TRANSFORMING COERCIVE PROCESSES WITH A KOREAN FAMILY OF A CHILD WITH A DEVELOPMENTAL DISABILITY AND PROBLEM BEHAVIOUR

by

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Abstract

Family-centered PBS has been shown to be an effective and acceptable approach with families of children who have developmental disabilities and problem behaviours. However, little research has been done into the effects of cultural and linguistic differences on the provision of support for immigrant families. Among Canada’s many increasing ethnic minority populations, Korean Canadians are growing in number particularly rapidly. The purpose of this study was to add to the evidentiary base of an ecological, family-centered PBS approach by replicating the work of Lucyshyn et al. (2014) with a Korean-Canadian family raising a child with a developmental disability and problem behaviour. A single-case, quasi-experimental multiple baseline design across two routines in the home was used to evaluate the effectiveness of an approach designed to be culturally responsive to a Korean-Canadian family. Baseline data and preliminary intervention data were gathered for one target routine, and preliminary baseline data were gathered for the second routine. Preliminary results documented substantial decreases in child problem behaviour and increases in routine participation during the first sub-phase of intervention in which the interventionist provided intensive training with the child and in vivo parent training with the child’s mother. Preliminary social validity and contextual/cultural fit results indicated that the intervention was acceptable and contextually appropriate to the child’s mother. These preliminary results are discussed in terms of contributions to the literature, implications, cautions and limitations, and future research. This preliminary analysis serves as my thesis, while future research will address the remaining questions and extensions of this work.
Preface

This dissertation is an original intellectual product of the author, Samantha Jin-Oh Kwon. The fieldwork reported in Chapters 2 – 4 was covered by UBC Ethics Certificate number H12-00801. This thesis, entitled *Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour*, was supervised by the Principal Investigator, Dr. Joseph M. Lucyshyn.
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Chapter 1. Introduction

Many families of children with developmental disabilities face challenges when their children engage in problem behaviour such as physical aggression, self-injury, and property destruction (Hunt, Johnson, Owen, Ormerod, & Babbitt, 1990; Vaughn & Horner, 1997). These challenges, in turn, become a major source of stress for those families, negatively affecting their quality of life (Mugno, Ruta, D’Arrigo, & Mazzone, 2007). Consequently, families of children with developmental disabilities may have a significant need for behaviour support services (Floyd & Gallagher, 1997; Lucyshyn, Dunlap, & Albin, 2002).

Among these families are Korean Canadians, one of the fastest growing ethnic groups in Canada. These families may require not only behaviour support services but also professionals who can exercise cultural awareness and responsiveness as they work with families to develop culturally responsive behaviour support plans. One very promising service model for Korean families is family-centered positive behaviour support (PBS). PBS is an applied science that uses an approach based on collaborative, assessment-based intervention to redesign an individual’s living environment so as to enhance that person’s quality of life and minimize his or her problem behaviour (Carr et al., 1999; Koegel, Koegel, & Dunlap, 1996). Research has documented significant benefits of a PBS approach in supporting individuals in school and community settings (Carr & Carlson, 1993; Carter & Norman, 2010; Dunlap, Kern-Dunlap, Clarke, & Robbins, 1991; Sugai & Horner, 2010). Concurrently, there have been efforts to extend PBS into the natural family contexts of families raising children with developmental disabilities (Binnendyk & Lucyshyn, 2009; Clarke, Dunlap, & Vaughn, 1999; Lucyshyn et al., 2002; Moes & Frea, 2002; Vaughn, Wilson, & Dunlap, 2002). The family-centered PBS approach views the
family as the most durable resource for their child’s development, education, and behaviour support; thus, professionals implementing a PBS approach strive to empower family members to become experts in their own right in supporting their child with a disability in both home and community settings (Lucyshyn et al., 2002).

Recently, Lucyshyn and colleagues developed an ecological, family-centered PBS approach that is designed to promote survivable behavioural interventions: that is, interventions that, when implemented by families in the natural settings of family life, prove to be acceptable, effective, durable, and sustainable across a long period of time in their homes as well as in the community (Lucyshyn et al., 2004; Binnendyk & Lucyshyn, 2009). This ecological approach integrates three theories related to child behaviour and development in family life so as to create an expanded, ecological unit of analysis: Coercive processes in family routines. Interventionists employing this ecological unit of analysis aim to transform coercive parent-child interactions in unsuccessful family routines into constructive parent-child interactions in successful family home and community routines.

To date, however, little research has been done to show that this ecological, family-centered PBS approach leads to “survivable” interventions. In a review of intervention studies published between 1985 and 1996 that employed positive behaviour interventions, Carr et al. (1999) found that only 5% of these studies documented the maintenance of behaviour changes 13 to 24 months after interventions had been introduced, and that none gathered follow-up data beyond two years. At the same time, Chen, Downing, and Peckman-Hardin (2002) and Wang, McCart, and Turnbull (2007) have noted that little to no empirical research exists on behaviour support for families of diverse linguistic and cultural backgrounds.
Lucyshyn et al. (2014) recently completed a longitudinal investigation of the efficacy and acceptability of the ecological, family-centered PBS approach with 10 families of children with developmental disabilities and severe problem behaviour. Among these families were four that were from culturally and linguistically diverse backgrounds: China, Taiwan, Japan, and Iran. Results for eight of these families showed meaningful and durable improvements in child behaviour, parent-child interaction, and successful participation in targeted routines. However, these encouraging results require replication with other families of diverse linguistic and cultural backgrounds in order to support the following assertion: that the ecological, family-centered PBS approach is an evidence-based practice which is acceptable and effective across a wider diversity of children and families. I propose in this thesis to add to the evidentiary base for the ecological, family-centered PBS approach by replicating the work of Lucyshyn et al. (2014) with a Korean-Canadian family raising a child with a developmental disability and problem behaviour in the home and community. Interestingly, Cheremshynski, Lucyshyn, and Olson (2013) recently demonstrated the acceptability and effectiveness of a family-centered PBS approach with a Japanese-Canadian mother and her young son with autism. One innovation developed in this study was the use of a cultural assessment tool designed by Chen et al. (2002) to gather cultural information relevant to the designing of a culturally-responsive PBS plan. Accordingly, I further propose to use this cultural assessment tool with a Korean family to assist in creating a positive behaviour support plan that is culturally appropriate.

In the first part of this thesis proposal, I will describe Lucyshyn and colleague’s integrated ecological unit of analysis – coercive processes in family routines – and summarize assessment and intervention research that validates key components of this ecological, family-centered PBS approach. I will then review the literature on culturally responsive service delivery
to families of children with developmental disabilities. Following that review, I will examine the historical background, cultural values, and beliefs of Korean Canadians. Because there is virtually no empirical research focused on Korean Canadians (Song, 1997), this review will draw from American research on Korean families in the United States. This section of my thesis proposal will continue with a brief review of PBS research to date with families of diverse linguistic and cultural backgrounds, and conclude with my research questions.

The Integrated Ecological Unit of Analysis: Coercive Processes in Family Routines

In order to design PBS intervention plans that are survivable in natural family contexts (i.e., that are acceptable, effective, durable, and sustainable), Lucyshyn and fellow researchers (Lucyshyn et al., 2004; Lucyshyn et al., 2009; Lucyshyn et al., 2014) developed an ecological approach that offers a deeper understanding of the variables that affect the development and maintenance of children’s problem behaviour in natural family contexts in the home and community. The approach is based on an ecological unit of analysis that is derived from three well-established theoretical frameworks: behaviour theory (Bijou & Baer, 1961; Skinner, 1953), coercion theory (Patterson, 1982; Reid, Patterson, & Snyder, 2002), and ecocultural theory and the construct of the activity setting (Gallimore, Weisner, Kaufman, & Bernheimer, 1989; O’Donnell, Tharp, & Wilson, 1993). These three theoretical frameworks are described below.

**Behaviour theory.** Behaviour theory involves a comprehensive set of principles or laws of behaviour that account for how individual behaviour changes over time in interaction with the environment. Drawing on this science of behaviour, the field of applied behaviour analysis over the past 40 years has developed behavioural technologies that have produced empirically effective, socially valid, and durable behaviour change in children, adolescents, and adults (Baer,
Emerging from applied behaviour analysis, positive behaviour support (PBS) is a systematic approach to preventing problem behaviour at the individual and community levels and to improving quality of life (Weiss, DelPizzo-Cheng, Sloman, & LaRue, 2010). Practitioners of PBS strive to develop collaborative partnerships with key stakeholders so that together they can build multi-component interventions that are both technically sound and contextually appropriate (Carr et al., 2002; Lucyshyn, Horner, Dunlap, Albin, & Ben, 2002; Dunlap & Fox, 2007). The assessment technology used by practitioners of both applied behaviour analysis and positive behaviour support involves a comprehensive functional assessment based on a four-term contingency: (a) setting events or motivating operations (the distal environmental events and physiological states that alter the current frequency of target problem behaviour), (b) antecedent stimuli (the immediate triggers for target behaviour), (c) target behaviour, and (d) maintaining consequences (Repp & Horner, 1999).

Understanding these environmental variables allows an interventionist to determine the purpose of a person’s problem behaviour. Research has demonstrated that children with developmental disabilities engage in problem behaviour for one or more of the following purposes: (a) to gain social attention, (b) to escape or avoid aversive demands, tasks, or people, (c) to gain access to preferred items or activities, and/or (d) to receive sensory or automatic reinforcement (O’Neill et al., 1997). Information that helps to identify the function of a person’s problem behaviour can be gathered through functional assessment procedures: interviews with key stakeholders, direct observation in natural conditions, and/or experimental manipulations (functional analysis) (Carr, Langdon, & Yarbrough, 1999; O’Neill et al., 1997; Repp & Horner,
This information is then used to design behaviour support plans that promote positive behaviour change (Cooper et al., 2007).

Functional assessment informed by this four-term contingency analysis helps interventionists to design multi-component behaviour support plans that address each function of problem behaviour as identified by the functional assessment. According to Herzinger and Campbell (2007), quantitative synthesis data suggest that developing an intervention according to information gathered from functional assessment, especially from functional analysis manipulations, increases the likelihood that therapists will design behaviour support plans that produce positive behaviour change. Similarly, Campbell (2003) and Kahng, Iwata, and Lewin (2002) report that their empirical data syntheses show behavioural treatments to be most effective when preceded by functional assessment. Therefore, research substantiates the idea that identifying the functions of problem behaviour is an important consideration in the design and implementation of a behaviour support plan that aims to promote significant improvements in behaviours and quality of life. Given these studies, behaviour theory is the first essential component of Lucyshyn and colleagues’ ecological unit of analysis for the development of survival interventions in the family context.

Coercion theory. Longitudinal studies by Patterson and colleagues (Patterson, 1982; Reid et al., 2002; Snyder, Cramer, Afrank, & Patterson, 2005) offer evidence for a theory of coercion in which problem behaviours in young children have their roots in the cumulative moment-by-moment (micro-) interactions between parents and children. This coercive pattern of interaction involves a four-step aversive sequence: (a) a parent makes a request or demand of the child, (b) the child engages in problem behaviour, (c) the parent withdraws the demand, and (d) the child terminates the problem behaviour. Over time, this well-rehearsed sequence of exchanges
reciprocally reinforces the behaviour of both parents and children so that without being aware of the process, they eventually become trapped in relationships that maintain both problem behaviour and ineffective parenting practices (Lucyshyn et al., 2009). Dumas (2005) notes that once these coercive interactions become well established, they can become automatic or reflexive. Moreover, if the coercive exchanges between parent and child continue, a child’s problem behaviour is likely to generalize to other settings such as the child’s school. If this occurs, the child enters a trajectory toward academic failure, antisocial behaviour, affiliation with deviant peers, juvenile delinquency, adult arrest, and an array of mental health problems (Bank, Patterson, & Reid, 1996; Patterson, Forgatch, Yoerger, & Stoolmiller, 1998).

Although a number of empirical efforts have sought to ascertain how coercive processes between antisocial boys and their families contribute to the development of conduct problems (Patterson et al., 1998), very little research has examined the presence and long-term effects of coercive processes in families of children with developmental disabilities. The first, a comparative observational study by Floyd and Phillippe (1993), documented coercive parent-child interaction both in families of children who have mental retardation, and in families of children who do not have mental retardation. Across two 50-minute videotaped sessions during typical family activities in the home (e.g., preparing dinner, eating dinner, baking cookies, doing family crafts), observers documented two-step coercive exchanges involving the parent presenting a demand and the child responding with a problem behaviour.

Lucyshyn et al. (2004) conducted an observational study of coercive parent-child interactions in the daily routines of ten families raising children with developmental disabilities and problem behaviour. The videotaped observations were conducted in two valued but problematic home routines for each family across a nine-month period. The researchers found
that two stable coercive processes were in operation. First, attention-driven coercive processes were observed in routines in which the parents were busy (e.g., preparing dinner, working on the computer, doing household chores) and therefore were unable to fully attend to their child with a disability. The four steps in this process were (a) the parent was occupied, (b) the child engaged in problem behaviour, (c) the parent provided attention, and (d) the child terminated or reduced the problem behaviour. Second, escape-driven coercive processes were observed in routines in which parental demands were common (e.g., eating dinner, doing homework, reading). The four steps in this process were identified as follows: (a) the parent made a request or demand of the child, (b) the child engaged in problem behaviour, (c) the parent reduced the demand (i.e., delivered positive or negative attention or provided physical assistance), and (d) the child terminated or reduced his or her problem behaviour (e.g., complied with the parent’s request or stopped engaging in problem behaviour).

Supported by these studies of children with and without developmental disabilities, coercion theory provides a second necessary component for Lucyshyn and colleagues’ ecological unit of analysis: the concept that assessing coercive processes in parent-child interactions in natural family settings will promote the development of survivable interventions by directly addressing and transforming these coercive parent-child processes.

