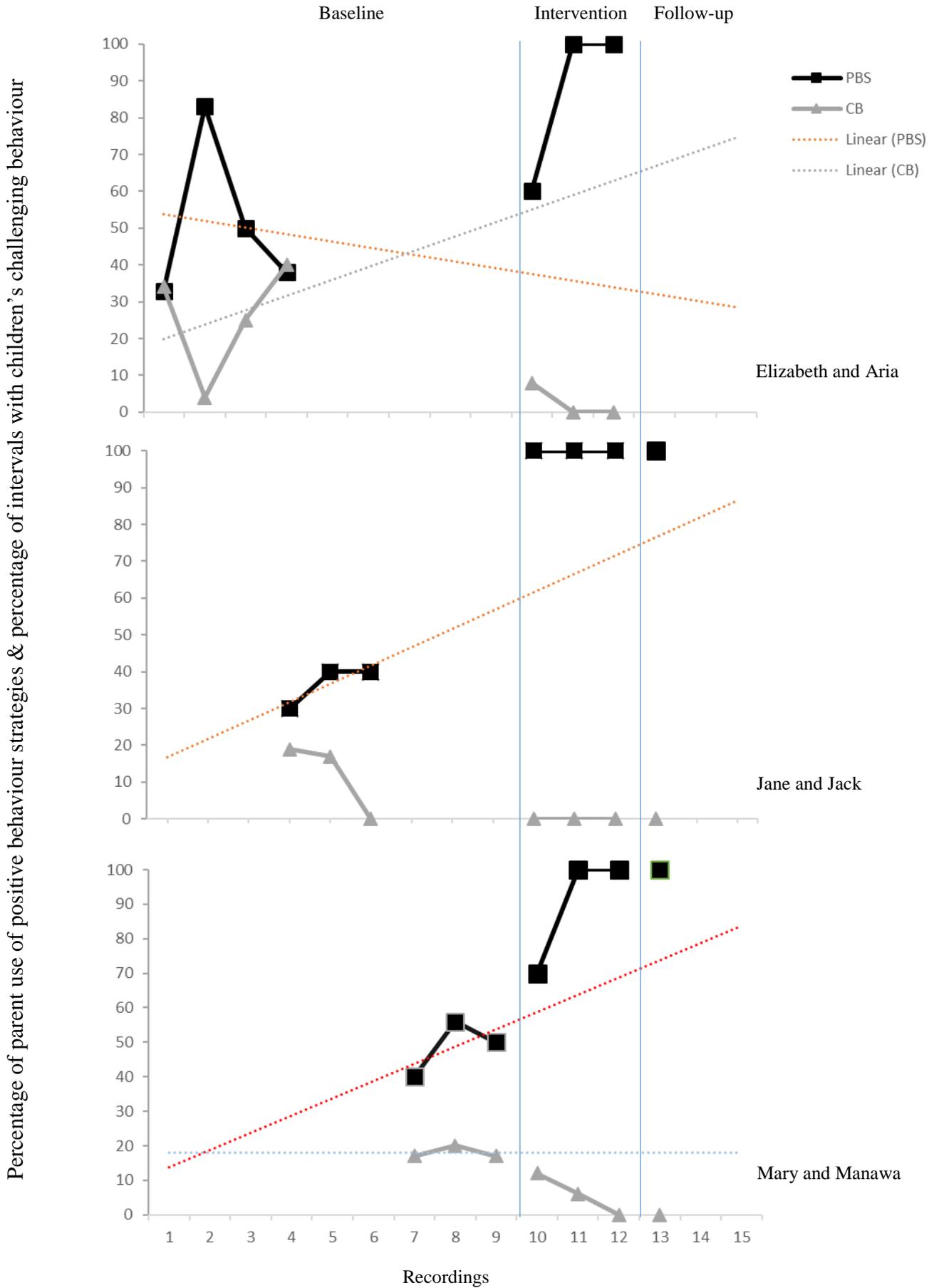


Figure 2. The percentage of parent use of positive behaviour strategies (PBS) and percentage of intervals the child engaged in challenging behaviour (CB)

**Elizabeth and Aria.** The home routine addressed was bedtime. Figure 2 indicates that during baseline data was variable for both the percentage of time Aria engaged in non-compliance and tantrums at bedtime, and the percentage of Elizabeth's use of positive attention, clear, concise instructions, and expecting Aria to follow through with her instructions. Variability was greatly reduced during the intervention phase. The baseline forecast trendlines indicate decreasing use of PBS and increasing challenging behaviour. During baseline, Aria engaged in challenging behaviour for 26% of the total 60 minutes of recorded time during the bedtime routine, and Elizabeth utilised appropriate PBS techniques 50% of this time on average. Due to the variability of baseline, a trend was difficult to establish. At baseline, from data point 2 onwards there was an increasing trend of challenging behaviour, and decreasing trend for PBS use. Overlap between baseline and intervention occurred with baseline recording 2 overlapping intervention recording 8 in both challenging behaviour and parental use of positive behaviour strategies. During the intervention phase, Aria engaged in non-compliance and tantrums for 3% of the total 60 minutes of recording time during the bedtime routine. Elizabeth utilised both an antecedent strategy and a consequence strategy 87% of the time on average during the intervention. Her chosen PBS antecedent strategy was going to Aria and getting down to her level to deliver a clear and concise instruction. Her chosen consequence strategy involved the reading of a bedtime story dependent on being in bed by a set time. Using these strategies showed an immediate increase in appropriate behaviour during the intervention phase. No follow-up recording was made.

**Jane and Jack.** The home routine time addressed was breakfast time. Figure 2 indicates that during baseline there was a decreasing trend in challenging behaviour for Jack, and an increasing trend for the percentage of Jane's use of appropriate PBS techniques. This means caution should be made when drawing inferences on the effects of the intervention at reducing Jack's challenging behaviour and increasing Jane's use of positive behaviour

strategies. The forecast increasing trend for Jane's use of PBS shows that improvements may have happened without intervention but these may not have occurred as quickly. During baseline, Jack engaged in tantrums, inappropriate vocalisations, and being out of the required area for 12% of the total 60 minutes of recording during the breakfast routine. Jane utilised positive attention, clear and concise instructions, and clear transition times 37% of this time on average. During intervention, Jack did not engage in any tantrums, inappropriate vocalisations, or was out of the required area during the breakfast routine at intervention or follow-up. Jane utilised three main antecedent strategies 100% of the time. She ensured that Jack was not over-tired by giving him a day-time nap, simplified the breakfast routine by preparing breakfast in advance, and giving Jack the option of cereal for breakfast, not just boiled eggs. The breakfast routine reduced from 20 minutes in baseline to 5 minutes during the intervention phase.

**Mary and Manawa.** The home routine time addressed was bedtime. Figure 2 indicates Mary's use of PBS techniques during baseline was variable. Manawa displayed consistent challenging behaviour during baseline. Mary increased her use of PBS during intervention and there was a corresponding decrease in Manawa's inappropriate vocalisations and being out of her bed during the bedtime routine. This was maintained at follow-up. Mary utilised clear and concise instructions, positive attention, and planned ignoring 49% of the time during baseline. During intervention Mary gave positive attention by including a small play time with Manawa in the bedtime routine and using planned ignoring when she left her bed. This continued during follow-up. Sleep onset for Manawa went from 45 minutes in baseline to 10 minutes in intervention.

### **Correlation.**

Figure 3 shows that there was a strong inverse correlation ( $r^2 = 0.73$ ) between the percentage of parental use of positive behaviour support strategies and percentage of time the children engaged in challenging behaviour across all phases and all parent-child dyads. This shows that 73% of the total variation in the percentage of time the children engaged in challenging behaviour can be explained by its linear relationship with the percentage of parental use of positive behaviour support strategies. Individually, each parent-child dyad also showed an inverse correlation across phases. Elizabeth and Aria, and Mary and Manawa showed the strongest correlations ( $r^2 = 0.87$  and  $r^2 = 0.94$  respectively), and Jane and Jack showed a moderate correlation ( $r^2 = 0.58$ ).