**Ecocultural theory and the activity setting.** Family theorists and behavioural family interventionists have long recognized the importance of the ecology that surrounds the child and family (Bronfenbrenner, 1986; Peters & McMahon, 1989). Failure to attend to ecological variables can result in a lack of treatment adherence, negative side-effects, or a loss of maintenance (Gallimore, Coots, Weisner, Garnier, & Guthrie, 1996). Drawing on research from the fields of cross-cultural anthropology and community psychology, ecocultural theory provides
an empirically grounded theoretical framework for understanding the ecology of families. According to this theory, families are active participants in the organization of family life and in the development of their children (Gallimore et al., 1989; Gallimore et al., 1996). The theory supposes that the activity settings of daily and weekly routines with family members mediate two groups of variables: (a) ecological factors involving objective, physical, material, and social elements that constrain sustainable settings (e.g., income, neighborhood, available resources), and (b) cultural factors that subjectively shape perceptions of what is important within an environment (e.g., beliefs, goals, values). Activity settings are home and community routines that occur regularly and that are important to the child and family (e.g., getting ready for school, eating dinner, going to bed, visiting grandparents, attending religious services). These routines in which a child participates and interacts with family members provide essential contexts for that child’s cognitive and adaptive skill development and learning (Dunst, Hamby, Trivette, Raab, & Bruder, 2000; Spagnola & Fiese, 2007).

Over the past decade, researchers in the area of positive behaviour support have collaborated with families of children with developmental disabilities in using the family activity setting of daily routines as a unit of analysis for designing and implementing PBS interventions (Binnendyk & Lucyshyn, 2009; Buschbacher, Fox, & Clarke, 2004; Clarke et al., 1999; Lucyshyn et al., 2007a; Lucyshyn, Albin, & Nixon, 1997; Moes & Frea, 2002; Vaughn, Clarke, & Dunlap, 1997). Their research offers evidence that as a unit of analysis, the family routine contributes significantly to the design of technically sound and contextually appropriate interventions that take place within natural family contexts, and are acceptable to the family, effective when implemented by family members, and durable over time.
Vaughn, Clarke, and Dunlap (1997) designed a functional assessment-based PBS intervention plan focused on two problematic family activity settings (going to the bathroom at home and dining out at a fast-food restaurant) for the family of an 8-year-old boy with a severe intellectual disability. Their single-subject, multiple-baseline design across the two routines showed that the intervention was associated with a decrease in problem behaviour to near zero levels and a substantial increase in the boy’s independent engagement in each routine.

In collaboration with the parents of a 14-year-old girl with multiple disabilities and severe problem behaviour, Lucyshyn, Albin, and Nixon (1997) implemented an ecological, family-centered PBS approach that addressed the adolescent’s disruptive behaviours in four problematic routines in the home and community setting across a 26-month period. These four routines were (a) eating dinner with the family at home, (b) participating in home leisure tasks (e.g., giving her father a beverage, playing independently), (c) dining out at a restaurant, and (d) shopping with one or both parents at a grocery store. Multiple-baseline design results across these routines demonstrated that the intervention yielded 88% reductions in problem behaviour. These improvements maintained at three and nine months postintervention. The parents also reported that the goals, procedures, and outcomes of the intervention were important and acceptable (i.e., socially valid) and that the support plan fit well with their family’s ecology.

In a second study examining their ecological, family-centered PBS approach, Lucyshyn et al. (2007a) conducted a longitudinal experimental and descriptive analysis of PBS implementation by a family of a young girl with autism. The study was carried out across a ten-year period, beginning when the child was five years old and concluding when she was fifteen. In collaboration with the girl's parents, the researchers selected four family routines in the home and community: (a) eating dinner together at home, (b) going to bed, (c) eating at a fast-food
restaurant, and (d) grocery shopping. A multiple baseline across the four routines evaluated the efficacy and acceptability of the approach. Results indicated a 93% decrease in the girl’s problem behaviours and an improvement in her successful participation in target family routines from 0% at baseline to 75% during the intervention phase. Follow-up data at six months, eighteen months, three years, and seven years post-intervention showed that these changes not only maintained but further improved to 100% during observations probes. Furthermore, parental social validity and contextual fit ratings throughout the study were both high, indicating that the parents perceived the PBS approach to be not only acceptable and important, but a good fit with their lives.

On the basis of the research evidence described above, Lucyshyn and colleagues argued that the analysis of valued but problematic activity settings in family routines is the third necessary component in an ecological unit of analysis that promotes survivable family interventions for families of children with developmental disabilities and problem behaviour.

**Theoretical Synthesis: Ecological Unit of Analysis (Coercive Processes in Family Routines)**

Lucyshyn and colleagues have argued that these three theoretical frameworks – *behaviour theory, coercion theory, and ecocultural theory* – integrate child behaviour, parent-child interactions, and the activity settings of daily routines into a productive ecological unit of analysis that they call *coercive processes in family routines* (Lucyshyn et al., 2004). Because everyday family routines naturally involve child behaviour and parent-child interactions, assessment activities conducted within family activity settings can easily consider and integrate functional assessment, assessment of coercive processes, and assessment of activity settings.
Functional assessment allows therapists to understand the functions of the child’s problem behaviour, which in turn helps them to design interventions that are logically linked to the environmental variables that set up, trigger, and maintain that problem behaviour (Albin, Lucyshyn, Horner, & Flannery, 1996; Horner, Carr, Strain, Todd, & Reed, 2000). The assessment of coercive processes aids interventionists in understanding reciprocal processes of parent-child interaction and in designing support plans that ameliorate these patterns of interaction, thus potentially extending the long-term maintenance of treatment outcomes (Gallimore, 2005; Lucyshyn et al., 2007a).

Finally, an assessment of activity settings that includes both objective elements (e.g., time and place, tasks, resources, personnel) and subjective elements (e.g., goals, values, beliefs) provides interventionists with an understanding of the contextual variables that surround the family and that may affect child and parent behaviour. These important contextual variables, in turn, can help therapists when collaborating with the family to design appropriate and culturally sensitive interventions (Chen et al., 2002; Gallimore, Goldenberg, & Weisner, 1993; Cheremshynski et al., in press). Given the growing cultural diversity of families in the United States and Canada, the development of cultural competence in assessment and intervention planning is becoming increasingly essential (Lynch & Hanson, 2004). Furthermore, the assessment of activity settings offers interventionists an opportunity to embed interventions within the core elements of specific family routines (e.g., eating dinner, going to bed, getting ready for school). Doing so may increase the acceptability of behavioural interventions to family members while also enhancing family members’ ability to implement interventions with fidelity (Lucyshyn et al., 2009). Finally, because family activity settings are instantiations of the broader ecology that surrounds the child and family, they offer a window into contextual influences (e.g.,
sibling relationships, marital strain, extended family relationships) that interventionists may need to consider and address when working with the family.

In summary, the construct of coercive processes in family activity settings expands interventionists’ view of sources of variability (i.e., function of child behaviour, coercive patterns of interaction, and elements of activity settings) and so helps them to design PBS plans that are more likely to be survivable (i.e., acceptable, effective, durable, and sustainable) within the complex and dynamic contexts of family life.

**Preliminary Evidence of Ecological Approach Efficacy**

To date, two research studies have empirically evaluated the acceptability and efficacy of the ecological, family-centered PBS approach to meaningfully and durably transform coercive patterns of parent-child interaction into constructive patterns of interaction in valued but problematic family routines (Binnendyk, 2009; Lucyshyn et al., 2011).

Binnendyk (2009) implemented the ecological, family-centered PBS approach with three families in meal routines in their homes to address severe food refusal behaviour in children with developmental disabilities. A multiple baseline across the three families demonstrated that after parents implemented behaviour support plan procedures, food refusal behaviour decreased from a baseline average of 74% of intervals to a maintenance-phase average of 9%. At the same time, the children’s participation in meal routines and their consumption of new, non-preferred foods increased. Three months post-intervention, these improvements in the children’s behaviour and routine participation were being maintained, and each family indicated that the behaviour support plans they were following were acceptable and sustainable within their family’s ecology. In addition, Binnendyk (2009) found that the implementation of the ecological approach was
associated with improvements in parent-child interactions within the meal routines. While strong
and stable four-step, escape-driven coercive processes were present during baseline, they were
replaced during intervention with stable four-step constructive processes. As noted by Binnendyk
(2009) “child behaviour, routine participation, and parent-child interaction data offered
preliminary evidence of the transformation of coercive processes into constructive processes in
valued meal routines across the three families” (p. 122).

Lucyshyn et al. (2014) conducted a 9-year longitudinal investigation of the acceptability
and efficacy of the ecological, family-centered PBS approach with 10 families of children with
developmental disabilities and severe problem behaviours. The researchers targeted in
collaboration with the families two to four valued but problematic routines in the home and
community for assessment and intervention. Group design results across the 10 families
documented statistically and clinically significant improvements in child problem behaviour and
participation in targeted routines when comparing baseline and intervention phases. Problem
behaviour decreased from an average of 51% during baseline to an average of 6% during
maintenance support, and further improved to 4% during follow-up. Routine participation
improved from a median of 31% during baseline to a median of 82% during maintenance
support, and further improved to 92% during follow-up. Single-subject multiple-baseline design
results for 7 of 10 families documented functional relations between parent implementation of
behaviour support plans and improvements in child behaviour and routine participation.

In addition, the study provided further evidence of the existence of the construct of
coevasive processes in family routines, and offered strong preliminary support for the possibility
that coercive processes indeed can be transformed into constructive processes of parent-child
interaction in family’s home and community routines. During baseline conditions, each of the 10
families showed the presence of stable, 4-step escape-driven or attention-driven coercive processes in the target family routines. During intervention conditions, 8 of the 10 families evidenced the emergence of stable, 4-step constructive processes. In addition, follow-up data one to two years post-intervention provided evidence of the durability and sustainability of the approach. Parents also rated highly the social validity of the goals, procedures, and outcomes of the approach.

In regard to cultural sensitivity, preliminary evidence from Lucyshyn et al. (2014) suggested that the approach was culturally responsive to the unique needs of families from diverse cultural and linguistic background. Four families in this study, from China, Japan, Taiwan, and Iran, rated the approach to be acceptable and important, and viewed the behaviour support plans as having a good fit with their family ecology.

**Culturally Responsive Service Delivery**

Culture has a profound impact on how professionals interact with families of diverse cultural and linguistic backgrounds. Culture is a broad term that encompasses beliefs and behaviours that can be socially learned, shared, and passed onto subsequent generations (Smedley & Smedley, 2005; Triandis, 1996; Carter & Qureshi, 1995). However, culture is not a “one size fits all” concept: people within any society will not equally share cultural knowledge, beliefs, behaviours, values, and attitudes (Armstrong & Fitzgerald, 1996). Banks and Banks (2003) suggest that when identifying culture in multicultural societies such as Canada, professionals consider finding relatively more fluid definitions that focus on “shared core culture as well as many subcultures” (p. 7). One of the reasons that it is important that professionals consider culture is that in its constant evolution (Awaad, 2003), culture helps individuals to adapt to their surrounding conditions over time and in that process contributes to their unique
identities. Therefore, an understanding of a family's culture may give professionals some additional insight into those individuals. By understanding that each family member embodies cultural and individual characteristics as well as responses to environmental influences, professionals are better able to provide effective services to families of diverse cultural backgrounds.

Researchers in the field of mental health have for more than four decades emphasized the need for professionals in health care agencies and professional organizations to develop cultural competence so that they are able to provide culturally responsive services to members of culturally diverse backgrounds (Sue, Zane, Nagayama Hall, & Berger, 2009). Cultural competence can be defined as the ability and capacity to actively understand how others’ world views are influenced by culture (Harris, 2004). To develop cultural competence, professionals must accept that their own culture affects their interactions with families (Rounds, Weil, & Bishop, 1994); they must be sensitive to values, beliefs, practices, and problem-solving strategies of families with different cultures (Campinha-Bacote, 1999); and they must actively seek and obtain specific and general cultural knowledge that can help them understand how to work with others from different backgrounds (Fitzgerald, 2000; Suh, 2004). Today, cultural competency is mandated in the United States by local, state, and federal professional organizations (Hernandez, Isaacs, Nesman, & Burns, 1998).

Like other families, those raising children with developmental disabilities are influenced by their cultural views on child rearing, disability, family roles and structure, and communication processes (Chen et al., 2002). Since my study will involve a Korean Canadian family, in the next section, I will therefore discuss Korean Canadians’ historical background, cultural values, beliefs, and issues of language.
Korean Canadian Families

Korean Canadians are one of the fastest-growing ethnic groups in Canada. According to Statistics Canada, between 1996 and 2001 the number of Canadians of Korean origin rose by 53%, while the overall population grew by only 4% (Lindsay, 2001). However, the majority of Koreans in Canada are immigrants, most relatively recent arrivals (Lindsay, 2001). The following sections thus will focus on recent Korean immigrant families. Given the paucity of literature dealing specifically with Korean-Canadian immigrant families (Song, 1997) in terms of cultural values, beliefs, and issues of language, this paper utilizes research into Korean-American immigrant families. Because there is some recognition among scholars and practitioners that the knowledge of the traditional cultural values and behaviors of one population may not be applicable to another cultural group, it should be emphasized that this paper focuses on one ethnic minority group, Korean immigrants to North America (Bernal & Scharron-del-Rio, 2001; Hall, 2003; Sue, 1999, 2003).

Migration history and demographics in Canada. The significant number of Koreans in Canada have immigrated in two main waves: 1950-1965, and since 1966. The first group consisted mostly of Christian Koreans sent by Canadian missionaries to become seminary students in Canada (“Korean Canadians,” 2009) and brides of Canadian servicemen from the Korean War (Song, 1997); but very few of these Koreans settled in Canada. Thus, as late as 1965, the total Korean immigrated population in Canada was estimated at only seventy (Yoon, 2006). However, after the reform of Canadian immigration laws in 1966 that made Korean immigration to Canada easier, South Korean immigration to Canada started to grow. Between 1970 and 1980, 18,148 Koreans immigrated to Canada; in the following decade, another 17,583 arrived. By the late 1990s South Korea had become the fifth-largest source country of
immigrants to Canada, and so by 2009, there were 223,322 Koreans in Canada, making them the world’s fourth-largest group of overseas Koreans (“Korean Canadians,” 2009). In 2001, the Korean community was the seventh-largest non-European ethnic group in the country, after the Chinese, East Indian, Filipino, Jamaican, Vietnamese, and Lebanese populations (Lindsay, 2001). Most Korean immigrants (in 2001, nearly 90%) live in Ontario and British Columbia (Yoon, 2006). Clearly, Koreans make up one of the largest and fastest-growing ethnic groups in Canada.