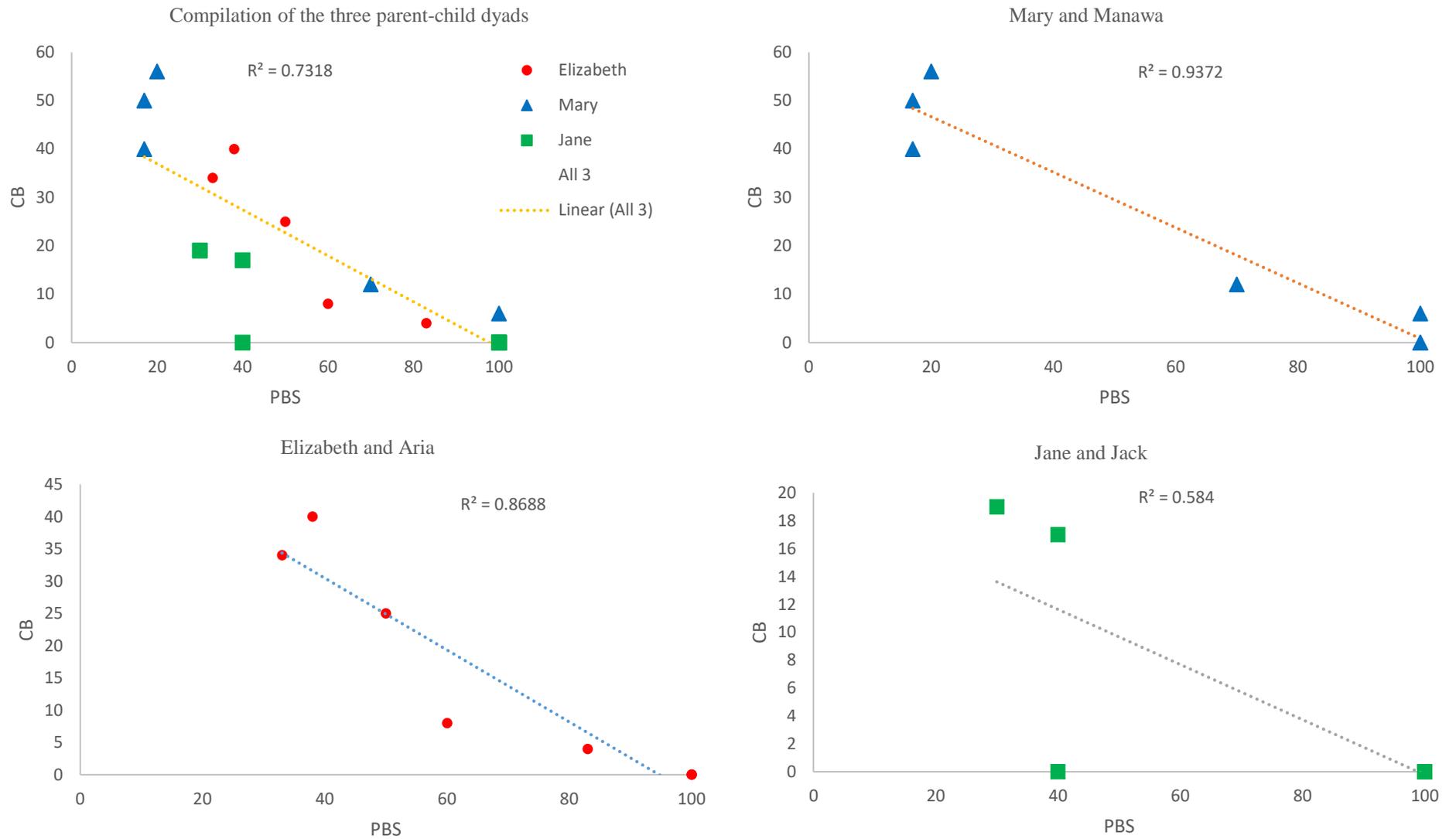


Figure 3: Correlation between the percentage of positive behaviour support (PBS) strategies used by the three parents and the percentage of time children engaged in challenging behaviour (CB) during their home routine.

## **Social Validity Questionnaire (SVQ).**

**Group findings.** All four participants completed and returned the Social Validity Questionnaire. Scores on the 17 questions ranged from 1 to 5 (1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, and 5 strongly agree). Due to Elizabeth's answers being significantly different to the other three participants, the median score has been reported as it is resistant to outliers. Table 9 displays the participant's scores and the median group score for each item on the questionnaire. A total mean score of 4.39 was calculated, which is in the agree range.

Results were varied. The four participants scored ten of the 17 items as a 4 (agree) indicating that the participants found most aspects of the programme socially acceptable. Four items (6, 8, 12, 15) obtained median scores between neutral and agree (range = 3.5 – 3.75), and item two was scored as neutral (3). Only item 11, *Overall training time was neither too short or too long*, received a median score in the disagree range (2.75). Three items scored 4 or above (agree or strongly agree); item 5 *The instructor showed knowledge and professionalism when providing training and feedback*; item 9 *functional behaviour assessment strategies were relatable to my family situation*; and item 14, *I would recommend learning about functional behaviour assessment and interventions to other parents*.

**Individual findings.** Individual findings for each participant are outlined below:

**Mary** strongly agreed or agreed with 13 of the 17 items. The remaining four items were scored 3 (neutral). Mary wrote at the end of her questionnaire "*I found the course really informative... easy to understand and relatable to my family situation.*"

**Jane** also strongly agreed or agreed with 13 of the 17 items, and the remaining four items were also scored 3 (neutral). Jane wrote at the end of the questionnaire "*I really enjoyed the parenting course. I enjoy referencing back to the book every now and then.*"

Table 9. *Social Validity Questionnaire Mean Scores from Participants*

Social Validity Questionnaire	Participants Scores				Group Median Score
	Elizabeth	Mary	Jane	Lydia	
<b>Group Workshop</b>					
1. Components of the workshop were well organised	3	4	4	4	4
2. Examples and video resources were easy to relate to	2	3	3	5	3
3. The mixture of written, visual, and physical learning activities was beneficial for my learning	2	4	5	4	4
4. Information provided was thorough	3	5	4	4	4
5. The instructor showed knowledge and professionalism when providing training and feedback	4	4	5	5	4.5
6. Workshop was interactive and enjoyable	2	5	4	3	3.5
7. The group setting encouraged relationships between parents	2	4	5	4	4
<b>Functional Behaviour Assessment Strategies</b>					
8. Teaching of Functional Behaviour Assessment strategies was understandable and helpful	4	4	3	3	3.5
9. Functional Behaviour Assessment strategies were relatable to my family situation	2	4	5	5	4.5
10. I have confidence in my ability to perform Functional Behaviour Assessments and intervention plans	4	3	4	5	4
<b>Overall Satisfaction</b>					
11. Overall training time was neither too short or too long	1	3	4	2.5	2.75
12. I would use the skills learned again with my child if necessary	1	4	3	4	3.5
13. The information gained through this training helped me to better understand my child	1	4	4	4	4
14. I would recommend learning about Functional Behaviour Assessment and Interventions to other parents	1	4	5	5	4.5
15. I am satisfied with the training programme	1	5	4	3.5	3.75
16. The components of the workshop were relevant to my child	1	4	4	5	4
17. The video resources were relevant to my family	1	3	3	5	3

**Lydia** strongly agreed, or agreed with 13 of the 17 items. Unlike Mary and Jane, Lydia scored 3 (neutral) for three items, and disagree for item 11. Lydia commented that she would have like more time to relate the learning to her personal experiences. She wrote at the end of her questionnaire *“I feel the information being discussed/ taught was very important. It was great not to be told what was right/ wrong for individual families but to recognise what is your limit and what you want to change... It has given me confidence to deal with children’s behaviour.”*

In contrast, **Elizabeth** agreed (scored 4) on three of the 17 items, and scored neutral for two items. She disagreed or strongly disagreed with the remaining 12 items. Elizabeth’s wrote at the end of the Social Validity Questionnaire *“I thought the examples in the material indicated an underlying parenting philosophy that was not openly acknowledged in the course.”*

### **Overall Summary.**

Results of this project show that three of four parents were able to increase their knowledge of functional behaviour assessment, identify the function of their child’s behaviour, and identify and implement appropriate positive behaviour support strategies in the home environment via the Parent Empowerment Programme. From the pre-test to the post-test Knowledge Quiz there was an increase in scores for three of the participants. The three parent-child dyads also saw an increase in percentage of parent use of positive behaviour support strategies and a decrease in percentage of time children displayed challenging behaviour, with a strong inverse correlation between the two variables. Lastly, three of the participants thought that the Parent Empowerment Programme was socially acceptable, especially in the areas of facilitator knowledge, reliability of functional behaviour assessment strategies, and recommendation of the Parent Empowerment Programme to other parents.

## Chapter 5

### Discussion

The aim of this project was to investigate the effectiveness of the Parent Empowering Programme (PEP) which had been culturally adapted for parents of Māori children. Two research questions emerged from this aim. Firstly, can parental knowledge of functional behaviour assessment and function-based intervention strategies increase and be maintained over two PEP group workshops and, secondly, can this new knowledge be generalised to the home environment via a parent implemented function-based intervention programme.

This chapter will discuss the cultural delivery of the workshops and interpret the findings, both for the group of participants and individual participants. Data collection methods, engagement, study design, limitations of the study, and implications for future research will also be discussed.