By far, most Koreans in Canada are Korean-born and recent arrivals: in 2001, only 16% were Canadian-born (Yoon, 2006) while 94% were Korean-born (Lindsay, 2001); in the same year, 60% of Koreans in Canada indicated that they had arrived in the previous decade while 19% had arrived between 1981 and 1990, 17% between 1971 and 1980, and only 4% before 1971 (Lindsay, 2001).

Although the majority of Korean immigrants have university degrees and professional or white-collar occupational backgrounds, they are more likely to be unemployed than the rest of the population in the overall workforce and to earn less than Statistics Canada’s low-income cut-offs (Yoon, 2006; Lindsay, 2001). Thus, although Koreans in Canada have obtained advanced education and are from middle-class backgrounds in Korea, in Canada they are still for the most part at an early stage of economic adaptation.

**Values and beliefs.** Korean culture is characterized as collectivistic: family members are expected to be interdependent (Hofstede, 1980; Lehrer, 1988). Collectivistic cultures prioritize individuals’ close connections to family and others, the good of the larger community, respect and obedience, caring for others, fitting in, and harmonious interdependence. In contrast,
individualistic cultures, including that which predominates in Canada, emphasize independence and autonomy by attending to the self, the appreciation of one’s difference from others, and the importance of expressing self (Markus & Kitayama, 1991).

Korean culture also has been largely influenced by Confucianism, with its emphasis on hierarchical human relationships, obedience, harmony, and respect for authority figures (Clarke-Stewart, Lee, Allhusen, Kim, & McDowell, 2006). Children are raised to obey their parents, to show loyalty to their families, and to fulfill other filial obligations. At the same time, because Korean parents tend to think of their children as extensions of themselves they typically take full responsibility for their children’s behaviours and outcomes (Lynch & Hanson, 2004). Believing that they know best for their children and that their exercise of authority reflects their caring for their children, most parents are extensively involved in their children’s choices, from daily routines to colleges and spouses (Lehrer, 1988). At the same time, their emphasis on maintaining harmony causes Koreans to avoid direct confrontation in favor of polite behaviour (Lynch & Hanson, 2004). These Confucian cultural values mean that in their efforts to achieve harmonious interpersonal relationships, Korean parents and children are unlikely to express thoughts that conflict with the views of professionals.

**Family structure.** Confucianism has for centuries permeated and shaped the Korean family system and concepts of family roles (Min, 1988). In spite of modernization in Korea, these traditional family structures and role differentiations still influence Koreans in Korea and elsewhere (Kim, 1997). Because Confucian traditions assign position in the family hierarchy according to age and gender, elders and males acquire primary privileges and responsibilities, with fathers maintaining the most power and authority in the nuclear family (Uba, 1994). Traditionally, sons, particularly eldest sons, tend to be preferred over daughters because they
symbolically carry on the family name and are responsible for caring for their parents as they age (Shon & Ja, 1982) while daughters tend to be less valued because when they marry, they leave to join their husbands’ families (Uba, 1994). Therefore, Korean mothers acquire increasingly greater power when they produce sons and later become mothers-in-law (Kim, 1985).

The traditional Korean family structure also defines relationships within the family. The father typically serves as an authority figure over his wife and children and as the family’s primary decision maker, while the mother is responsible for monitoring the family’s emotional well-being, raising and educating the children, and taking care of financial matters (Kim, 1997). Older siblings and extended family members (grandparents, other relatives) may have a moderate level of authority and play a role in caretaking responsibilities and in teaching skills to younger children, an expression of caring which the children reciprocate when their parents become elderly (Yee, Huang, & Lew, 1998). Even after the death of their parents, children are expected to pay their respects to their parents through ancestor worship (Kim & Wong, 2002). These cultural family roles continue to influence Korean families in Canada.

Acknowledging the influence of these traditional family structures is important for researchers and clinicians, since doing so will facilitate their interactions with individual family members and eases their navigation through family systems in the Korean Canadian community. For example, when gathering information these professionals will have greater success if they understand the importance of showing respect to various family members according to their age and gender, which in turn may require an understanding of the family structure – in particular, who is closest to the child, and who has decision-making power.
Views on disability. Among families from diverse cultural backgrounds, attributions and traditional beliefs regarding the causes of children’s disabilities may differ from predominant views (Chen et al., 2002). According to Cho, Singer, and Brenner (2000), it is common among Korean people to attribute disability in their children to their own previous behaviour, such as poorly provided Tae Gyo (the traditional form of prenatal care) or mistakes in early parenting. Tae Gyo contains explicit guidelines outlining what pregnant women should and should not do. These requirements are based on the belief that a mother’s experience during her pregnancy has direct immediate and long-term effects on her child (Kim & Choi, 1994). Given these cultural influences, many Korean mothers whose children are later diagnosed as having disabilities blame themselves for not having engaged in suitable enrichment activities during their pregnancy. However, Cho et al. (2000) also found that 63% of Korean American parents who were devoted Christians attributed their children’s disabilities to God’s divine plans to ultimately benefit their children and families. Another study (Kim & Kang, 2003) observed that some Koreans attribute a child’s disability to a parent’s previous failure to take properly care for elders and ancestors.

For these various reasons, many Korean families consider disability to be a shameful experience for individuals and their families (Kim & Kang, 2003). According to Confucianism, Korean individuals with disabilities are considerably stigmatized because disabilities are likely to compromise their ability to take care of their aging parents (Lee, 1998). Because many Korean families thus view disability as a punishment for sins or transgressions (Chan, 1986), Korean mothers face extensive criticism from strangers in the Korean community if they fail to teach their children to behave appropriately in public (Lee, 2002; Lee & Jun, 2004). In a qualitative study comparing other Korean immigrant mothers with Korean mothers of young children with disabilities, Cho et al. (2000) found that because mothers in Korea frequently experienced shame
and humiliation when their children with disabilities misbehaved in public while Korean immigrant mothers were less likely to face public criticism while outside of Korea, Korean immigrant mothers experienced less everyday stress than their counterparts in Korea. However, Korean mothers both in Korea and elsewhere reported that when their children engaged in problem behaviours, they felt the same cognitive and emotional confusion and distress that they had previously experienced when they first learned that their young children had disabilities.

At the same time, Korean American parents’ expectations of their own children’s futures were related to the severity of their children’s disabilities (Kim, Lee, & Morningstar, 2007). When their children showed lower levels of functional skills than their typical same-age peers, the parents were more pessimistic and skeptical about their own children’s ability of getting a job or going to college than non-Korean parents of children with disabilities, a perception that often led these parents to consider other options for their children, such as vocational training services. Moreover, most of these parents were concerned that because their children’s low functional skills would demand considerable help from care providers, those care providers would dislike their children.

**Child rearing.** According to Farver and Shin (1997), even after moving to America Korean immigrants continued to be strongly influenced for a few generations by their traditional cultural values, including those related to child-rearing goals and parenting styles. These parenting factors for Koreans are shaped by collectivism and Confucianism. Chan (1998) and Hanson (1998) found that while European Americans emphasize the individual and individual achievement for their children, Asian Americans continue to adhere to collectivist and Confucian values, prioritizing interdependence among family members and the maintaining of social relationships when rearing their children. In order to maintain these close, long-term
commitments to the groups to which they see themselves belonging, be they family, extended family, or others, Koreans value family education (Jip Ahn Kyo Yuk): the notion that parents are responsible for teaching their children how to behave in public.

To that end, from their early years Korean children are often provided with a very nurturing, secure, and predictable environment which typically restricts the children’s independence. For example, children usually sleep in their parents’ rooms until school age or older. From these experiences, children not only develop strong family attachments (Lynch & Hanson, 2004) but sometimes rely on their parents to make decisions for them (Lain, 1996). Korean parents, particularly mothers, view this kind of parenting as a form of unselfish devotion and sacrifice to their children and their fundamental role and duty, seeing parenting not as an abandonment but an extension of the self (Park et al., 2004; Kim & Choi, 1994). Thus, as their life-goals become intrinsically attached to their children and their children’s accomplishments become their own measures of success, they are vicariously fulfilled by their children’s realization of dreams and goals. Unfortunately, however, professionals from different cultural backgrounds may interpret this kind of collectivistic-oriented care-giving in early childhood as deviant or incompetent (Bernhard, Lefebvre, Kilbride, Chud, & Lange, 1998).

Koreans’ child-rearing goals also are affected by Confucian values, which focus strongly on education and academic credentials (hak-bul). When they are of school age, children are expected to study, regardless of any disabilities they may have (Park et al., 2004). However, as discussed above, Korean mothers often are evaluated according to their children’s achievements rather than their own professional accomplishments (Kim & Ryu, 1996); thus, Korean mothers who have children with disabilities struggle because of the discrepancy between their beliefs about how normal children should behave and their limited success in changing their children’s
behaviour (Kim & Kang, 2003). Therefore, most Korean mothers who have children with disabilities feel intense pressure to provide high levels of nurturance to their children so as to fulfill their expected role of raising successful children. You and McGraw (2009) confirmed that most Korean mothers accepted primary responsibility in the family for raising their children with autism and focused on demonstrating that they were good mothers by doing everything in their power to raise their children to be successful. In the process, they typically gave up paid employment to follow their children vigilantly, arranging for private therapy to help their children “get better.” These mothers were highly motivated to succeed because successful parenting was the only way they saw of gaining social approval and recognition (You & McGraw, 2009; Kim & Ryu, 1996).

While collectivism and Confucianism are the primary influences on how Koreans parent, other cultural factors also affect their parenting styles. According to Shrake (1996), Korean immigrant parents are usually described as warm and sensitive, moderately controlling, or authoritarian. Accordingly, Kim and Hong (2007) pointed out that Korean immigrant parents in America identified spanking and reduced hugging/kissing as Korean-style discipline, while they saw time-out, the use of sticker charts, the addition or removal of privileges, extra work chores, reasoning, praising, and showing affection as unfamiliar aspects of American-style discipline. Along the same lines, Min (1988) suggested that compared to the general population, Korean Americans are less likely to use monetary rewards and more likely to use corporal punishment to modify their children’s behaviour. Ahn (1994) found that when their children are young, both 79% of Korean Americans and 78% of European Americans believed that spanking/hitting was an effective discipline strategy; however, in response to a hypothetical situation in which their 9 year-old child was caught cheating in school, 70% of Korean Americans but only 7% of
European American parents considered hitting the child on the hand to be appropriate punishment. Ahn (1994) also found that Korean Americans viewed spanking not as a means of controlling their children through parental authority, but rather as a way to help their children to regulate behaviors that their children were unable to control themselves. At the same time, Korean American parents believed that if a set of rules about spanking was formulated in advance and followed consistently rather than impulsively, children would accept spanking as a punishment (Ahn, 1994).

**Language and communication style.** When Park, Turnbull, and Park (2001) interviewed ten Korean American parents of children with disabilities about their partnerships with professionals, these parents reported that the biggest barrier for them in forming partnerships was their limited proficiency in English. Although some were provided with interpreters, most of those parents were dissatisfied with that service both because their interpreters knew little about special education and because the parents did not want other Korean Americans to know about their family matters. Cho et al. (2000) reported that due to language barriers, Korean parents also had difficulty obtaining information about available services; in fact, more than 50% of the Asian American respondents from Choi and Wynne’s (2000) survey indicated that language barriers were the major obstacle throughout the various stages of service delivery.

In addition to language barriers, different communicative styles cause many Korean parents to find building partnerships with professionals difficult. An interview of eight Korean parents of children with disabilities regarding the special education services they received showed that as an indication of their respect, these Korean parents were more likely than others to be silent and unassertive with professionals; similarly, they listened and followed
professionals’ opinions without disagreeing or asking questions, since asking questions was sometimes seen as a challenge to another person’s knowledge and authority that could result in loss of face (Park, Turnbull, & Park, 2001). Thus, a smile and nod from Korean parents could be misinterpreted by others as a sign of understanding and agreement when in fact neither existed (Yao, 1993). Moreover, Choi and Wynne (2000) reported that even when their family histories or issues are necessary to the development of treatment plans, Korean parents are hesitant to reveal such information to service providers, or to other families in support groups. For these reasons, issues of language and different communication styles may constitute barriers to collaboration between Korean parents and professionals.

**Culturally Responsive Positive Behaviour Support**

To date, only a few empirical studies have considered how positive behaviour support should be offered to families from different cultural and linguistic backgrounds. Santarelli, Koegel, Casas, and Koegel (2001) emphasized the importance of providing culturally sensitive PBS services to families of diverse cultural backgrounds. Referring to a Hispanic family of a boy with autism, they argued that professionals should develop cross-cultural competence by assessing both their own cultural identities and their clients’ specific cultural values to provide culturally appropriate interventions. They also noted that acknowledging cultural and socioeconomic variables within a family’s ecology and working with a translator or interpreter when necessary are crucial elements in building effective, collaborative PBS plans.

Vaughn, Wilson, and Dunlap (2002) conducted the first PBS study involving a family from a minority cultural background. In this study, a mother of Nigerian descent implemented a family-centered PBS plan for her son in a fast-food restaurant. A multiple-baseline design across three problematic subroutines in the restaurant documented a functional relation between the
mother’s implementation of PBS strategies in each subroutine, and improvements in the child’s behaviour and positive engagement in the community setting. However, although participants in the study were from a culturally diverse background, the researchers did not take cultural variables into account when developing the PBS plan.

Wang et al. (2007), in a descriptive case study of a composite Chinese family, illustrated the importance of conducting PBS processes in a culturally responsive manner. In their case description, Wang and colleagues highlighted the implications of interventionists understanding the distinct cultural values, beliefs, child-rearing practices, and behavioural expectations of the Chinese family they were studying. They also emphasized that in order to work effectively with culturally diverse families, professionals should both recognize their own cultural values and obtain culturally specific information about the families they are working with so as to effectively reflect on both their own embedded cultural values pertaining to PBS and those of families from diverse backgrounds. Their discussion emphasized the need for additional PBS studies to examine the cultural fit of PBS plans across a diversity of families from different cultures.

In a more recent study, Binnendyk and Lucyshyn (2009) collaborated with a family from the Middle East to successfully implement a PBS plan to ameliorate food refusal behaviour in a child with autism in the home. A single-subject case-study design was employed in one snack routine in the home. The results showed an association between implementation of the family-centered PBS approach and substantial decreases in food refusal behaviour, increases in food acceptance, improvements in the child’s participation in the snack routine, and high parental ratings of social validity and contextual fit. In addition, improvements were maintained up to 26
months post-intervention. Cultural factors, however, did not appear to play a role in the design of
the PBS plan.

The most recent relevant study by Cheremshynski et al. (in press), focused on culturally
appropriate, family-centered PBS involving a family of Japanese heritage. The authors
collaborated with a Japanese mother of a 5-year old boy with autism to improve his behaviour
and participation in a dinner routine in the home. A single-subject withdrawal design
demonstrated a functional relation between parental implementation of a culturally appropriate
PBS plan and improvements in the child’s behaviour and participation in the dinner routine. A
unique aspect of this study was the interventionist’s use of a cultural assessment tool designed by
Chen et al. (2002) to gather cultural knowledge relevant to designing a culturally responsive PBS
plan. The intervention’s positive results supported the use of the cultural assessment tool in
helping the interventionist understand and accommodate cultural differences when designing the
PBS plan. The researchers also employed qualitative case-study methods to illuminate the cross-
cultural perspectives and experiences of both the interventionist and the parent as they
collaborated to develop a culturally appropriate PBS plan.

Model of Culturally Responsive PBS with Korean Families

In this study, I implemented an enhanced ecological, family-centered PBS approach
articulated by Lucyshyn et al. by combining the approach with culturally responsive service-
delivery. First, I integrated Chen et al.’s cultural assessment tool into the comprehensive
assessment process to ensure that relevant cultural information is gathered and that this
information informed the design of the PBS plan. Second, I incorporated my knowledge of
Korean families and culture into the design of both the PBS plan and implementation support. In
doing so, I illustrated how PBS plan design and implementation can incorporate cultural sensitivity for a Korean family.

To build a culturally appropriate PBS plan in collaboration with the Korean family I used four communication strategies. First, I built a positive relationship with the family to gain their trust. Because of the importance to Korean people of saving face (che-myun), it took longer for me to build a mutually trusting relationship with Korean parents than with parents from different cultural backgrounds. However, remaining open-minded about the family’s perspectives, showing warmth, respecting individual differences, communicating empathy, and spending time getting to know the family helped me to build a positive bond with them.

Second, in acknowledgement of the Korean family members’ culturally-informed communication style (i.e., responding nonconfrontationally to authority figures) I refrained from using an assertive and direct communication style in favour of a more gentle and indirect approach. I spoke clearly and slowly, avoiding professional jargon and technical terminology. I also provided diagrams to explain abstract concepts so that I could ensure that my listeners understood the information and strategies I presented. At the same time, I paid close attention to the parents’ nonverbal cues and physical signs of distress so that as necessary, I helped them to feel more comfortable and gave them more time to respond to questions.

Third, I utilized my ability to speak Korean and my knowledge about special education, including positive behaviour support. As Dennis and Giangreco (1996) suggested, non-Korean service providers may improve their communication with Korean parents by obtaining the assistance of a translator who also is familiar with both disabilities and positive behaviour support. As a bi-cultural person comfortable in both Canadian and Korean cultures, I worked
with a Korean Canadian family without a translator because of my language and academic knowledge in these areas. This experience in turn provides me with the opportunity to explain to my colleagues in the field how cultural awareness and education can help them to increase their cultural competence.

Fourth, when training the parents I used a communication technique called *reframing*. Watzlawick et al. (1974) defined reframing is “to change the conceptual and/or emotional setting or viewpoint in relation to which a situation is experienced and to place it in another frame which fits the facts of the same concrete situation equally well or even better, and thereby changes its entire meaning” (p. 95). In this situation, the cultural values of Korean parents may direct them to focus on their child’s shortcomings and deficits, and then compel them to criticise the child. In response, I reframed the situation by suggesting that their child’s inappropriate behaviours may be perceived as the child calling for help in an unusual way. Thus, instead of punishing their child for his or her behaviour, the parents learned to help their child by teaching positive ways to ask for help, such as by using a speech output app asking for “help.” Such reframing may help parents see problems as opportunities to teach their child new behaviours and skills. That is, instead of viewing problem behaviours solely as weaknesses, they learned to see the child’s attempts to communicate as a strength that simply needed to be shaped into something more acceptable to the family and society.

**Research Questions**

This study addressed the following research questions:

1. Is there a functional relation between implementation of the ecological, family-centered, culturally responsive PBS approach and: (a) decreases in the percentage of intervals of
child problem behaviour, and (b) increases in the percentage of steps successfully completed in family routines?

2. Is implementation of an ecological, family-centered, culturally responsive PBS approach associated with maintained improvements in child behaviour and routine participation for up to three months post-intervention?

3. Across target family routines, will the conditional probability of the parent and child engaging in escape-driven coercive processes of interaction, comprise of (a) parent request/demand; (b) child problem behaviour; (c) parent termination or reduction of request/demand; and (d) child termination or reduction of problem behaviour, be statistically significant ($p < .05$) during baseline but not during intervention?

4. Across target family routines, will the conditional probability of the parent and child engaging in constructive processes of interaction, comprised of (a) parent request/demand; (b) child compliance; (c) parent positive behaviour; and (d) child appropriate behaviour, be statistically significant ($p < .05$) during intervention but not during baseline?

5. Across target family routines, will the difference between the log odds of the parent and child engaging in escape-driven coercive processes across baseline and intervention be statistically significant ($p < .05$) in the hypothesized direction (i.e., odds more likely in baseline than during intervention)?

6. Across target family routines, will the difference between the log odds of the parent and child engaging in constructive processes across baseline and intervention be statistically significant ($p < .05$) in the hypothesized direction (i.e., odds more likely during intervention than in baseline)?
7. Is implementation of the ecological, family-centered, culturally responsive PBS approach associated with high levels of accurate parental use of behaviour support strategies?

8. Is there an association between the implementation of the ecological, family-centered, culturally responsive PBS approach and meaningful improvements in family quality of life and decreases in parenting stress?

9. Is the ecological, family-centered, culturally responsive PBS approach socially valid from the parent's point of view?

10. Does the parent view the child’s behaviour support plan as possessing a good contextual fit with the family's ecology?
Chapter 2. Method

Participants

One Korean family of a child with a significant global developmental delay, hypotonia, seizures, and below-age visual acuity was recruited for participation in the study. Min-seo\(^1\) was a happy, affectionate, and persistent girl, aged eight years and six months at the beginning of the study in 2013. Min-seo lived with her parents and her older and younger sisters in an average-sized house in a middle-class neighborhood in a moderate sized city in the lower mainland of British Columbia. All family members were of Korean descent. Both parents were born in Korea while all three girls were born in North America. Korean was spoken in the home, although both parents were also fluent in English. Min-seo’s father was a businessman and Min-seo’s mother was a homemaker. Her older sister was 13 years old while her younger sister was 4 years old. Her home environment was warm and loving, and her family was highly supportive in terms of fostering Min-seo’s growth. Min-seo attended a private elementary school with support from a Special Education Assistant (SEA). She also received services from a Speech and Language Pathologist (SLP), a Physical Therapist (PT), and an Occupational Therapist (OT).

At the time the study began, Min-seo was nonverbal and had very little vocalization. She was only able to say one to two words in Korean (“annyia” (“no”) and “Umma” (“mom”)). Also, her language comprehension and nonverbal communication were very limited. When the study began, Min-seo engaged in several problem behaviours at home, including negative vocalizations (e.g., saying “annyia” in an agitated and distressed or negative tone, whining, crying, or screaming), physical aggression (e.g., hair-pulling, hitting, slapping, head butting, biting, or throwing objects at others), destructive behaviour (e.g., pulling her own hair, grabbing

\(^1\) All names are pseudonyms
items away from others, biting toys, rapidly pulling the strings of the toys back and forth across her mouth, or climbing onto a table), physical resistance (e.g., pushing or pulling away from a parent, falling limp onto the floor after her parent’s attempt to physically assist her, or sliding down or out of her parent’s grasp), leaving an assigned area (i.e., leaving the area that her parent has chosen for her task or an activity), inappropriate physical demands (e.g., giving her mom her mom’s shoes or bag in a demand to go out), and inappropriate physical interference (i.e., pulling her mom away from the task area).

Min-seo and her family were recruited through Autism Community Training (ACT), a community-based organization providing information, support, and training on a wide range of autism related issues to families and professionals across British Columbia. To locate a family that met the eligibility criteria for this study (see Appendix B), I wrote and sent a letter of initial contact (an introductory letter written in both English and Korean providing an overview of the study [see Appendix A]) to various agencies and organizations with a request that they distribute it to potential candidates. ACT, Families for Early Autism Treatment of British Columbia (FEAT of BC), Dr. Sara White (a private behaviour consultant providing services to families who have children with developmental disabilities), Korean non-profit organizations (Vancouver Milal Wheat Mission Society and Vancouver Korean Bethesda Christian Association), and local Korean newspapers. Families who expressed interest in participating were then asked to contact me or the Principal Investigator, or to provide their contact information so that I might contact them to conduct a pre-screening phone interview to assess eligibility.

Based on this initial screening, it appeared that Min-seo’s family met the eligibility requirements for participation in the study: (a) the focus child had a formal diagnosis of a

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2 A non-profit, volunteer organization of parents and concerned professionals working for universal access to effective autism treatment for all children diagnosed with autism and other pervasive developmental disorders
developmental disability (i.e., autism, intellectual disabilities); (b) the child was between the ages of three and eight years old; (c) the parent reported that the child engaged in mild to moderate problem behaviour in at least two typical home-based family routines (i.e., the problem behaviour was not so severe as to cause physical injury to others or property damage valued at over $100); (d) the child was not receiving any behavioural intervention outside of the study (except interventions targeting speech or other areas of development); (e) both parents were born in Korea, were therefore immigrants to Canada, and were able to speak Korean and English; (f) both parents consented to having an observer videotape parent-child interaction during typical family routines in the home; (g) both parents were willing to designate one parent as the primary interventionist with the child throughout the research and family-support processes; (h) neither parent perceived themselves to be in “crisis” due either to the focus child’s problem behaviour or to unrelated family issues (e.g., a sibling with a behaviour disorder, marital conflict between the parents, a parent with a psychological disorder); and (i) the family expected to remain in the lower mainland of British Columbia for the next 12 months.

Once the family was identified as potential participants, the family was invited to provide informed consent for their participation in preliminary screening (see Appendix C). During the screening process, I conducted a brief interview in Korean about their child’s problem behaviour during typical home-based family routines and I conducted pilot observations verifying the problem behaviour and escape-driven coercive processes involved in these routines. Through this preliminary screening process, I confirmed that the child and family were appropriate candidates for participation. The family was then asked to complete the consent forms for participating in the study and for being videotaped (see Appendix D). In addition, I provided more detailed information in Korean about the family-centered assessment and intervention processes.
Settings

The intervention settings for this study were collaboratively selected and defined by Min-seo’s parents (mostly Min-seo’s mother, Ji-woo) and me in their home during the preliminary screening process. Using the assessment of family activity settings component of the family ecology assessment (Albin et al., 1996; Lucyshyn, Kayser, Irvin, & Blumberg, 2002; see Appendix E), I asked Ji-woo to identify typical and valued routines in the home that were problematic and unsuccessful due to her child’s problem behaviour. She then prioritized these routines for intervention according to how problematic they were to her and other family members, which might best improve the child’s and family’s lives together, and which could be resolved with minimal effort and time commitment. Ji-woo and I identified two family routines to serve as potential intervention settings: independent play, and play with younger sibling.