#### **Data Collection Methods.**

The planned data collection method was to use a small video camera to capture the parent-child interactions during a typical home routine time. The three parent-child dyads agreed to this method of data collection and all three completed baseline and intervention recordings using the small video camera. Bjorknes and Manger (2012), Coard et al. (2007), Kim et al. (2008) and Turner et al. (2007) all included, as a limitation to their studies, that they had not used a direct observation method as a measure for their culturally adapted parenting programmes hence the use of small video cameras as the preferred choice of data collection for this study. Technical difficulties did occur during the project, with Jane's camera not operating properly and Mary's camera being stolen. However, Jane supplemented her video recording with a written diary. Alongside the written diary, Jane wrote a moment-by-moment summary of what had happened to enable the researcher to 'see' what had

occurred through her words as would have happened with a video recording. Mary's camera was stolen after the intervention phase and before she was able to pass it to the researcher. Fortunately, she had downloaded her video footage to her own computer so the researcher was able to access the video footage. Both Jane and Mary agreed to provide verbal feedback to the researcher for the follow-up phase, giving comprehensive ABC observation descriptions of what was occurred during their chosen routine time. Lindsay (2016) also experienced difficulties with obtaining recordings from her four participants, with only managing to collect one video recording from one participant throughout the duration of her study. Reasons for this included parents forgetting to turn on the camera or not wanting to be seen responding angrily to their child. Lindsay (2016) reported that the one participant who completed both a video and written record was accurate in their description of events. Barr et al. (1988) found that there were moderately strong correlations between the parent written diary and audio recordings, concluding that a parent diary can be a valid measure of data collection.

### **Cultural Delivery of PEP.**

In line with other studies which have culturally adapted parenting programmes (Herewini, 2014; Lau et al., 2011; Turner et al., 2007), participants from the current project anecdotally shared their enjoyment of the workshop facilitation and delivery with the researcher post workshops. This indicated that making surface structure and deep structure adaptations were important factors when taking the programme's acceptability into account, as participants felt relaxed with each other, the researcher, and her supervisor.

**Surface structure.** Adaptations which are surface structure include matching people, locations and language to that of the target population (Resnicow et al., 1998). There were a number of matches between the participants and the researcher. Both were matched

ethnically, had been Playcentre members, and came from the same community. In terms of language, te Reo Māori was interwoven in the delivery of the workshop by both the participants and researcher, but English was the primary language spoken. In terms of surface structure, matching the researcher with the participants appeared to provide a relaxed atmosphere for both the participants and the researcher. These aspects were discussed during the initial visit with Mary and she expressed that it put her at ease knowing that the researcher understood her and her background. This kanohi ki te kanohi (face-to-face) visit was key in establishing a respectful relationship between the researcher and Mary. This first step is of great cultural importance for Māori and is a fundamental aspect of Kaupapa Māori research (Jones, 2013; Walker, et al., 2006) as it is the foundation for building solid relationships. Likewise, having knowledge of Playcentre philosophy, their way of “doing things” and their qualification, the Playcentre Education Diploma, was crucial with this group of parents as it allowed the researcher to prioritise areas of the PEP which the participants were less familiar with, such as the functional behaviour assessment (FBA) process and positive behaviour support strategies, as opposed to those aspects which they all had experience of, such as the observation methods. As the participants had all met the researcher in the capacity of a previous Playcentre supervisor and Playcentre Education Co-convenor, relationships had already been established thus an initial “ice-breaker” was not required. Trust and respect had already been established. Lastly, being able to use the same language as the participants was important. Understanding Playcentre terminology as well as te reo Māori allowed for relaxed discussions between participants and the researcher. This finding is in line with current research. Mytton and colleagues (2014) reported that their participants liked that their facilitator was known and trusted by them, Penehira and Doherty (2013) reported that the Māori participants in their study found having a Māori facilitating their group was valuable and their participants responded positively to this, while Dunn (2012) found that Māori

engaged with facilitators who responded to participants as equals and joined in the group discussion. These findings all support the present findings which indicate that it is important to build on already established connections between researchers and participants in order to achieve positive outcomes for both.

**Deep structure.** Adaptations which involve deep structure involve intertwining the social, cultural, and psychological elements that influence the target population's behaviour (Resnicow et al., 1998). The main *social* element in this project was the concept of whanau, *cultural* elements included the use of the powhiri and hui processes, and *psychological* elements included discussions on parenting norms as well as providing culturally appropriate role models in the video vignettes. The shared world-view the researcher had with the participants was important as this ensured that Māori values were acknowledged and prioritised in the interview, the workshops, and the discussions which came from these elements (Herbert, 2001).

*Social.* The participants in the current project viewed themselves as a collective, as part of the same whanau. Mary clearly stated in the first workshop that her Playcentre community was her whanau as they were the support network she established when her family moved to Christchurch. This led to the inclusion of both Elizabeth and Lydia to this extended network. This concept of whanau was important to develop and include when delivering the PEP programme and was consistent with the research conducted by McMurchy-Pilkington (2013) who found that the best learning environment for adult Māori learners was one which included a strong sense of whanau. Whanau is seen as the main support system for many Māori parents, hence its importance in the Māori models of health and well-being (i.e. Durie, 1994; Pere, 1982). Māori cultural values and identity support

interdependence, and often whanau will be more responsible for determining care than the individual themselves (Kumar et al., 2012).

*Cultural.* To ensure that the participants values were prioritised the Powhiri process (McClintock et al., 2012) was included when planning the current project. This ensured that the participants values were prioritised. Respect and positive relations between tangata whenua (participants), and manuhiri (researchers) were valued as the researcher followed appropriate Māori cultural and Playcentre processes. Through this process the researcher was able to connect to participants because of their shared whakapapa and history of Playcentre membership. Shared experiences were exchanged and relationships formed.

The Hui process (Lacey et al., 2011) was adhered to in the delivery of the workshops. This process was familiar to the participants as it is commonly used in the Playcentre community. to ensure that links were established and maintained between the participants, researcher, and the researcher's supervisor, who was present during the workshop. A suitable amount of time was scheduled to allow for meaningful connections to be made. The researcher cited her pepeha in Māori and encouraged participants to introduce themselves in whatever way they felt comfortable. To provide a model the researcher's supervisor introduced herself in English to show that it was up to participants to choose a delivery they were most comfortable with. All four participants chose to cite their pepeha. Lydia did this for the first time and received much encouragement and praise from the other participants as she worked out what each point in the pepeha referred to. The participants all stated that they enjoyed the whakawhanaungatanga process as they were able to learn new things about each other and it highlighted the similarities in the group as opposed to there being a division between the researchers and the participants, Jane summed this up by saying "*you become one of us then*". Kai was offered by Elizabeth at this stage to break free from the restrictions

of tapu and so the business of the first workshop began. A poroporoaki at the end of the workshops allowed participants to have closure for the evening and understand what was required of them next. This was a reflective time for all participants as they chose to share with the group the main points they had learned that night and what they would do in the following week.

*Psychological.* Similar to Turner et al. (2007) findings, cultural content was not specifically added to the programme but emerged during discussion with the participants. Initially gaining a group understanding of what was meant by “parenting norms”, and “challenging behaviour” was important as this ensured that the participants understood the philosophical underpinnings of the content in the Parent Empowerment Programme. The importance of this practice was highlighted by Penehira and Doherty (2013) who reported that Māori parents valued being heard and wanted to have their parenting practices valued so the researcher emphasised that a ‘parent’ referred to any caregiver of the child, and that challenging behaviour was to be defined by the individual parent because what is normal parenting practice for one parent/whanau may not be for another. Two of the participants commented in their Social Validity Questionnaire that they were appreciative of the programme delivery supporting their parenting style and practices. For example, when the group was discussing the function of a behaviour for a child who was displaying challenging behaviour during the sleep routine, Elizabeth was vocal in her support of rocking a child to sleep and her dislike of the ‘cry it out’ technique, whilst Mary had tried leaving her child to cry themselves to sleep and expressed she now felt guilty for using this technique. This led to a discussion on how it was not up to us, as outsiders, to comment on what was appropriate practice in another family, but it was up to us to support them in their choice and help them become successful parents while still adhering to their whanau values.

### **Knowledge Quiz (KQ).**

The results of the second KQ may have been influenced by the time of night it was undertaken. It was 10.30pm when this workshop finally ended and this time may have had an impact on the parent's ability as they all reported they were finding it difficult to concentrate on the quiz. Considering their reported lack of concentration and that two of the participants missed the workshop one revision at the start of the second workshop, three of the four participants increased their post-test scores indicating that their knowledge of functional behaviour assessment and positive behaviour strategies increased over the two workshops. This result is similar to that found in other brief FBA parenting programmes (Duda et al., 2008; Dunlap et al., 2006; Fettig et al., 2015; Lindsay, 2016; Shayne & Miltenberger, 2013), and answers the first research question by indicating that parental knowledge of functional behaviour assessment and function-based intervention strategies can increase and be maintained over the two PEP group workshops.

It is of interest that there was a reduction in time that it took to complete the quiz for three participants. Elizabeth, Jane, and Lydia all took over 40-minutes to complete the pre-test during the initial interview; this was reduced to 10-minutes in the post-test for all three. In comparison, Mary completed both the pre- and the post-test in 10-minutes.