After the two potential intervention settings were selected, Ji-woo was asked to envision how the target routines would look if they were successful. In collaboration with me, she defined the content and structure of each envisioned routine. The process of defining the envisioned routines was guided by the elements of activity settings as described by Gallimore and colleagues (Gallimore et al., 1993; Gallimore et al., 1989). Specifically, Ji-woo was asked to describe (a) the time and place where the activity would occur, (b) the tasks that would be enacted and their organization, (c) the resources that would be used or available, (d) the family members who would be present during the activity, (e) the pertinent cultural values and beliefs of the family, and (f) the goals and purposes of the activity. The envisioned routines that emerged from the preliminary assessment process were summarized as one-page operational definitions (see Table 2.1).
The envisioned routines were described in English and Korean, and Min-seo’s parents reviewed each definition, evaluated its accuracy, and suggested adjustments or corrections. The resulting definitions were used to structure how Ji-woo implemented the routines during the study’s baseline, intervention, and follow-up phases. Defining the target routines prior to beginning baseline procedures in this way ensured the comparability of observation sessions across phases (Lucyshyn et al., 1997).
Table 2.1

*Operational Definitions of Min-seo’s Envisioned Routines*

<table>
<thead>
<tr>
<th></th>
<th>Independent Play</th>
<th>Sibling Play</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Time/length</strong></td>
<td>• Between 4:00 and 4:30pm, for approximately 15-20 minutes</td>
<td>• After school, for approximately 15-20 minutes</td>
</tr>
<tr>
<td><strong>Setting</strong></td>
<td>• At home, in the living room</td>
<td>• At home, in the living room or playroom</td>
</tr>
<tr>
<td><strong>Participants</strong></td>
<td>• Min-seo and her mother</td>
<td>• Min-seo, her sister, and her mother and/or father</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>• Age-appropriate toys that have been modified and adapted, such as puzzles, magnetic dolls, sticker books, coloring books, and Play-doh</td>
<td>• Materials for age-appropriate activities, including drawing, reading books, doing puzzles, and playing with a ball</td>
</tr>
<tr>
<td><strong>Child’s tasks</strong></td>
<td>• Come to the living room when called</td>
<td>• Come to the living room or play room when called</td>
</tr>
<tr>
<td></td>
<td>• Choose a toy</td>
<td>• Choose a modified or adapted activity or allow her sister to choose one</td>
</tr>
<tr>
<td></td>
<td>• Take it out</td>
<td>• Engage in that activity</td>
</tr>
<tr>
<td></td>
<td>• Play with it appropriately</td>
<td>• When finished, clean up together</td>
</tr>
<tr>
<td></td>
<td>• When finished, put the toy away</td>
<td>• Take turns as appropriate</td>
</tr>
<tr>
<td><strong>Sibling’s tasks</strong></td>
<td>• N/A</td>
<td>• Come to the living room or play room when called</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Choose an activity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Help to set up the activity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Model appropriate play for the activity</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Provide her sister with encouragement as needed</td>
</tr>
<tr>
<td>Parent’s tasks</td>
<td>Independent Play</td>
<td>Sibling Play</td>
</tr>
<tr>
<td>----------------</td>
<td>------------------</td>
<td>--------------</td>
</tr>
<tr>
<td></td>
<td>Call Min-seo to the living room</td>
<td>Call Min-seo and her sister to the living room or play room</td>
</tr>
<tr>
<td></td>
<td>Help Min-seo choose a toy</td>
<td>Help the children to choose an activity</td>
</tr>
<tr>
<td></td>
<td>Help Min-seo set up the toy</td>
<td>Help the children to set up the activity</td>
</tr>
<tr>
<td></td>
<td>While Min-seo is playing, relax (e.g., read a book, watch TV, use the internet) or do housework (e.g., do the laundry, clean the room or kitchen)</td>
<td>Check on the children every 5 minutes to see if they are playing nicely</td>
</tr>
<tr>
<td></td>
<td>While the children are playing, relax (e.g., read a book, watch TV, use the internet) or do housework (e.g., do the laundry, clean the room or kitchen, cook food)</td>
<td>While the children are playing, relax (e.g., read a book, watch TV, use the internet) or do housework (e.g., do the laundry, clean the room or kitchen, cook food)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Child’s and family’s goals</th>
<th>For Min-seo:</th>
<th>For Min-seo:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Play with toys appropriately and independently</td>
<td>Play with toys appropriately and independently</td>
</tr>
<tr>
<td></td>
<td>Learn to enjoy playing with age-appropriate toys</td>
<td>Share toys and take turns playing with her sister</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Clean up toys when finished playing</td>
</tr>
<tr>
<td>For the family:</td>
<td>(Parents) Effectively support Min-seo in learning new skills</td>
<td>For the family:</td>
</tr>
<tr>
<td></td>
<td>(Parents) Successfully play with Min-seo</td>
<td>(Parents) Effectively support Min-seo in learning new skills</td>
</tr>
<tr>
<td></td>
<td>(Ji-woo) Have more time for herself, or spend time with her daughter</td>
<td>(Parents) Complete their own work and have more time for themselves rather than being disrupted while their children are playing</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(The children) Be relaxed and have fun together</td>
</tr>
</tbody>
</table>

Once independent and sibling play routines were selected and defined, the next step in the preliminary screening process was to determine if within each target routine Min-seo and her parents engaged in four-step escape-driven coercive interactions (i.e., parent makes a demand →
child displays problem behaviour → parent withdraws demand → child terminates problem behaviour). I conducted a brief functional assessment (see Appendix F) of Min-seo’s problem behaviour in each potential intervention setting by asking Ji-woo specific questions in Korean pertaining to Min-seo’s behaviour within each routine. Questions regarding the independent play routine included the following: “How does Min-seo react when you tell her it is time to go to play alone?” “What do you do in response to her crying?” These questions helped to identify the environmental variables that set up, triggered, and maintained Min-seo’s problem behaviour. In addition, Ji-woo was asked about how Min-seo responds after Ji-woo engaged in a parental action that served to maintain her child’s problem behaviour. For example, “After you stop asking Min-seo to go to play alone and let her continue to sit next to you, what does she do? Does she continue to engage in problem behaviour or does she calm down?” This information allowed for an initial assessment that the four-step escape-driven coercive process was present in both routines. However, during this initial assessment, attention-driven coercive process also was identified. Following the interviews, I conducted two pilot observations of the target routines to confirm the presence of two coercive patterns of interaction: an escape driven coercive process, and an attention driven coercive process. The information gathered from the preliminary screening process was later incorporated into a comprehensive assessment.

**Measurement**

The study employed multiple measurement procedures to monitor dependent variables and to document implementation of the independent variable (the ecological, family-centered, PBS approach to assessment and intervention). These measurement procedures are described below.
**Clinical confirmation of coercive process and design of break procedure.** In Lucyshyn et al.’s (2004) initial investigation of coercive parent-child interaction in families who have children with developmental disabilities, the researchers observed parent reactivity to being videotaped while attempting to carry out routines in which parent demands were common (i.e., routines in which the presence of escape-driven coercive processes were hypothesized to exist). The parents tended to persist with routine-related demands while being videotaped and to terminate their demands only after observation had ended. Partly due to this reactivity, the presence of the four-step escape-driven coercive process was not fully validated. In Lucyshyn et al.’s (2011) subsequent study of coercive processes in family routines, the researchers therefore developed a break procedure that involved a series of steps designed to ensure that naturally occurring escape-driven coercive processes in the selected routines could be observed. Consistent with the procedure developed by Lucyshyn and colleagues, Ji-woo and I collaboratively developed a break procedure to reduce parent reactivity to observation. Prior to conducting experimental baseline observations, the following steps to define a break procedure were implemented. First, I asked Ji-woo to describe what she normally did during the target routines after her routine-related demand was met with Min-seo engaging in problem behaviour. In response, Ji-woo stated, “I don’t know how I would respond. I never tried to push her.” This suggested that Ji-woo might withdraw her demand in response to problem behaviour. Second, Ji-woo was asked to describe the specific actions or behaviours she typically engaged in with Min-seo when refraining from “pushing” her. She replied with statements such as “I sit with her and hug her to comfort her,” and “I tickle her so she will laugh.” These parental responses, which were consistent with parental behaviour observed during screening observations, became the
definition of a break. Table 2.2 presents the operational definition of the break procedure utilized in this study.

Table 2.2
Operational Definition of the Break Procedure

<table>
<thead>
<tr>
<th>Points in Routine</th>
<th>Parent Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child engages in problem behaviour to a level that would lead to mother to naturally terminate routine-related demands and/or gave child comforting attention</td>
<td>Mother</td>
</tr>
<tr>
<td></td>
<td>• Takes a break from implementing the routine</td>
</tr>
<tr>
<td></td>
<td>• Signals that she would like a break by looking at the observer, and/or by saying “done” or “break” in Korean</td>
</tr>
<tr>
<td>Parent and Min-seo take a break from the routine</td>
<td>Mother</td>
</tr>
<tr>
<td></td>
<td>• Sits next to Min-seo to comfort her (e.g., rub her back; hug, massage, or tickle her; uses soothing words in either in Korean or English) until she stops crying/calms down</td>
</tr>
<tr>
<td></td>
<td>If Min-seo resists attempts at comfort, mother:</td>
</tr>
<tr>
<td></td>
<td>• Allows Min-seo to move away from the spot of the demand and gives her small snacks until she stops crying/calms down</td>
</tr>
<tr>
<td>Min-seo calms down</td>
<td>Mother</td>
</tr>
<tr>
<td></td>
<td>• Attempts to re-implement the routine</td>
</tr>
<tr>
<td></td>
<td>• Continues to do so for 5 to 10 minutes, or 3 to 5 times, or until a criterion level of problem behaviour has been reached</td>
</tr>
</tbody>
</table>

**Videotaped observation sessions and procedures.** I served as the primary observer for the duration of the study. I used a digital video camera to observe and record parent and child behaviour and interaction in the independent and sibling play routines. I implemented guidelines for home-based observations described by Patterson (1982): Visitors may not interrupt the observation, and participants should not use the phone or speak to the observer during videotaping. Observations were conducted during the baseline and intervention phases (i.e.,
interventionist training with child and parent sub-phase), once or twice a week during the baseline phase and every second to fourth training session during the interventionist training with child and parent sub-phase of intervention. Over seven months, Min-seo and her mother participated in a total of 15 observations during the baseline and intervention phases. Each observation lasted for a maximum of 30 minutes.

Observation sessions took place at naturally occurring times for the routines and were scheduled on days that were convenient for the family. During every observation session, I reviewed the operational definition of the envisioned routine with Ji-woo, ensured that the necessary material resources were present, and ensured that the general structure of the routine was followed. I asked Ji-woo to try at least 3 to 5 times, or for 10 to 15 minutes, to complete the routine successfully. Ji-woo was reminded that she could take a break during the observation session whenever she would naturally do so if I were not present. Ji-woo initiated a break by signaling me either with a look in my direction or by saying “done” in Korean. I acknowledged the signal with a nod, continued videotaping for another 30 seconds to 2 minutes, and then put the camera on standby to initiate a break. After a few minutes, I asked her to attempt the routine again with her daughter whenever she was ready. When Ji-woo acknowledged that she was ready, I resumed videotaping her attempt to engage Min-seo in the routine. The observation session continued until (a) Ji-woo had attempted the routine 3 to 5 times or 10 to 15 minutes had elapsed, (b) the termination criterion had occurred, or (c) the routine had been successfully completed.

**Coding videotaped observation sessions.** Five baseline and five intervention observations were collected of the independent routine, and five baseline observations were collected of the sibling play routine. For each observation two of eight dependent measures,
percentage of intervals of child problem behaviour and of steps completed, were coded for the entire observation session.

In regard to coding parent-child interaction in the two target routines, this has not yet been completed due to my academic schedule requiring that I graduate in May 2014. However, following my thesis defense, I will complete the coding process under the supervision of the Principal Investigator of the study. The analyses conducted by Lucyshyn et al. (2004) indicated that 10 to 12 observation sessions in each of the baseline and intervention phases of at least 10 minutes in length (i.e., approximately 100 minutes of video per phase) were sufficient to meet the parametric assumptions of a normal distribution upon which sequential analysis is based (Bakeman & Gottman, 1997). Thus, I will use a random sample of 10 baseline and 10 intervention observation sessions across the two target routines. Ten minutes of each observation will be coded for parent and child behaviour. If sessions last more than 15 minutes, the final 10 minutes of the observation will be coded, while sessions that last 10 minutes or less will be coded in their entirety.

**Computer-based data coding equipment and software.** A desktop computer was used to collect and code data from each videotaped session. Video data were directly downloaded from digital videotape onto the hard drive of the computer. The password-protected desktop computer was located in the Principal Investigator’s laboratory in the Faculty of Education at the University of British Columbia; the digital videotapes and DVDs were stored in a locked cabinet also located in the laboratory.

A computer software media-player program was used to code both the child’s behaviour (i.e., percentage of intervals of problem behaviour, steps of the routine successfully completed), and parent implementation fidelity (i.e., percentage of intervals during which the parent
accurately followed support-plan procedures). When coding an observation session, I opened the media-player software program, selected the file to be coded, and coded the child’s behaviour and routine steps completed directly from the computer screen. Data sheets and pencils were used to record the occurrence and/or non-occurrence of these two dependent variables.

A computer software observation program, Observer 5.0 (Noldus, Trienes, Hendriksen, Jansen, & Jansen, 2000), will be used to code parent-child interaction. The software provides a system for observing and coding parent and child behaviour in real time. When coding an observation session, the trained coders will open the Observer 5.0 software program, select a file for coding, and code behaviour directly from a viewing box on the computer screen. One coder and I will use the Parent and Child Coding System (PACCS; Lucyshyn et al., 2007b) to code these interactions that occurred during the videotaped home-based routines. Coding categories will have already been entered into an Observer configuration file for the study and will appear as three-letter agent-action codes (e.g., Parent Request/Demand = PRD) in the coding-category panel on the computer screen. Watching the observation session, the coder will use a computer keyboard and a jog/shuttle to enter codes that represent the onset of specific parent and child behaviours. The computer keyboard and jog/shuttle will allow the coder to pause, rewind, or fast-forward the observation session in synchronization with the ongoing coding process. After an observation is coded, it will be saved as an observation data file (with the suffix .odf) in a folder on the computer’s hard drive.

Dependent Variables

By the completion of the study, eight dependent variables will be measured to assess the survivability of the ecological, family-centered, culturally responsive PBS approach to
beavioural assessment and intervention, and its ability to transform coercive patterns of parent-child interaction into constructive patterns of interaction:

1. Percentage of intervals of problem behaviour,

2. Percentage of steps successfully completed in the routine,

3. Conditional probability of coercive processes and constructive processes,

4. Log odd of coercive processes and of constructive processes,

5. Percentage of intervals during which the parent accurately used behaviour support plan strategies,

6. Average rating of the social validity of the support effort,

7. Average index of the support plan’s contextual and cultural fit with the family’s ecology, and

8. Family functioning scores from the Family Quality of Life Survey (Park et al., 2003) and Parenting Stress Index (Abidin, 1995).