### **Parent use of Positive Behaviour Strategies.**

The findings of this study replicated those of Fettig and Ostrosky (2014), where the percentage of time children engaged in challenging behaviour was inversely correlated to parent use of positive behaviour strategies. This finding provides strong support for a causal relationship between parent implemented functional behaviour based intervention strategies and the reduction in the children's challenging behaviours. This is an important finding as both parental style and parent-child relationship are risk factors that can impact on a child's

future behavioural pathway (Darling & Steinberg, 1993; Deater-Deckard et al.1996; Patterson et al., 2010). Teaching these three parents the function of their child’s challenging behaviour informed these parents that they can deliberately change the antecedents and/or consequences via consistent/ contingent use of positive behaviour support strategies in their home.

The three participants who completed the in-home recordings showed that two 2-hour PEP workshops were enough to teach them how to successfully implement a function-based intervention with their children in their home environment. This finding supports Lindsay’s (2016) as well as Duda et al. (2008), Dunlap et al. (2006) and Fettig et al. (2015) findings. Furthermore, the findings in this current project also extends this research by showing that culturally adapting a parenting programme for ethnic minorities or indigenous populations can be successful.

### **Social Validity.**

All four participants were comfortable undertaking the Social Validity Questionnaire. They all named their questionnaire which implied that they were comfortable with the researcher knowing their personal views on the culturally adapted Parent Empowerment Programme. The mean score of each participant’s answer was 4.39 on a 5-point Likert scale. This finding is in line with other culturally adapted parenting programmes, such as Matsumoto et al. (2007) who reported a mean score of 5.65 on a 7-point Likert scale for programme delivery and Coard et al. (2007) who reported that programme delivery was rated in the high range on a 7-point Likert scale.

The only item which all participants rated as “disagree” was “*Overall training time was neither too short or too long,*”. This response could be due to the ambiguity of the question. It was difficult to determine how the participants felt about the workshop length as both workshops were late starting because of family commitments and thus went until 10.00

– 10.30pm. Future research could adjust this question to be less ambiguous. One participant commented that they would have liked more time to discuss their personal circumstances.

### **Individual Findings.**

**Elizabeth and Aria.** Elizabeth hosted the workshops at her house and was present for the entirety of both workshops. She actively participated in all discussions, asking appropriate questions and asked for clarity when required. Elizabeth held a strong parenting philosophy which included the belief that parents should always pay attention to their children whenever they requested it, including during the bed time routine. However, this was not evident in her parenting practices, as during baseline, Elizabeth believed she was paying attention to Aria but the video recording showed she was busy doing other chores while Aria was engaged in tantrum behaviour. With this strong parenting philosophy and possible resistance to the underlying behavioural philosophy of the Parent Empowerment Programme, attend to children when they are being ‘good,’ she commented that “*(She) thought the examples in the material indicated an underlying parenting philosophy that was not openly acknowledged in the course.*” This comment was in line with the contributions she made to the workshop discussions about how parents should attend to their children whenever they want their attention.

It was interesting to note that even though Elizabeth strongly disagreed with items 12, 13, and 16 on the Social Validity Questionnaire, she correctly identified the function of her child’s behaviour and increased her use of PBS strategies. This finding was similar to Strain, Barton, and Dunlap (2012) who reported that their families achieved behavioural change in their children before they reported feeling comfortable with the PBS strategies they were implementing. It is possible that with time Elizabeth may find the PBS strategies more socially acceptable to her parenting philosophy.

**Mary and Manawa.** Mary also attended both workshops and participated fully in the discussions and asked a number of questions. She appeared fully engaged with the content of the workshop, relating content back to her child and her difficult home routine time at numerous times.

Mary was the only parent who self-identified as Māori and it is important to note that Mary agreed that the components of the workshop were relevant to her and her child, as she agreed with item 16. This finding aligns with Turner et al. (2007) who found that the content of the workshop, when delivered in a culturally appropriate way, can cross cultures and that it is important to include models who portray the ethnic group of participants. Mary would recommend the programme to other Māori and non-Māori parents.

**Jane and Jack.** Jane was present for all of the first workshop, and fully engaged in the discussion. She was an hour late to the second workshop and arrived tired and did not engage in the discussion. Jane reported she found the Parent Empowerment Programme socially acceptable. Jane did not self-identify as Māori, but did answer the advertisement which specifically asked for parents of Māori children.

During the initial interview, Jane described Jack's challenging behaviour as non-compliance during the breakfast routine. The video recordings also showed Jack's two siblings displaying more challenging behaviour than him, but the coding of their behaviour did not occur because consent had not been obtained. During Jane and Jack's third baseline recording, Jack did not display any challenging behaviour when he was seated at the table eating breakfast which had been prepared by Jane. In contrast, during this recording one of Jack's siblings was yelling "stop fighting" for an extended period of time while Jane ignored all three children. Intervention recordings showed that Jane's use of positive behaviour strategies increased to 100% and during this time Jack's challenging behaviour reduced to

zero. Anecdotally, there was also a reduction in challenging behaviour displayed by Jack's siblings as well during this time.

**Lydia.** Lydia was the supervisor at the local Playcentre where the three participants attended. Lydia was fully engaged in all discussion and was supportive of the other participants. This was evident when she helped with the identification of the function of each of the children's behaviour by providing examples of similar behaviour they engaged in at Playcentre. This also indicated that Lydia was generalising examples of behaviour to other settings.

Lydia's found the PEP programme socially acceptable and, unlike Mary and Jane, she found the video resources easy to relate to and relevant. Lydia indicated that she was not satisfied with the length of the workshops, commenting that she would have liked more time to talk with the facilitator *kanohi ki te kanohi* to discuss her personal circumstances. In both workshops she became preoccupied with her own experiences, both at home and at Playcentre, and relating these to workshop content. At times she was redirected to the task being taught. A possible direction for future research may be for a teacher version of the Parent Empowerment Programme to be developed as there appears to be a need for this type of information to be disseminated with this population. Functional behaviour assessment has been successfully taught to teachers previously (Fallon, Zhang, & Kim, 2011; Ingram et al., 2005).

### **Engagement.**

**Engagement rate.** A high engagement rate of 100% was achieved for the PEP programme as all four participants attended both workshops and completed the measures that were requested of them. This finding is in line with other culturally adapted parenting programmes which showed high engagement rates, such as Matsumoto and colleagues (2007)

who also had a 100% engagement rate with Japanese parents, and Kim and colleagues (2008) who had 96% with their Korean-American participants. The rate of engagement from this current project was higher than the rates found by Tully and Hunt (2016) who reported an average engagement rate of 84% in their literature review on brief parenting interventions. This finding suggests that culturally adapted programmes have a higher engagement rate than other parenting programmes such as Triple P and PMT-O. This may be due to the open communication between the researcher and participants via reminder text messages, and the openness to make the workshop dates and time suitable to all families' needs. Both of these processes made everything amicable for both parties. This finding aligns with research on engagement which shows higher engagement rates when scheduling issues can be overcome, and the programme is of one or two sessions in length (Axford, Lehtonen, Kaoukji, Tobin, & Berry, 2012; Duppong-Hurley et al., 2016; Ingoldsby, 2010; Tully & Hunt, 2016).

**Location.** As with other culturally adapted parenting programmes (Herewini, 2014; Lau et al., 2011; Turner et al., 2007), the Parent Empowerment Programme workshops were run in the participants' local community. Originally the workshops were going to be situated at their local Playcentre but one of the participants offered to host the workshops at her home. All of the participants had visited the home before and were happy to attend the workshop there. It has been noted that locating parenting programmes within participants' community can increase engagement rates (Ingoldsby, 2010) and worked very successfully for the PEP.

### **Limitations.**

There were four limitations to this project, 1) mother only sample, 2) sample size, 3) ethnic identification and, 4) video vignettes.

**Mother only sample.** The recruitment advertisement for this project asked for parents of Māori children, there was no specification for mothers or fathers. Any adult who took the

primary caregiving role was eligible to be included in the project. No fathers answered the advertisement resulting in a mother only sample. In future it would be beneficial to recruit specifically for caregivers of Māori children instead of just parents. This would be more inclusive of Māori child rearing practices where it is more common for extended family members to care for children (Kumar et al., 2012; Herbert, 2001), and would meet the goals of the PEP programme.

**Sample size.** The results of this project cannot be generalised to other populations, ethnicity's, or settings as the sample size was too small. A large number of parent-child dyads who self-identify as Māori would allow for a stronger causal inference to be drawn between parent's use of positive behaviour strategies and their child's challenging behaviour.

**Ethnic identification.** Only one parent-child dyad in the present project self-identified as being of Māori ethnicity. Understandably the term ethnicity can be difficult to define as it has become interchangeable with the term 'race' in popular culture (Betancourt, & López, 1993). Statistics New Zealand (n.d.) have also expressed difficulty with individual's identifying themselves as Māori, as people can self-identify with multiple ethnicities, or may object to answering questions on ethnicity. Perhaps future research could use 'whanau' as one way of self-identification.

**Video vignettes.** Even though there were video vignettes available for each teaching point for the PEP, the researcher and the participants jointly decided to discuss their own children's examples instead of using the video vignettes. This resulted in no video vignettes being shown in the first workshop and only two shown in the second workshop. The two video vignettes that were shown did not include Māori whanau, so participants only saw a Pakeha New Zealand family. In future it would be beneficial to include Māori whanau in one of these two vignettes.

### **Implications for Future Research.**

As mentioned, there are several implications for future research which have emerged from this project. Firstly, to extend this research, other research could investigate a teacher version of the Parent Empowerment Programme as suggested by Lydia. This would allow teachers to gain knowledge in functional behaviour assessment and function-based interventions. Creating more vignettes which include Māori whanau as models would aid in the cultural sensitivity of the programme and should be extended in other occurrences of the PEP. Lastly, extending the empirical research on the Parent Empowerment Programme by completing a randomised control trial would be beneficial for the programmes future development.

### **Conclusion.**

The Parent Empowerment Programme (PEP) is a parenting programme that teaches parents to identify the function of their child's challenging behaviour and then to implement a function-based intervention plan using positive behaviour support (PBS) strategies in their home environment to address this behaviour. After the two 2-hour workshops, parents increased their knowledge of functional behaviour assessment and positive behaviour strategies. The parents also learned how to identify the function of their child's behaviour and from that information, they successfully developed and implemented a function-based intervention plan with their children in their home environment where their child's challenging behaviour decreased and the parent's use of PBS increased. Three of the four parents found the PEP to be a socially acceptable parenting programme that they would recommend to others, the fourth parent expressed dislike for the behavioural underpinnings of the programme yet was able to successfully implement a functional behaviour assessment and function-based intervention with her child during her selected home routine time. Lastly, by following Māori tikanga and kaupapa, matching the facilitator with the participants, and

locating the workshops in the local community, a parent engagement rate of 100% was achieved.

The current project is a positive addition to the small literature on culturally adapting a brief group parenting programme which teaches functional behaviour assessment and function-based intervention to parents in the home setting.

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**Appendix A – Ngāi Tahu consultation and Engagement Group letter.**

## **Ngāi Tahu Consultation and Engagement Group**

March, 2016

Tēnā koe, Corina



Re: Parent Empowering Programme (PEP) with parents of young Māori children.

This letter is written on behalf of the Ngāi Tahu Consultation and Engagement Group. We have read and considered your proposal and are in agreement that this project is of great potential value and importance.

We would like to acknowledge the potential benefits of your work for Māori, and commend you for your cultural sensitivity.

Thank you for engaging with the Māori consultation process. The process strengthens and enlarges the network of support for your work. Feel free to contact the committee members and Māori research advisors for further advice should you need it. We wish you all the best with your current project and look forward to hearing about future research plans.

The Ngāi Tahu Consultation and Engagement Group would appreciate a summary of your findings on completion of the current project. Please feel free to contact me if you have any questions.

Nāku noa, nā

Nigel Harris

Acting Māori Research Consultant  
Office of AVC Māori  
Te Whare Wānanga o Waitaha  
Private Bag 4800  
Otautahi Christchurch 8140  
Aotearoa New Zealand  
Phone +64 3 364 2987 ext 6120  
cellphone 0273950134  
nigel.harris@canterbury.ac.nz

# Playcentre



## Appendix B – NZPF letter.

New Zealand Playcentre Federation  
PO Box 218, Whangaparaoa 0943  
secretary@playcentre.org.nz

14<sup>th</sup> September  
Dear Corina Landon-Lane,

I am pleased to advise that the Research Advisory Group (“the committee”) has approved your application to conduct your research project, titled ‘*Parent Empowering Programme (PEP) with parents of young Māori children,*’ within a Playcentre Setting.

You have supplied a Research Proposal and schedule outlining the timeline that you expect the research to take, and we expect that progress towards completion of the project will be guided by this.

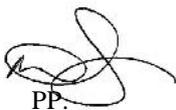
During the completion of this research please ensure that the Association/s is made fully aware of conduct of the research and all Association and Centre policies are adhered to.

Any Tangata Whenua consultation will occur either with Te Whare Tikanga Māori members or Māori Federation Officers dependent on the time that consultation is required; please contact the Te Whare Tikanga Māori Administrator on [kaiwhakahaere@Playcentre.org.nz](mailto:kaiwhakahaere@Playcentre.org.nz) when needing to initiate consultation.

Please forward through confirmation of receipt of ethical approval prior to the commencement of your research.

NZPF expects to receive a copy of the final report after publication. I am happy to discuss further possibilities with you once your report is nearing completion.

Best wishes for your research project.



PP.  
Ann Langis  
For the NZPF Research Advisory Group.



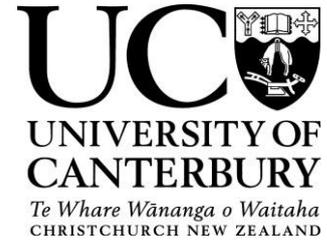
[www.Playcentre.org.nz](http://www.Playcentre.org.nz)

“Whānau tupu ngātahi – families growing together”

**Appendix C – UC Human Ethics Committee letter.**

HUMAN ETHICS COMMITTEE

Secretary, Rebecca Robinson  
Telephone: +64 03 364 2987, Extn 45588  
Email: [human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)



Ref: HEC 2016/76

16 September 2016

Corina Landon-Lane  
School of Health Sciences  
UNIVERSITY OF  
CANTERBURY

Dear Corina

The Human Ethics Committee advises that your research proposal “Parent Empowering Programme (PEP) with Parents of Young Māori Children” has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your emails of 31<sup>st</sup> August and 14<sup>th</sup> September 2016.

Best wishes for your project.

Yours sincerely

*pp.*

A handwritten signature in black ink that reads 'R. Robinson'.

Kelly Dombroski  
*Deputy Chair*  
*University of Canterbury Human Ethics Committee*

## Appendix D – Participant Consent Form



Department of Health Sciences, University of Canterbury  
[corina.lane-lane@canterbury.ac.nz](mailto:corina.lane-lane@canterbury.ac.nz)

### Consent Form for Parents/Caregivers

*Please tick the following boxes to give your consent.*

- I give permission for my participation in the research study titled 'Parent Empowering Programme with parents of young Māori children.'
- I have read and understood the information given to me about the research project and what will be required of me throughout the research.
- I have also been given the opportunity to ask any questions.
- I have read the child information sheet to my child.
- I understand that throughout the project my name and my child's name or any other identifiers will be coded to protect and maintain confidentiality and anonymity. The names of me and my child will not be used in any report, conference or publication.
- I understand that up to fifteen home video observations will be made by Corina. These will be only viewed by Corina, her supervisors and a post graduate student who will assist with reliability.
- I understand that should I feel distressed during any part of the in-home components of the research I have the option to phone, Facetime or Skype Corina and Corina will help me through the situation.
- I understand that any information and data collected will be kept in the strictest confidence and will be stored in locked filing cabinets in my senior supervisor's office and will be destroyed after five years in alignment with the Human Ethics Committee guidelines.
- I understand that Corina's thesis is a public document and will be available through the UC Library and Corina will be using pseudonyms so we can't be identified.
- I understand that participation in this project is voluntary and that I can withdraw from the project without having to give a reason by contacting the researcher via email or phone call.

- I understand that I am able to receive a report on the findings of the study by contacting the researcher at the conclusion of the project.
- I understand that I can contact the researcher Corina Landon-Lane ([corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz)) or her supervisor Dr. Gaye Tyler-Merrick ([gaye.tyler-merrick@canterbury.ac.nz](mailto:gaye.tyler-merrick@canterbury.ac.nz)) for further information. If I have any complaints, I can contact the Chair of the University of Canterbury Human Ethics Committee, Private Bag 4800, Christchurch ([humanethics@canterbury.ac.nz](mailto:humanethics@canterbury.ac.nz))
- I would like to receive a copy of the research results on completion of the Thesis project.
- I understand that in signing this consent form I am providing assent for my child - \_\_\_\_\_ to be recorded in the home video component of this research.

By signing below, I agree to participate in this research project

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Email address to send final report:

\_\_\_\_\_

Please bring this completed consent form with you to your first meeting with Corina.

Kind regards

Corina Landon-Lane

## Appendix E – Child Consent Form



Department of Health Sciences, University of Canterbury  
[corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz)

### Consent Form for Child (parent/researcher please read to child).

Please tick the following boxes to give your consent.

- I agree to be a part of Corina's project.
- I understand that during Corina's project I will be videoed at home during bed/bath/dinner/breakfast (as applicable)
- I understand that Corina, her teachers and a research helper will be the only people who watch the videos of me and my whanau.
- I understand that my name and those of my whanau will not be used when Corina writes up her project. We will all have codes so that no one will know who we are or where we live.
- I understand that any information Corina takes about my whanau will be kept in a safe, secured place.
- I understand that I can stop being a part of Corina's project if I don't want to anymore.
- I understand that I can ask Corina ([corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz)) or my mum or dad (as applicable) if I want to know anything else or have questions about the project.

By signing below, I agree to be a part of Corina's research project

Child's name: \_\_\_\_\_

By signing below, I declare that I have read through both the information and consent form with my child.