**Percentage of intervals of problem behaviour.** Problem behaviour data were collected during videotaped observations of the independent play and sibling play routines. Child problem behaviours were categorized in collaboration with Min-seo’s as follows: (a) physical aggression; (b) disruptive, destructive, or dangerous behaviour; (c) negative vocalization; (d) physical resistance; (e) leaving assigned area/running away; (f) inappropriate demands; and (g) inappropriate physical interference. Table 2.3 provides operational definitions of Min-seo’s problem behaviours.
<table>
<thead>
<tr>
<th>Category</th>
<th>Operational Definition</th>
<th>Child-Specific Examples</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical aggression</td>
<td>• Negative physical contact toward another person that causes distress, pain, or injury</td>
<td>• Hair-pulling, hitting, kicking, head butting, biting, or throwing objects at another person</td>
</tr>
<tr>
<td>Disruptive/ Destructive/ Dangerous behaviour</td>
<td>• A wide variety of behaviours that are disruptive to family members and the success of chosen routines, that are destructive to objects or that are dangerous to the target child’s physical health</td>
<td>• Biting objects, pulling her own hair, grabbing items away from others, banging objects (toys) with her feet, rapidly pulling the strings of toys back and forth in her mouth (3 or more times in one second), pulling at a parent’s clothing, climbing onto a table, or pulling the window blinds</td>
</tr>
<tr>
<td>Negative vocalization</td>
<td>• Nonverbal or verbal vocalizations that are agitated, distressed, or negative in tone; vocalizations can range from low to high intensity</td>
<td>• Saying “anniya” (“no” in Korean) in an agitated and distressed or negative tone, whining, crying, screaming, nonsensical shouting, or making baby sounds</td>
</tr>
<tr>
<td>Physical resistance</td>
<td>• Physical resistance to parent physical assistance or restraint</td>
<td>• Pushing or pulling away from parent, arching her back, falling limp onto the floor after her parent’s attempt to physically assist her, or sliding down and out of her parent’s grasp</td>
</tr>
<tr>
<td>Leaving assigned area/ Running away</td>
<td>• During a target routine, the child physically leaves the area designated for the activity, or runs away from a parent during a task or activity</td>
<td>• Leaving her assigned area (e.g., the living room or playroom) and/or grabbing a bag, going to the front door, or going to the kitchen</td>
</tr>
<tr>
<td>Inappropriate Demands</td>
<td>• A verbal request or demand that is clearly inappropriate to the circumstances</td>
<td>• Giving her parent her own or her parent’s shoes or bag in a demand to go out, even though doing so is inappropriate because she should be playing alone</td>
</tr>
<tr>
<td>Category</td>
<td>Operational Definition</td>
<td>Child-Specific Examples</td>
</tr>
<tr>
<td>---------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Inappropriate physical interference</td>
<td>• A physical behaviour aimed at prompting or helping the parent engage in a task or activity that clearly is not part of the expected routine, or that clearly is not what the parent wants to do</td>
<td>• Pulling her parent away from the task area and/or towards an activity that is clearly not part of the routine (e.g., pulling her mother toward the front door when she should be moving towards the living room)</td>
</tr>
</tbody>
</table>

Problem behaviour was measured as the percentage of intervals of occurrence during a target routine. A partial interval recording system was used with observation intervals of 10 seconds (Richards, Taylor, Ramasamy, & Richards, 1999; see Appendix G). An occurrence was scored if problem behaviour occurred at any point during the interval. The percentage of intervals of problem behaviour \( (P_{PB}) \) was calculated using the following formula:

\[
P_{PB} = \frac{N_{PB}}{\text{Total Intervals}} \times 100.
\]

\( N_{PB} \) refers to the number of intervals in which problem behaviour occurred.

**Percentage of steps successfully completed in routine.** Steps in each routine, including definitions of the successful completion of each step, were defined in collaboration with Min-seo’s parents prior to beginning baseline observations. The procedure for defining each successful step was as follows: First, Min-seo’s parents and I identified and defined the steps comprising each of the target routines. Second, for steps that had a criterion level of performance (e.g., appropriate engagement in the activity), the criterion (e.g., plays with the toy about 75% of the time) was defined. Third, steps that could occur one or more times during the routine (e.g., asking mom for help or attention) were defined, and successful completion of one of these steps was defined as one or more occurrences of that step. Fourth, the level of problem behaviour that rendered a step unsuccessful was determined. Criterion levels of problem behaviour ranged from minor (e.g., minor negative vocalizations, or inappropriate physical assistance or demand) to
major (e.g., physical aggression, major negative vocalizations). If minor problem behaviour occurred three times or more during a step, the step was scored as unsuccessful. If major problem behaviour occurred one time or more during a step, the step was scored as unsuccessful.

Finally, the level of independence required by the child before a step was scored as successfully completed was determined. Given Min-seo’s significant developmental disabilities, completing the step with verbal, gestural, or physical help was scored as successful, as long as Min-seo cooperated with assistance while engaged in the step, and she did not engage in a criterion level of problem behaviour. Table 2.4 provides the target steps to be completed for both the independent and sibling play routines.

Table 2.4

<table>
<thead>
<tr>
<th>Independent Play Routine</th>
<th>Sibling Play Routine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Routine Steps</td>
<td></td>
</tr>
<tr>
<td>1. Come to the living room when called</td>
<td>1. Come to the living room when called</td>
</tr>
<tr>
<td>2. Make 3 play choices</td>
<td>2. Make 3 play choices or allow her sister to make them</td>
</tr>
<tr>
<td>3. Get the first toy</td>
<td>3. Help to set up the first activity</td>
</tr>
<tr>
<td>4. Play with the first toy appropriately (about 75% of the time, with any necessary modifications or adaptation)</td>
<td>4. Engage in the first activity (about 75% of the time, modified or adapted as needed</td>
</tr>
<tr>
<td>5. When finished, put the toy away</td>
<td>5. When finished, help put the first activity away</td>
</tr>
<tr>
<td>6. Repeat steps 3 through 5 for the remaining 2 toys</td>
<td>6. Help to set up the second activity</td>
</tr>
<tr>
<td>7. Ask for mom as necessary (for help or attention)</td>
<td>7. Repeat steps 3 through 5 for the remaining play choices</td>
</tr>
<tr>
<td></td>
<td>8. Take turns as appropriate</td>
</tr>
<tr>
<td></td>
<td>9. Ask for mom as necessary (for help or attention)</td>
</tr>
</tbody>
</table>

Using a checklist of defined steps and criterion levels of problem behaviour and independence (see Appendix H), I recorded whether a step was successfully completed, not
completed, or unable to be completed because the child had no opportunity to engage in it (e.g.,
the parent did not ask the child to come to the living room). Steps completed were measured as
the percentage of steps completed during the routine. The percentage of steps completed ($P_{SC}$)
was calculated using the following formula:

$$P_{SC} = \frac{N_{SC}}{\text{Total Steps}} \times 100.$$ 

$N_{SC}$ refers to the number of steps successfully completed.

**Conditional probability of coercive processes and constructive processes.** The
conditional probability of coercive processes has not yet been analyzed due to the professional
requirement to graduate in May 2014. However, following my thesis defense, I will complete
this procedure under the supervision of Dr. Lucyshyn. The Parent and Child Coding System
(PACCS) (Lucyshyn et al., 2007b) will be used to generate the conditional probabilities of
coercive and constructive processes in family routines. PACCS was developed using guidelines
described by Bakeman and Gottman (1997) for how to design observational methods to
sequentially analyze dyadic interactions. PACCS consists of 19 parent and child coding
categories and their constituent defining codes (9 parent codes and 10 child codes). These codes
are organized hierarchically for both members of the dyad. These hierarchies allow a coder to
select the most salient code when a parent or child is simultaneously engaged in two behaviour
categories (e.g., the parent delivering praise while doing the dishes). PACCS is based on a turn-
taking scheme and is therefore sensitive to changes in behaviour categories during one person’s
turn and between the parent’s and child’s turns.

The hierarchy of parent categories (with agent-action codes in parentheses) is as follows:

- **Negative Attention (PNA),**
- **Request/Demand (PRD),**
• Reduced Request/Demand (PRR),
• Positive Attention (PPA),
• Physical Assistance (PAS),
• Non-Compliance (PNC),
• Compliance (PCO),
• Other Behaviour (POT), and
• Occupied (POC).

The hierarchy of child code categories, with agent-action codes in parentheses, is as follows:

• Problem Behaviour (CPB),
• Problem Behaviour with Non-Compliance (CPN),
• Problem Behaviour with Compliance (CPC),
• Non-Compliance (CNC),
• Compliance (CCO),
• Out of Assigned Area (COA),
• Appropriate Request/Demand (CRD),
• Positive Attention (CPA),
• Other Behaviour (COT), and
• Occupied (COC).

Coercive processes. By the completion of the study, two coercive patterns of interaction will be defined for routines. In routines where parental requests and demands are common, an escape-driven coercive process will be defined as consisting of four steps: (a) parent demand; (b) child problem behaviour; (c) parent withdraw and/or reduce demand; and (d) child terminate
and/or reduce problem behaviour. In routines where a parent is busy and can not give the child his or her undivided attention, an attention-driven coercive process will be defined for steps: (a) parent busy; (b) child problem behaviour; (c) parent gives positive or negative attention; and (d) child terminates or reduces problem behaviour.

The statistical need for a sufficiently large sample N of parent-child interactions will require an aggregate measure across the targeted routines. Coded observation sessions will be aggregated in conformance with the multiple baseline design. Observations within each research phase (either baseline or intervention) will be aggregated into a single data file. Thus, one aggregate data file will contain all observations across both targeted routines in the baseline phase; a second aggregate data file will contain all observations across both routines in the intervention phase.

Conditional probabilities will be generated by the student researcher’s posing of a series of questions using the following general format: given the occurrence of a criterion event, what is the conditional probability of a target event? As indicated below, the questions will address the first two, the first three, and then all four steps in coercive parent-child interactions during escape-driven and attention-driven family routines:

1. Given the parent’s demand (or parent busy), what is the conditional probability that the child will engage in problem behaviour?
2. Given that the parent’s demand (or parent busy) is followed by child problem behaviour, what is the conditional probability that the parent will withdraw her demand (or parent will give positive or negative attention)?
3. Given that the parent’s demand (or parent busy) is followed by child problem behaviour and the parent’s withdrawal of the demand (or parent’s delivery of positive/negative
attention), what is the conditional probability that the child will terminate the problem behaviour?

*Constructive processes.* PACCS will be used to generate the conditional probabilities of constructive processes occurring in family routines. Constructive processes will be defined for the two selected routines based on the logical inference of what one might expect to see if: (a) an escape-driven coercive process is transformed into a constructive process of parent-child interaction in routines in which parental demands are common, and (b) an attention-driven coercive process is transformed into a constructive process of parent-child interaction in routines in which parents are typically busy with other household or family responsibilities. Based on this logic, I propose two definitions. In routines where parental requests and demands are common, a constructive process will be defined as consisting of four steps: (a) parent demand; (b) child compliance; (c) parent positive attention; and (d) child occupied in routine or engaged in other positive or neutral behavior. In routines where parents are typically busy and cannot readily attend to the child, a constructive process will be defined as consisting of the following four steps: (a) parent busy; (b) child occupied in routine; (c) parent positive attention or parent occupied in routine; and (d) child occupied in routine or child engaged in other positive or neutral behavior. The observation sessions that were aggregated across the routines during the research phase to generate the conditional probabilities of coercive processes will be used to generate the conditional probabilities of constructive processes.

I will generate conditional probabilities by posing questions about the likelihood of a target event occurring, given a criterion event. These questions will represent the first two, the first three, and all four steps in a constructive pattern of parent-child interaction, as defined below:
1. Given the parent’s request/demand (or parent busy), what is the conditional probability that the child will comply with the request/demand?

2. Given that the parent’s demand (or parent busy) is followed by the child’s compliance (child occupied in routine), what is the conditional probability that the parent will provide positive attention?

3. Given that the parent’s demand (or parent busy) is followed by the child’s compliance (child occupied in routine), what is the conditional probability that the parent will provide positive attention (or parent occupied in routine) and that the child will respond with appropriate behaviour?

Questions about sequential relationships within parent and child behaviour will be answered by General Sequential Querier (GSEQ) for Windows (GSW) for Windows sequential analysis program (Quera & Bakeman, 2000). For each question about coercive and constructive patterns of interaction, GSW will generate conditional probabilities within a $2 \times 2$ contingency table. In GSW analysis, one behaviour pattern is always antecedent to the other behaviour or sequential pattern: thus, for instance, for the first two steps in a coercive escape-driven process, a parent request/demand will be cross-tabulated with child problem behaviour. The behaviour sequences in a contingency table structure, in conjunction with the data obtained from the family, will empirically yield conditional probabilities, as generated by the Sequential Data Interchange Standard and General Sequential Querier (SDIS/GSEQ) software program (Bakeman & Quera, 1995).