Signed parent/caregiver: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Please bring this completed consent form with you to your first meeting with Corina.

Thank You,

Corina Landon-Lane

## Appendix F – Participant Information Form



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Department of Health Sciences  
[corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz)

### Information Form for Parents/Caregivers

Tena Koe,

Ko Horoutu toku waka

Ko Hikurangi toku maunga

Ko Waiapu toku awa

Ko Ngati Porou toku iwi

Ko te whanau a Ruataupare toku hapu

Ko Tuatini toku marae

Ko Corina Landon-Lane ahau

Nō reira, tēnā tātou katoa

I am currently working towards my Child and Family Psychology Master's Thesis. The purpose of my project is to adapt the Parent Empowering Programme (PEP) for a New Zealand population that includes parents of young Māori children. The PEP teaches parents how to identify the purpose of their child's challenging behaviour, and then identify and use positive behaviour management strategies during a home routine time (bedtime, mealtimes, bathtime, or morning time routines). This is done by teaching parents how to implement a Functional Behaviour Assessment (FBA).

Based on international research, the PEP was developed to consist of two - two-hour workshops. What I am interested to see, in my project, is if the FBA training and the teaching of prosocial strategies has any effect on the child's disruptive behaviour.

I am hoping to get up to six families to participate in my workshops. Participants need to have a child between the ages of 3-10 who is engaging in challenging behaviours around a

daily routine time. For the purposes of this project the term 'parent' will be used to refer to any adult who has day-to-day care of a child. I want to focus on children who are identified as being of Māori descent. If you and your child fit this profile, I would like to invite you to join my parent group.

### **My project involves two parts:**

#### **1. Workshops**

The two workshops are two hours long, and will be a week apart. Parents will be in a group environment together and will learn about FBA and how to use positive behaviour management strategies. The workshops will use a range of materials and teaching methods such as, New Zealand specific videos, work books, PowerPoints and role plays.

#### **2. In-home video component**

The video component involves a video recording of you and your child's interactions during a normal home routine where your child engages in challenging behaviour. The video recordings will occur up to 15 times at designated points of the study; at the beginning for three to five recordings, after the workshops for seven sessions and later at follow up for one recording. You will be required to set up these videos I will not be coming into your home unless requested. Once you have completed the recordings for each phase of the study you will be asked to send the recordings to me via email or USB. You will be supplied with a small recording device.

*If you are uncomfortable doing video recording, there is the option of audio and/or written diary.*

### **The Process:**

Being involved in this project will require you to complete a number of tasks and activities within the parent workshops and in your own home.

These tasks and activities include:

- An initial meeting at the Pukemanu/Dovelade Centre, your Playcentre, or in your home to gather information about your whanau and whanau needs.
- Participation in the two group workshops which will run for no more than 2 hours each. These will be held 1 week apart (day and time TBC) at a Playcentre.
- Completing a questionnaire at the initial meeting and at the end of the second workshop.
- Complete some in home tasks after each workshop such as; watching a 10min DVD or completing a checklist.
- Completing a questionnaire on the effectiveness of the parent workshops
- Being willing to set up a recording device in order to record your interaction with your child during the daily routine of concern.
- Being willing to be observed in your natural home environment through video recordings.

As my project is focusing on developing your knowledge of disruptive and prosocial behaviour I will request your permission to allow you and your child to be recorded as a part of my project. If you require any assistance during the in-home components of my project you will be able to either phone, Facetime or Skype me and I will help you through your situation. In addition, should I identify that you are having difficulty implementing the strategies in your home I will speak to my supervisors and with their help we will provide additional coaching to assist you.

Any data recorded in workshops or interviews and home video recordings will be kept secure with my senior supervisor for the five years as stated by the Ethics Committee guidelines. The information collected will be stored in locked filing cabinets in my senior supervisor's office, or on password protected servers and will be destroyed after five years. Names and any identifying details will be changed to maintain confidentiality of both you and your child(ren) throughout the project. At the end of the project, I will give you a summary of the study.

The results of the project may be published, but be assured that complete confidentiality of data gathered will be maintained. To ensure confidentiality your name and any identifiers will be given pseudonyms. The completed thesis will be a public document and will be available through the University of Canterbury Library.

Please remember that your participation is voluntary and you have the right to withdraw at any stage without penalty or explanation. You can withdraw easily and without embarrassment by emailing me at [corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz) or phoning me on 021 250 8057. If you choose to withdraw, I will do my best to remove any information relating to you, provided this is practically achievable.

The project is being carried out as a requirement for my Master of Arts in Child and Family Psychology degree, under the supervision of Dr. Gaye Tyler-Merrick (senior supervisor) who can be contacted at [gaye.tyler-merrick@canterbury.ac.nz](mailto:gaye.tyler-merrick@canterbury.ac.nz). She will be pleased to discuss any concerns you may have about participation in the project. If you have any questions during any stage of the research you are most welcome to contact me at the details below or, either of my senior supervisor.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch ([human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)).

As my project is limited to a maximum of six families please contact me promptly if you wish to join me as participant, positions are filled on a first come, first entry criteria. If all participant positions are filled, I will contact you to let you know.

If you understand and agree to take part in this study, please complete the attached consent form and I will collect this from you at the beginning of our first meeting.

Many thanks,

Corina Landon-Lane

Email: [corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz) Phone: 021 250 8057

**Senior Supervisor**

Gaye Tyler-Merrick

Email: [gaye.tyler-merrick@canterbury.ac.nz](mailto:gaye.tyler-merrick@canterbury.ac.nz) Phone: (03) 345 8380

**Secondary Supervisor**

Lawrence Walker

Email: [lawrence.walker@canterbury.ac.nz](mailto:lawrence.walker@canterbury.ac.nz)

## Appendix G – Child Information Form



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Department of Health Sciences, University of Canterbury  
corina.landon-lane@pg.canterbury.ac.nz

### **Child Information Sheet (parent please read to child).**

Corina is doing a project at the university. She is going to work with us to see how and what we do during our bed/dressing/breakfast/dinner time (as applicable) through a video set up in the room. She will watch us all on the video and take notes about what we do and how we do it. Corina will then work with Mum and Dad (as applicable) to help us make these times more enjoyable and less stressful than they are now. Mum and Dad (as applicable) will video these times and give the video to Corina and her teachers to watch and record what happens.

When Corina writes about us, we will be given code names so that no-one will know our names or where we live.

This project is being carried out as a requirement for Corina's university degree and she has her teacher Gaye helping her.

If you have any questions you can talk to us, Corina or Gaye. If you change your mind about being in the project, that's fine, too. All you have to do is to tell us or Corina. Do you have any questions?

If you agree to participate in the study, please give your assent by signing the consent form.

Thank you for helping with the project.

Corina Landon-Lane  
corina.lane-lane@pg.canterbury.ac.nz

## Appendix H – Research Assistant Consent Form



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Department of Health Sciences, University of Canterbury  
[corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz)

### Consent Form for Research Assistant

Please tick the following boxes to give your consent.

- I am willing to act as the research assistant in the research study titled “Parent Empowering Programme (PEP) with parents of young Māori children.”
- I understand what the aim and purpose of the study is.
- I understand that I will be trained in the skills necessary to fore fill this role.
- I understand that all data within the study is confidential and participants shall remain anonymous.
- I understand that any information I handle will be returned to Corina Landon-Lane and she will store this in a secured storage facility.
- I understand that any work I do regarding this study will be completed on a password protected server and will be saved as directed by Corina Landon-Lane.
- I understand that I can contact Corina ([corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz)) or her supervisor Dr. Gaye Tyler-Merrick ([gaye.tylermerrick@canterbury.ac.nz](mailto:gaye.tylermerrick@canterbury.ac.nz)) if I want to know anything else about the project

By signing below, I agree to act as the research assistant and keep the information I see confidential

Signed: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Thank You,

Corina Landon-Lane.

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Department of Health Sciences, University of Canterbury  
[corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz)

### Information Form for Research Assistant

Kia Ora,

My name is Corina Landon-Lane and I am currently undertaking my Child and Family Psychology Master's Thesis. The purpose of my study is to examine the effects of training parents in Functional Behaviour Assessment (FBA) and prosocial behaviour strategies, on the duration and/or frequency of disruptive child behaviours around daily routine times (bed, bath, eating times).

FBA is a technique that shows patterns of behaviour and helps determine the reason/function of the difficult behaviour. FBA is a beneficial skill for parents to learn as once the function of a child's behaviour is identified parents can then teach prosocial skills which will help decrease the difficult behaviour. Based on international research, I have developed a two – 2-hour workshop to teach FBA skills to parents and also teach prosocial skills to replace the difficult behaviour the child is engaged in. What I am interested to see, in my project, if the FBA training and the teaching of prosocial strategies has any effect on the child's disruptive behaviour.

I am hoping to get up to six families to participate in my workshops who have a child between the ages of 3-10 that has difficult to manage behaviours around a daily routine time such as bed/bath/dinner/breakfast/dressing time. I want to focus on 'typically developing' children without any formal diagnoses.