The conditional probabilities of parent behaviour given child behaviour will then be transformed into a log odd, which in turn will serve as dependent measures. Table 2.5 below lists the six dependent measures considered in this study. For example, all 2-step interaction patterns
being studied specify the child’s behaviour as conditional (“C”) given the parent’s previous behaviour (“P”). The odd of interest are the conditional probability that C will occur when P is present, compared to the conditional probability that C will not occur when P is present, \( \Omega_p = \frac{p(C|P)}{p(\neg C|P)} \). The odd and its log transformation, \( \Omega_p \), are interpreted as the measure of association between the occurrence of C being preceded by P. With this measure we can answer the question “What is the odd that C will occur when P is present?” When the two conditional probabilities are equal (i.e., \( p(C|P) = p(\neg C|P) \)), then \( \Omega_p = 1 \), indicating a lack of association between C and P. If \( p(C|P) > p(\neg C|P) \), then \( \Omega_p > 1 \), whereas if \( p(C|P) < p(\neg C|P) \), then \( \Omega_p < 1 \). Unfortunately, the distribution of \( \Omega_p \) is not symmetrical around 1: values below 1 range from 0 to 1, while values above 1 range from 1 to + \( \infty \). Given that valid statistical techniques require data to follow a normal distribution with variance independent of the mean, odd data must therefore be transformed into its logarithm function. Using logarithmic transformation of the odd, the dependent measure is then found to be symmetric around the value 0, with values ranging from \(-\infty\) to +\(\infty\). Transforming the data so it follows a normal distribution allows a repeated measures \( t \)-test analysis to be carried out on this transformed scale (Bland & Altman, 1996).
### Table 2.5

**Dependent Variables and Dependent Measures**

<table>
<thead>
<tr>
<th>Dependent Variable: Process/Routine/Steps</th>
<th>Dependent Measure: Log (Odds)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coercive/escape or attention-driven/2-Steps</td>
<td></td>
</tr>
<tr>
<td>Child problem behaviour</td>
<td>(Parent demand)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Child problem behaviour</td>
<td>(Parent busy)</td>
</tr>
<tr>
<td>Coercive/escape or attention-driven/3-Steps</td>
<td></td>
</tr>
<tr>
<td>Parent withdraw/reduce demand</td>
<td>(Parent demand &amp; Child problem behaviour)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Parent gives negative or positive attention</td>
<td>(Parent busy &amp; Child problem behaviour)</td>
</tr>
<tr>
<td>Coercive/escape or attention-driven/4-Steps</td>
<td></td>
</tr>
<tr>
<td>Parent withdraw/reduce demand &amp; child terminates or reduces problem behaviour</td>
<td>(Parent demand &amp; child problem behaviour)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Parent gives negative or positive attention &amp; child terminates or reduces problem behaviour</td>
<td>(Parent busy &amp; child problem behaviour)</td>
</tr>
<tr>
<td>Constructive/escape or attention-driven/2-Steps</td>
<td></td>
</tr>
<tr>
<td>Child compliance</td>
<td>(Parent demand)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Child occupied in routine</td>
<td>(Parent busy)</td>
</tr>
<tr>
<td>Constructive/escape or attention-driven/3-Steps</td>
<td></td>
</tr>
<tr>
<td>Parent positive response</td>
<td>(Parent demand &amp; child compliance)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Parent positive response</td>
<td>(Parent busy &amp; child occupied in routine)</td>
</tr>
<tr>
<td>Constructive/escape or attention-driven/4-Steps</td>
<td></td>
</tr>
<tr>
<td>Parent positive response &amp; child positive behaviour or neutral behaviour</td>
<td>(Parent demand &amp; child compliance)</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>Parent positive response or occupied &amp; child occupied or positive or neutral behavior</td>
<td>(Parent busy &amp; child occupied in routine)</td>
</tr>
</tbody>
</table>
Percentage of intervals of parent accurate use of behaviour support plan strategies.

Parent implementation fidelity was defined as the accurate implementation of a core set of intervention strategies for the independent play routine, as listed and described in Min-seo’s core behaviour support plan (see Table 2.6). Because preliminary intervention has only occurred in the first of two target routines, the percentage of intervals of parent accurate use of behaviour support strategies has not yet been scored. Definitions of parent accurate and inaccurate use of these strategies will be generated after behaviour support plans for both independent and sibling play routines have been developed. Parent behaviour will be scored, according to the definition of accurate implementation, using a partial interval recording system (see Appendix I). The length of the interval is 30 seconds. An occurrence will be scored if accurate use of a support strategy occurred at any point during the interval. The percentage of intervals of parent accurate implementation (PPI) will be calculated using the following formula:

\[ PPI = \frac{NPI}{\text{Total Intervals}} \times 100. \]

NPI refers to the number of intervals of parent accurate.
Table 2.6

_Min-seo’s Core Behaviour Support Plan_

<table>
<thead>
<tr>
<th>Support Plan Strategy</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Offer choices from among non-preferred activities</td>
<td>Min-seo is given a choice from among non-preferred play activities before starting any activity. In this way, she can select the activity that she finds to be more reinforcing/desirable, a strategy that can encourage her to do the non-preferred activity.</td>
</tr>
<tr>
<td>2. Visual supports</td>
<td>Mother uses a “first and then” visual board throughout the routine to help Min-seo to predict tasks, sequences, rewards, and transitions. A picture of an activity that Min-seo has to do is placed in the “first” box; to motivate her to finish that activity, a reward she has previously chosen is placed in the “then” box. Mother also uses the expected behaviour visuals “sitting nice” and “hands to self.”</td>
</tr>
<tr>
<td>3. Visual schedule</td>
<td>Mother provides her with a picture schedule of a play routine to show its sequence of activities and to increase her knowledge of expectations. The picture schedule should be placed on the desk or on the living room carpet.</td>
</tr>
<tr>
<td>4. Verbal pre-corrects</td>
<td>Before leaving the room, mother reminds Min-seo to ask her for help. For example, Ji-woo can say, “if you need help, you can ask for mom.”</td>
</tr>
<tr>
<td>5. Safety signals</td>
<td>Mother provides Min-seo with contingency statements informing them how much time she has left to play prior to the routine ending and the delivery of a reinforcer.</td>
</tr>
<tr>
<td>6. Proactive prompts</td>
<td>Mother provides proactive physical, gestural, and verbal prompts to Min-seo to help her to complete steps in routine.</td>
</tr>
<tr>
<td>7. Functional communicative tool</td>
<td>Mother prompts Min-seo to use speech output apps (e.g., proloquo2go) when she needs mom with mothers’ help. Min-seo presses the image of “mom” on her iPad to get her mother’s attention or help in an appropriate way.</td>
</tr>
<tr>
<td>8. Non-contingent reinforcement</td>
<td>Mother engages Min-seo in positive ways during play time (e.g., mom checks on Min-seo every one to two minutes) in order to prevent the occurrence of attention-motivated problem behaviour.</td>
</tr>
<tr>
<td>Support Plan Strategy</td>
<td>Description</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>9. Provide preferred tangible and praise</td>
<td>Mother provides Min-seo with praise, physical attention, and preferred food, contingent on appropriate playing independently or cooperatively with sister.</td>
</tr>
<tr>
<td>10. Redirection of minor problem behaviour</td>
<td>Min-seo is redirected back to appropriate behaviour by mother prompting her to complete the immediate demand (e.g., physically assisting her to the table, physically assisting her to focus on a toy), and then reviewing the visual schedule and the expected behaviour visuals of “sit nicely” and “hands to self.”</td>
</tr>
<tr>
<td>11. De-escalation procedure</td>
<td>If Min-seo engages in escape-motivated physical aggression/self-injurious behaviour, this behaviour is blocked and she is redirected to the task at hand. For attention-seeking problem behaviour, if Min-seo leaves the living room, her mother walks away from her but stay in the living room until Min-seo comes back to that room. Once Min-seo is back in the living room, her mother redirects her to appropriate play-time behaviour while prompting her to “sit nicely.”</td>
</tr>
</tbody>
</table>

**Average rating of the social validity of the support effort.** A social validity questionnaire, a revised version of the social validity questionnaire created by Lucyshyn et al. (1997), was used to assess the parent’s view of the acceptability and importance of intervention goals, procedures, and outcomes (see Appendix J). This questionnaire consisted of ten questions that used a Likert-type scale from 1 to 5 (1 = disagree, 5 = agree). During the interventionist training with child and parent sub-phase of intervention, Ji-woo completed one social validity questionnaire focused on the independent play routine. During the maintenance and follow-up phases, both parents will compete the social validity questionnaires. Following each administration, an average will be calculated to serve as a formative rating of social validity. At the conclusion of the study, a grand average will be computed to provide a summative rating of social validity.
**Average index of support plan’s contextual and cultural fit with family ecology.** A “contextual and cultural fit” assessment adapted from an instrument designed by Albin et al. (1996) was used to evaluate how well the behaviour support plan fitted with the ecology of the family (see Appendix K). This instrument consisted of 14 questions, each rated along a 5-point Likert scale (1 = a little, 5 = a lot). These questions addressed areas relevant to the plan’s contextual appropriateness (e.g., “Are you comfortable with what you are expected to do?”), its cultural relevance (e.g., “Does the plan recognize and build on your family’s strengths, values, and customs?”), and its sustainability (e.g., “if the plan is effective, do you believe you can continue to use these strategies for a long time?”). This questionnaire was administered once during the interventionist training of child and parent sub-phase of the intervention phase for the independent play routine. Following administration, an average was calculated to serve as a formative index of contextual/cultural fix. This questionnaire will be administered three more times: once again during the interventionist training of child and parent sub-phase of intervention, once during the maintenance sub-phase of intervention, and once during follow-up. At the conclusion of the study, an average index will be calculated across all measures to create a summative index of the contextual and cultural fit of the interventions.

**Family functioning scores.** Family functioning will be measured using two family assessment instruments: (a) the Family Quality of Life Survey (Park et al., 2003); and (b) the Parenting Stress Index (Abidin, 1995). These assessment instruments are described below.

**Family Quality of Life Survey (FQOL).** The Beach Center FQOL (Park et al., 2003) consists of 41 items that assess five family quality-of-life domains: (a) family interaction, (b) parenting, (c) emotional well-being, (d) physical/material well-being, and (e) disability-related support (see Appendix L). For each item, the parents rate their level of importance and
satisfaction with the interventions on a Likert-type scale (1 = a little important, 5 = critically important). Psychometric evaluations of this instrument have shown that it possesses excellent reliability (Cronbach alpha of .94 on importance ratings and .88 on satisfaction ratings) and concurrent validity (correlation coefficients of .68 and .60, p < .001), with well established measures for quality-of-life (Hoffman, Marquis, Poston, Summers, & Turnbull, 2006; Park et al., 2003). This instrument was administered to Min-seo’s parents during the initial baseline phase, and will be administered two more times: once during intervention and once during follow-up.

**Parenting Stress Index (PSI).** Parental stress was assessed using the Parenting Stress Index—Short Form (PSI-SF; Abidin, 1995; see Appendix M). This self-report measure consists of 36 items divided into three subscales of 12 items each and scored on a 5-point Likert scale (0 = strongly disagree, 5 = strongly agree). The PSI-SF’s Parental Distress subscale generates a score indicating the level of a parent’s distress resulting from personal factors as well as life restrictions due to the demands of raising a child. The Parent-Child Dysfunctional Interaction subscale yields a score indicating the parents’ level of dissatisfaction with their interactions with their children, as well as the degree to which they find their children unacceptable. Finally, the PSI-SF’s Difficult Child subscale provides a measure of the parents’ perceptions of their children’s self-regulatory abilities. The total of the scores from all three subscales yields a Total Stress score. In additions to these scores, Parental Distress subscale includes a 7-item scale that measures Defensive Reasoning. This measure, which indicates the degree to which parents might be trying to minimize or deny existing problems, has been shown to have high internal consistency and adequate test-retest reliability (Abidin, 1995). This measure was administered to Min-seo’s mother during the baseline phase of this study, and will be administered again during the intervention and follow-up phases.
**Inter-observer Agreement (IOA)**

A graduate student in the Faculty of Education at the University of British Columbia worked with me as an independent coder during inter-observer agreement (IOA) sessions. Prior to the measuring of baseline data, the graduate student was trained for approximately 2 hours in the coding of child-related dependent variables (i.e., child problem behaviour and steps completed in routines). To establish high levels of agreement for child-related dependent variables, we needed to agree at least 85% of the time over two consecutive observations before we began coding. Then, to maintain these levels of agreement for child-related dependent variables, we met twice a month to check for consistency by reviewing previously coded observation files. When coding the videotaped intervals involving Min-seo, we observed and coded sessions independently of each other.

**IOA for problem behaviour.** To determine the percentage of intervals of problem behaviour, inter-observer agreement checks were conducted on 40% of the observation session data, balanced across baseline phases. The percentage of observer agreement for problem behaviour ($P_A$) during the targeted routines was calculated using the following formula:

$$P_A = \frac{N_A}{N_A + N_D} \times 100.$$

$N_A$ refers to the number of times we agreed in our coding selections. $N_D$ refers to the number of disagreements we had. An agreement was considered to exist when we independently recorded the occurrence of target behaviour during the same 10-second interval.

The average inter-observer agreement for the percentage of intervals of problem behaviour during the baseline phases for the independent play and sibling play routines was 91% (range, 90 – 92%): the average agreement for the independent play routine was 90% (range, 89 – 91%), while the average agreement for the sibling play routine was 92% (range, 90 – 94%).
When this study is complete, the average inter-observer agreement for the percentage of intervals of problem behaviour in intervention and follow up phases will be calculated.

**IOA for steps completed.** To determine the percentage of steps successfully completed, inter-observer agreement checks were completed on 40% of the observation session data, balanced across the baseline phases. The percentage of observer agreement for the percentage of steps completed \( (P_A) \) during the target routines was calculated using the following formula:

\[
P_A = \frac{N_A}{N_A + N_D} \times 100.
\]

\( N_A \) refers to the number of agreements. \( N_D \) refers to the number of disagreements. An agreement was considered to have occurred when we independently recorded the same step in a trial as having been successfully completed, or unsuccessful due to level of problem behaviour, or as having had no opportunity to occur.

The average inter-observer agreement for steps successfully completed in the baseline phases across the independent play and sibling play routines was 98% (range, 96 – 100%). The average inter-observer agreement for the percentage of steps successfully completed in the independent play routine was 100%. The average inter-observer agreement for the percentage of steps successfully completed in the sibling play routine was 96% (range, 92 – 100%).

**IOA for parent implementation fidelity.** Observer training for coding parent implementation fidelity has not been completed. It will begin during the interventionist training of child and parent sub-phase of the intervention phase, when I have completely faded my direct training with the child during the routine, and the parent alone is implementing the behaviour support plan during the routine. After detailed operational definitions of support procedures are defined, the graduate student coder and I will participate in additional hours of training. A training criterion of 85% agreement across two consecutive observations will be required before
coding begins. For parent implementation fidelity, inter-observer agreement checks will be conducted on 20% of observation session data, balanced across intervention and follow-up phases. The percentage of observer agreements about parent implementation fidelity ($P_A$) during the targeted routines will be calculated using the following formula:

$$P_A = \frac{N_A}{N_A + N_D} \times 100.$$  

$N_A$ refers to the number of agreements. $N_D$ refers to the number of disagreements. An agreement will be considered to exist when we record the occurrence of the parent’s accurate use of a support strategy at any point during the same 30-second interval.