My project involves two parts.

#### Workshops

The two workshops are designed to teach a small group of up to 6 parents of Māori children to perform FBA and learn appropriate prosocial intervention skills depending on the function of their child's behaviour. The workshops are split into learning FBA and learning appropriate prosocial intervention strategies. To provide optimal learning opportunities, these workshops will use a range of materials and teaching methods such as, New Zealand specific videos, work books, PowerPoints and role plays.

#### In-home video component

The video component involves a video recording of parent and child's interactions during a normal home routine where the child engages in disruptive behaviour. The video recordings

will occur up to 12 times at designated points of the study; at the beginning for three recordings, after the workshops for seven sessions and later at follow up for one recording. Parents will be required to set up these videos I will not be present in the home. Once parents have completed the recordings for each phase of the study they will be asked to send the recordings to me via email or USB.

Being involved in this project will require you to complete number of tasks which you will be trained in.

These tasks and activities include:

- Coding participants' data
- Data collection
- Workshop preparation
- Data analysis.

Any data recorded in workshops or interviews and home video recordings will be kept secure in locked storage facilities or electronically on password protected servers. Any data information collected must be kept in the strictest confidence and participants identify anonymous.

Any work that you perform within this role will be returned to Corina Landon-Lane or her supervisors at the end of your work session. You are not to withhold any data or personally store the data.

The project is being carried out as a requirement for a Master of Science in Child and Family Psychology degree, under the supervision of Dr. Gaye Tyler-Merrick (senior supervisor) who can be contacted at [gaye.tylermerrick@canterbury.ac.nz](mailto:gaye.tylermerrick@canterbury.ac.nz). She will be pleased to discuss any concerns you may have about participation in the project.

This project has been reviewed and approved by the University of Canterbury Human Ethics Committee, and participants should address any complaints to The Chair, Human Ethics Committee, University of Canterbury, Private Bag 4800, Christchurch ([human-ethics@canterbury.ac.nz](mailto:human-ethics@canterbury.ac.nz)).

Many thanks,

Corina Landon-Lane  
Email: [corina.landon-lane@pg.canterbury.ac.nz](mailto:corina.landon-lane@pg.canterbury.ac.nz)  
Phone: 021 250 8057

**Senior Supervisor**

Gaye Tyler-Merrick

Email: [gaye.tylermerrick@canterbury.ac.nz](mailto:gaye.tylermerrick@canterbury.ac.nz) Phone: (03) 345-8380

**Secondary Supervisor**

Lawrence Walker

Email: [lawrence.walker@canterbury.ac.nz](mailto:lawrence.walker@canterbury.ac.nz)

## Appendix J - Advertisement



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Kia ora

My name is Corina Landon-Lane and I am currently working towards my Masters of Arts in Child and Family Psychology at the University of Canterbury. My project involves running a parenting programme for parents of Māori children who are 3-10 years old. For my study, the word 'parent' refers to any whanau member who is involved in the day-to-day care of a child.

*Parent participants:* I am looking for parents who have children of Māori descent, and who are having difficulty with their child's behaviour during normal routines at home. These home routine times may include dinnertime, bath time, bedtime, getting to Playcentre, or school times.

*My project.* This project involves helping parents to understand why their child may be using challenging behaviour during the routine time, and helping them to choose a positive behaviour strategy to manage their child's challenging behaviour.

If you are interested and would like further information my contact details are below:

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## Appendix K – Knowledge Quiz



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### Knowledge Quiz

Name: \_\_\_\_\_ Date: \_\_\_\_/\_\_\_\_/\_\_\_\_

Please indicate which assessment you are completing: **Baseline** **Final**

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1. Behaviour is defined as something which is *(please circle as many answers you think correct)* (2 marks)

Observable    Emotional    Outbursts    Measureable    Social

2. Which of the options below are behaviours you can observe and record *(please circle any answers you think are correct)* (3 marks)

Crying    Frustration    Tired    Laughing    Concentrating    Tantrum

3. Antecedents occur \_\_\_\_\_ behaviour (fill the gap). (1 mark)  
(A=before)

4. \_\_\_\_\_ occur after the behaviour. (fill in the gap). (1 mark)

(A = consequences)

5. Praise and encouragement can have a much greater effect on child behaviour when it is \_\_\_\_\_ and includes \_\_\_\_\_ *(fill the gaps with options below)*. (2 marks)

Descriptive/Parents    Positive/Guidance    Descriptive/Physical Warmth  
Spoken/Interaction

6. When using planned ignoring/extinction, extinction bursts can occur. What happens in these bursts? *(please circle the answer you think is correct)* (1 mark).

- A) Increase in problem behaviour either in frequency or intensity.
- B) Increase in good behaviour either in frequency or intensity.
- C) Increase of new behaviours either in frequency or intensity.

7. When children are well behaved it is important to give them \_\_\_\_\_ (*fill the gap with options below*). (1 mark)

Positive Attention      Opportunity to play by themselves      Support

8. A) Look away  
B) Try to maintain neutral facial expression and body language  
C) Continue to carry on with your activity

These are three essential components in the strategy \_\_\_\_\_ (*please circle the answer you think is correct*) (1 mark).

Timeout      Planned Ignoring/Extinction      Negative Attention      Negative Praise

9. Hana is yelling to her parents from her bedroom after being put to bed. Her yelling is getting louder and more frequent. What would be an appropriate response to use? (*please circle the response you think is correct*) (1 mark).

Timeout      Planned Ignoring/Extinction      Negative Attention  
Punishment

10. Niko arrives at the dinner table after washing his hands without having to be told to do so. What would be an appropriate response to use? (*please circle the answer you think is correct*) (1 mark).

Descriptive Praise      Support      Extinction      Positive Punishment

11. If a child is at risk of harming themselves, others, you, or property what is an appropriate response to use? (*please circle the answer you think is correct*) (1 mark).

Sit, and Wait      Exclusive timeout      Individual timeout  
Punishment

12. Three main functions of child behaviour are: (*please circle your answer*) (1 mark).

- A) Attention, Escape/Demand, Tangible  
B) Escape/Demand, Anger, Pleasure  
C) Attention, Tangible, Support

13. Functional behaviour assessment allows us to see the pattern of behaviours and make an educated guess of the \_\_\_\_\_ of behaviour (*fill in the gap*)

*(1 mark). ( A= function or reason)*

**14. The functional behaviour assessment process of A-B-C stands for: *(fill the gaps)* (3 marks)**

A \_\_\_\_\_

B \_\_\_\_\_

C \_\_\_\_\_

(A = antecedent, behaviour, consequence)

**15. When 4-year old Tia has missed her afternoon nap she often cries and tantrums when she has to share her toys. When Tia's 2-year old brother tries to take one of Tia's blocks she throws a block him. When Tia's father asks her not to do that again, she ignores him and picks up another block and throws it towards her brother. Tia's father explains what she has done is not acceptable and she needs to share with her brother or take turns. She is removed to the side of the activity for a short period of time (1-2 minutes). After this time her father explains again what she did wrong and what she should do instead.**

**Please list any behaviours or events that fit into the A-B-C process: *(fill the gaps)* (4 marks)**

A \_\_\_\_\_

B \_\_\_\_\_

C \_\_\_\_\_

Function: \_\_\_\_\_

**A= missed nap**

**B = cries and tantrums - throws blocks at brother**

**C= sit and wait/inclusive time out**

**Function = biological with tiredness and escape/demanding situation sharing with brother**

**16. Ben throws his toys at his father and then runs away to another room when he is asked to come to the dinner table. The function of Ben's behaviour is likely to be: *(please circle the answer you think is correct)* (1 mark).**

Attention

Escape/Demand

Tangible

Support

Anger

**17. Tane tugs at his mother's leg while she feeds his younger sibling. When Tane's mother continues to look after the younger sibling Tane begins to cry and tugs more intensely at his mother's leg. The function of Tane's behaviour is likely to be: *(please circle the***

**answer you think is correct) (1 mark).**

Attention      Escape/Demand      Tangible      Support      Anger

**18. A behaviour support plan uses information from functional behaviour assessment process to change problem behaviour through: (please circle any answers you think are correct) (4 marks).**

Match function and appropriate Consequences      Teach Alternative Replacement Behaviours

Reinforce and Encourage Appropriate Behaviours      Prevent Predictors or Triggers

**19. Reducing distractions and giving warnings are types of \_\_\_\_\_ (fill the gap) (1 mark). (A=prevention strategies)**

**20. Modelling is a \_\_\_\_\_ (please circle the answer you think is correct). (1 mark).**

Replacement Behaviour      Prevention Strategies      Consequences  
Punishment

**21. To change and manage problem behaviour we use \_\_\_\_\_ which allows us to create a \_\_\_\_\_ which may include \_\_\_\_\_, \_\_\_\_\_ and \_\_\_\_\_ depending on the behaviour (fill the gaps with options below). (4 marks)**

A) Functional Behaviour Assessment, A-B-C plan, Consequences, Punishments, Strategies that match function

B) A-B-C plan, Behaviour support plan, Prevention strategies, Consequences, Punishments

C) Functional Behaviour Assessment, Behaviour support plan, Prevention strategies, Replacement behaviours, Consequences that match function.

Thank you, please make sure your name is on the front of this sheet and you have circled the appropriate test.

Appendix L – Social Validity Questionnaire.



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Social Validity Questionnaire Adapted from Li, (2011).

**1 = Strongly Disagree; 2 = Disagree, 3= Neutral, 4 = Agree, 5 = Strongly Agree**

The Group Workshop

1. The components of the workshop were well organised  
1                      2                      3                      4                      5
2. The examples and video resources were easy to relate to  
1                      2                      3                      4                      5
3. The mixture of written, visual and physical learning activities was beneficial for my learning  
1                                      2                                      3                                      4                                      5
4. The information provided was thorough  
1                                      2                                      3                                      4                                      5
5. The instructor showed knowledge and professionalism when providing training and feedback  
1                                      2                                      3                                      4                                      5
6. The workshop was interactive and enjoyable  
1                                      2                                      3                                      4                                      5
7. The group setting encouraged relationships between parents  
1                                      2                                      3                                      4                                      5

**1 = Strongly Disagree      2 = Disagree    3= Neutral    4 = Agree    5 = Strongly Agree**

Functional Behaviour Assessment Strategies

- |   |   |   |   |   |   |
|---|---|---|---|---|---|
| 1. The teaching of Functional Behaviour Assessment strategies was understandable and helpful          | 1 | 2 | 3 | 4 | 5 |
| 2. Functional Behaviour Assessment strategies were relatable to my family situation                   | 1 | 2 | 3 | 4 | 5 |
| 3. I have confidence in my ability to perform Functional Behaviour assessments and intervention plans | 1 | 2 | 3 | 4 | 5 |

Overall Satisfaction

- |  |   |   |   |   |   |
|--|---|---|---|---|---|
| 1. Overall training time was neither too short or too long   | 1 | 2 | 3 | 4 | 5 |
| 2. I would use the skills learned again with my child if necessary                                     | 1 | 2 | 3 | 4 | 5 |
| 3. The information gained through this training helped me to better understand my child                | 1 | 2 | 3 | 4 | 5 |
| 4. I would recommend learning about Functional Behaviour Assessment and Interventions to other parents | 1 | 2 | 3 | 4 | 5 |
| 5. I am satisfied with the training programme  | 1 | 2 | 3 | 4 | 5 |
| 6. The components of the workshop were relevant to my tamariki   | 1 | 2 | 3 | 4 | 5 |
| 7. The video resources were relevant to my whanau  | 1 | 2 | 3 | 4 | 5 |

Further Comments or Suggestions

**Appendix M – FACTS and Demographics Questionnaire.**

Date: \_\_\_\_\_

Interviewer Name: \_\_\_\_\_

Parent Name: \_\_\_\_\_

Age: \_\_\_\_\_

Occupation: \_\_\_\_\_

Ethnicity: \_\_\_\_\_

Highest Qualification Gained: \_\_\_\_\_

Child Name: \_\_\_\_\_

Age: \_\_\_\_\_

School: \_\_\_\_\_

Ethnicity: \_\_\_\_\_

Family Make-up:

<input type="checkbox"/> Single parent	<input type="checkbox"/> Step parents	<input type="checkbox"/> Partner	<input type="checkbox"/> Extended Family
<input type="checkbox"/> Married Parents	<input type="checkbox"/> Siblings (please state age, gender, status =step/half)		
<input type="checkbox"/> Other			

Problem Routine: \_\_\_\_\_ Daily Frequency: 1 2 3 4 5 6 +

How long has this routine been an issue? (when did the behaviours start) \_\_\_\_\_

**Problem Behaviour(s): Identify the problem behaviours:**

<input type="checkbox"/> Tardy	<input type="checkbox"/> Fight/Physical Aggression	<input type="checkbox"/> Disruptive
<input type="checkbox"/> Unresponsive		
<input type="checkbox"/> Self-Injury	<input type="checkbox"/> Inappropriate Language	<input type="checkbox"/> Verbal Outburst
		<input type="checkbox"/> Escape

**Target Behaviour(s): Prioritize these behaviours (which is most important to be addressed).**

- 1.
- 2.
- 3.

**Provide more detail about the problem routine (s):**

What does the disruptive routine look like? (what, who, when, duration, daily/weekly occurrence).

**What procedures have you followed when the behaviour occurs and have these worked?**

**occur that have not worked?**

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**What procedures have you followed when the behaviour occurs that have worked?**

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**What are the events that predict when the problem behaviour(s) will occur?**

<b>Related Issues (settings events)</b>	<b>Environmental Features</b>
<input type="checkbox"/> illness <input type="checkbox"/> tiredness <input type="checkbox"/> hunger <input type="checkbox"/> timing conflicts <input type="checkbox"/> family conflict <input type="checkbox"/> school conflict (peer or academic) <input type="checkbox"/> other:	<input type="checkbox"/> reprimand/correction <input type="checkbox"/> physical demands <input type="checkbox"/> socially isolated <input type="checkbox"/> shared parental attention <input type="checkbox"/> with other people (state who) <input type="checkbox"/> task is too boring <input type="checkbox"/> task is too hard <input type="checkbox"/> task is too easy <input type="checkbox"/> routine is too long <input type="checkbox"/> other

**Perceived Function: What do you think causes or motivates the challenging behaviour?**

<b>Things that are obtained</b>	<b>Things that are avoided or escaped from</b>
<input type="checkbox"/> parent attention <input type="checkbox"/> sibling attention <input type="checkbox"/> preferred activity <input type="checkbox"/> tangible (money, toys, lollies) <input type="checkbox"/> other:	<input type="checkbox"/> hard tasks <input type="checkbox"/> boring tasks <input type="checkbox"/> reprimands <input type="checkbox"/> social isolation <input type="checkbox"/> shared parental attention <input type="checkbox"/> attention of another person (state who) <input type="checkbox"/> physical effort <input type="checkbox"/> other

**Are there any circumstances under which the behaviour will always occur?**

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**Are there any circumstances under which the behaviour will not occur?**

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**What are some things your child likes and are reinforcing for him/her?**

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**What are some things your child dislikes and are punishing for him/her?**

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**How do you feel during the routine of concern? (what emotions do you experience)**

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**How do you think your child feels during the routine of concern (what emotions do they show during and after the routine)?**

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**Other Comments and Additional Questions (as applicable)**

Consent forms collected: \_\_Parent \_\_Child

Baseline recording date: \_\_\_\_\_

Signed (parent) \_\_\_\_\_

Signed (researcher) \_\_\_\_\_

**Appendix N – Written Diary.**

<b>Baseline</b>			Name		
Routine	<i>Date</i>				
Time start	<i>Time finish</i>				
<b>Frequency: Number of behaviours</b>	<b>Antecedent (what happened before the behaviour</b>	<b>Behaviour (what was the behaviour you see)</b>	<b>Consequence (what happened after the behaviour)</b>	<b>Duration: How long was the incident</b>	<b>Notes</b>

## Appendix O – Interval Recording Challenging Behaviour.

Whanau Name: \_\_\_\_\_

Recording Number: \_\_\_\_\_

Target Behaviour: Challenging Behaviour

Video Length: \_\_\_\_\_

Interval Length: 10 seconds

Minutes						
<b>0</b>	10	20	30	40	50	60
<b>1</b>	10	20	30	40	50	60
<b>2</b>	10	20	30	40	50	60
<b>3</b>	10	20	30	40	50	60
<b>4</b>	10	20	30	40	50	60
<b>5</b>	10	20	30	40	50	60
<b>6</b>	10	20	30	40	50	60
<b>7</b>	10	20	30	40	50	60
<b>8</b>	10	20	30	40	50	60
<b>9</b>	10	20	30	40	50	60
<b>10</b>	10	20	30	40	50	60
<b>11</b>	10	20	30	40	50	60
<b>12</b>	10	20	30	40	50	60
<b>13</b>	10	20	30	40	50	60
<b>14</b>	10	20	30	40	50	60
<b>15</b>	10	20	30	40	50	60
<b>16</b>	10	20	30	40	50	60
<b>17</b>	10	20	30	40	50	60
<b>18</b>	10	20	30	40	50	60
<b>19</b>	10	20	30	40	50	60
<b>20</b>	10	20	30	40	50	60
<b>21</b>	10	20	30	40	50	60
<b>22</b>	10	20	30	40	50	60

## Appendix P – Parent use of PBS

Clear, concise instructions, clear transition times, positive attention, planned ignoring, follow through with requests, and use of the Sit, Wait, and Show strategy.

### Appropriate

Clear, concise instruction:

Clear transition times

Positive Attention

Planned ignoring

### Inappropriate

Clear, concise instruction:

Clear transition times

Positive Attention

Planned ignoring