**IOA for parent and child interaction data.** Parent and child interaction data were not coded for this study. When the study resumes, the graduate student coder and I will participate in additional hours of training in using PACCS (Lucyshyn, Laverty, et al., 2007b) to code parent and child interaction data. A training criterion of 80% agreement and a minimum Kappa of 0.75 on two consecutive observations will be required before coding begins. To maintain high levels of agreement regarding parent and child interaction data, we will record questions in the comments section of the observation file for parent and/or child behaviour regarding issues that we find difficult to interpret and for which the PACCS coding manual might not provide adequate direction. After coding a file, we will attend a consensus meeting to discuss these questions and come to an agreement regarding the appropriate way to code the behaviour and/or interaction in question. Our queries will be limited to no more than 10% of parent and child codes in any observation file. The purpose of these consensus meetings is to ensure the accuracy and uniformity of our coding when the PACCS coding manual provides insufficient direction for parent and child behaviours that are highly nuanced, subtle, or complex. Lucyshyn et al. (2014) and Binnendyk (2009) employed this procedure of holding consensus meetings in their analyses.
of coercive parent-child interactions in families of children with developmental disabilities. This procedure is common among research teams coding dyadic interactions in real time because of the complexity of these interactions and the inability of a coding manual to identify every possible nuance of parent and child behaviour and interaction (Lucyshyn et al., 2014). All inter-observer agreement scores will be calculated prior to consensus meetings between the two coders.

For parent and child interaction coding, inter-observer agreement checks will be held for 20% of observation session data, balanced across baseline and intervention phases. To control for non-occurrence agreements and disagreements (Bakeman & Gottman, 1997; Cohen, 1977), I will use the Observer 5.0 (Noldus et al., 2000) software program’s reliability measurement function to compute a Kappa statistic for all parent and child behaviour codes combined, for all parent behaviour categories, and for all child behaviour categories. The formula for calculating the Kappa statistic is as follows: $k = (O_a - E_a)/(N - E_a)$. $O_a$ is the observed count of agreements, $E_a$ is the expected count of agreements, and $N$ is the total.

In addition, an inter-observer agreement score will be computed for each individual parent and child behaviour category. The percentage of observer agreement ($P_A$) in regard to the codes for each parent and child behaviour category will be calculated according to the following formula:

$$P_A = N_A / (\text{Total Codes of Coder 1} + \text{Total Codes of Coder 2}) \times 100.$$ 

$N_A$ refers to the number of agreements.

**Research Design**

A quasi-experimental single-case, multiple baseline design across two family routines was employed to assess the association between implementation of the family centered,
culturally responsive PBS approach and improvements in the child’s behaviour and participation in the routines. Researchers in the fields of behavioural psychology and special education have recently reached a consensus on the standards that should be used in experimental research using single case methodology (Horner et al., 2005; Kratochwill et al., 2010). For multiple baseline designs, documentation of an experimental effect requires at least three baselines and the demonstration of three basic effects at different times. A basic effect is a substantial change in the direction of improvement of the level and slope of a data path between baseline and intervention phases. Given that my design includes only two baselines (the two routines), this standard for documenting experimental control has not been met. Thus, the design that I have employed should be characterized as a quasi-experimental or empirical case-study design. However, this design allows for a rigorous evaluation of two potential basic effects while at the same time being feasible within the constraints of a Master’s Thesis research study.

By March 2014, the two phases of the multiple baseline design have been initiated: (a) baseline, during which Min-seo’s mother attempted to implement her vision of successful routines; and (b) intervention, during which Min-seo’s parents and I collaborated to design and implement a culturally sensitive PBS plan for the independent play routine. At the conclusion of the study, this design will include three phases: (a) baseline; (b) intervention, consisting of intensive interventionist training with child, interventionist training with child and parent, and maintenance support; and (c) follow-up.

Within each target routine, baseline data were initially collected until stability was established for each dependent measure to the greatest extent possible, given low social acceptability to Min-seo’s parents of remaining in the baseline phase. Collection of baseline data began simultaneously for the two routines with the collaboratively established understanding that
the independent play routine would be the first routine to enter the intervention phase. Upon completion of the baseline phase for the first routine, the intervention phase began, while the baseline phase continued for the second routine. The intervention phase of the second routine will begin after stable improvements in child behaviour have been documented in the first routine.

Research and Intervention Procedures

The ecological, family-centered, culturally responsive PBS approach was implemented in the context of a multiple baseline design across two target routines, independent and sibling play. This section focuses on the sequence of research procedures and clinical family support procedures implemented during the study: (a) preliminary screening assessment, (b) baseline, and (c) intervention.

Preliminary screening process. Prior to baseline procedures, the family was involved in three preliminary screening activities (see beginning of this chapter) to establish a structured baselines across two family routines: (a) a brief functional assessment, (b) a routine assessment, and (c) behavioural observations. Behavioural observations served to confirm the results obtained through the brief functional assessment.

The preliminary screening process helped to determine (a) the eligibility of the family for participation, (b) whether Min-seo’s problem behaviour warranted the need for an intensive intervention, and (c) whether Min-seo’s parents and Min-seo engaged in a four-step escape-driven coercive interaction. Information gathered from the preliminary screening process was later incorporated into the comprehensive assessment.

Baseline. During the baseline phase, child-related dependent variables (the percentages of intervals of problem behaviour and of steps successfully completed) were measured across the
targeted routines at the family’s home before the comprehensive assessment and plan design procedures began. In conformance with the multiple baseline design, videotaped observations of the independent play and sibling play routines were conducted. During an observation, Min-seo’s mother was asked first to read a one-page summary of the operational definition of each envisioned routine, and then to implement that envisioned routine with Min-seo. Observations were conducted in each routine until graphed data indicated that the child problem behaviour was either stable or increasing. In addition, the FQOL (Park et al., 2003) and the PSI (Abidin, 1995) were administered to Min-seo’s parents to assess the family’s quality of life and level of parenting stress.

**Intervention.** I began the intervention phase by conducting a comprehensive assessment with Min-seo’s mother. This assessment consisted of completing a functional assessment and a family ecology assessments, which were initiated during the preliminary screening phase, and a family cultural assessment. After completing the comprehensive assessment, Min-seo’s mother and I collaborated in the design of an ecological, family-centered, culturally appropriate PBS plan (i.e., the independent variable) for the independent play routine. In addition, learning style assessments of Min-seo based on knowledge of other professionals (i.e., OT, SLP) working with Min-seo also were used to help build a precise PBS plan that matched Min-seo’s learning style. This chapter also presents the procedures involved in constructing the PBS plan for Min-seo. Throughout the implementation process for the independent routine, Min-seo’s mother and I acted together as co-interventionist. Intervention procedures were implemented in conformance with the multiple baseline design. These procedures are described below.
Comprehensive assessment. The comprehensive assessment included four assessment activities: (a) family ecology assessment; (b) cultural assessment; (c) functional assessment; and (d) learning style assessment. These are described below.

Family ecology assessment. The family ecology assessment interview protocol adapted by Lucyshyn, Kayser et al. (2002) was used (see Appendix N) to gather information about the family’s strengths, sources of stress, resources, social support, and goals (see Table 2.7). This assessment was conducted in Korean in the family’s home, at a time that was convenient for the family, and took approximately one hour to complete. The resulting information, along with the parent’s earlier description during the preliminary screening process (see Appendix E) of valued home routines that were unsuccessful due to their child’s problem behaviour, was then used to develop a contextually appropriate PBS plan.
### Table 2.7

**Family Ecology Assessment Results**

<table>
<thead>
<tr>
<th>Categories</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Family strengths</strong></td>
<td>• Family is cohesive and all family members enjoy being together (i.e., strong family bonds)&lt;br&gt;• All family members are loving and caring, especially the older sister, who takes care of her younger siblings.&lt;br&gt;• Min-seo’s mother and father are supportive of her special needs, especially her father, who loves all of his children very much.</td>
</tr>
<tr>
<td><strong>Child positive contributions</strong></td>
<td>• Min-seo loves people and has abundant “jeong” (a Korean term for the kind of love that includes affection, compassion, sympathy, appreciation of community, attachment, etc., and is very important to Korean people and in their culture).&lt;br&gt;• She has broadened the family’s notions of how children learn and how each child has different needs.&lt;br&gt;• She has caused all her family members to be more open and accepting of people with disabilities.</td>
</tr>
<tr>
<td><strong>Resources</strong></td>
<td>• Min-seo gets one-to-one support at her elementary school.&lt;br&gt;• She has access to a physical therapist, occupational therapists, and a speech pathologist.&lt;br&gt;• She and her family go to church every Sunday.&lt;br&gt;• Min-seo mother’s parents help Min-seo’s parents by taking care of their children.</td>
</tr>
<tr>
<td><strong>Stressors</strong></td>
<td>• Behavioural issues: Min-seo’s problematic behaviour across all contexts (home, school, and community) puts pressure on her parents as they struggle to resolve each situation.&lt;br&gt;• Family strain: everyone in the family is very tired because of constantly having to ensure Min-seo’s safety and meeting her needs.&lt;br&gt;• Social isolation: the family feels isolated due to the community stigma associated with Min-seo’s behaviour and diagnosis.&lt;br&gt;• Change of life style: the family can no longer go out (e.g., to restaurants or movies) due to Min-seo’s behaviour, so they stay home.&lt;br&gt;• Sibling issues: both sisters are stressed by how they are teased about Min-seo’s special needs and by relative lack of attention they receive from their parents as a result of their sister’s special needs.</td>
</tr>
</tbody>
</table>
### Categories | Responses
--- | ---
**Goals**  
**Child-centered goals:**  
• For Min-seo to be able to communicate with others.  
• For Min-seo to be able to live a typical, independent life (i.e., go to school, have a friend, eventually get a job, etc.).

**Parent-centered goals:**  
• For Min-seo’s mother to be able to use her training to volunteer/work at kindergarten.  
• For Min-seo’s mother to be able to take a special education course so she can learn more about her daughter.  
• For both parents to have more time to themselves to pursue their own interests.

**Family-centered goals:**  
• To be able to go places (e.g., out for dinner, to friends’ homes, to community events).  
• To be able to make a lengthy trip and take extended holidays (especially to visit Korea).

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**Cultural assessment.** The cultural assessment tool developed by Chen et al. (2002; see Appendix O) was used. This tool provides questions in three areas: (a) planning, (b) family assessment, and (c) self-evaluation. To answer the planning questions and thus gain an understanding of the family’s communicative and interaction style, I conducted informal observations of the family in their home. All observation procedures were conducted as unobtrusively as possible. The family assessment involved a semi-structured interview with Min-seo’s mother. The purpose was to gather information relevant to the family’s resources, practices, beliefs, and perspectives. This interview took an hour and was conducted in Korean in the home at a time that was convenient for the family. The self-evaluation segment of the cultural assessment comprised questions that guided reflections on my experiences with the family. These reflections helped me to adapt my approach to service provision so that it was as culturally responsive to the family’s needs as possible, which in turn strengthened my
partnership with the family for the PBS process. This self-evaluative process is ongoing, with the results of each reflection continually informing my practice with the family. The cultural assessment process began during the intervention phase and will continue throughout the study.

*Functional assessment.* The full functional assessment interview (FAI) and functional assessment observation protocols (FAO; see Appendix P) developed by O’Neill et al. (1997) were conducted with Min-seo’s mother in the family’s home. The FAI was completed in approximately 90 minutes. In addition to the questions contained in the FAI, I included one additional question aimed at identifying coercive patterns of interaction that may present within the target routines: What does Min-seo do after her mother withdraws a request/demand? After completing the interview, Min-seo’s mother and I collaboratively analyzed the FAI information to develop hypotheses about the functions of Min-seo’s problem behaviour.

Three setting events were identified that set the stage for but did not directly trigger Min-seo’s problem behaviour: (a) a lack of sleep (often a problem whenever Min-seo got less than 10 hours of sleep the night before or did not take her melatonin medication); (b) side effects (blurred visions, headache, tiredness, etc.) from the two different seizure medications which Min-seo is taking; and (c) fatigue (often present when she returns from school). If one or more of these setting events is present before or during a target routine, it is more likely that an immediate antecedent event might trigger Min-seo’s problem behaviour.

Several antecedent events were identified that directly triggered Min-seo’s problem behaviour during the independent play and sibling play routines, including the following: (a) Min-seo’s mother presenting a non-preferred request/demand (e.g., “Go and play with your sister,” “Go back to the living room”); (b) Ji-woo physically assisting Min-seo to complete a desired task (e.g., guiding her to the table to sit, guiding her to the living room); and (c) Ji-woo
leaving the room while Min-seo is doing independent activities, or another family member providing her with no attention for 2 minutes or longer (e.g., her mother talking to her younger sister, or her younger sister playing independently).

In regard to consequences, Ji-woo reported that she often responded to Min-seo’s problem behaviour by (a) withdrawing the non-preferred demand/request, (b) giving Min-seo her desired food or preferred choice, and/or (c) providing Min-seo with attention by physically cuddling or verbally comforting her in soothing tones and/or by reprimanding her not to engage in problem behaviour (e.g., pulling her sister’s hair).

Two hypotheses emerged as a result of this functional assessment information: Min-seo engaged in problem behaviours (a) to escape and/or avoid non-preferred demands/requests and situations that arose during the independent and sibling play routines, and (b) to get attention from other family members when she has been left alone during the independent and sibling play routines.

*Learning style assessment.* A learning style assessment was completed to assist in developing a behavior support plan that was technically sound and culturally appropriate (Lucyshyn et al., 2014). The assessment was comprised of 10 features of an instructional arrangement (see Appendix Q). Respondents were asked to describe their understanding of the child’s learning style for each of the 10 items. Information about Min-seo’s learning style was gained by way of interview with three knowledgeable sources: the occupational therapist, speech language pathologist, and SEA that worked with Min-seo. The learning style assessments were conducted with Min-seo’s SEAs in the school at a time that was convenient for the school team, and took approximately 1.5 hours to complete. Also, Min-seo’s occupational therapist and speech language pathologist answered some of questions from the learning style assessments via
emails due to their preference for emails. Information gathered from three experienced and insightful sources was summarized into the results of the learning style assessments (see Table 2.8).
Table 2.8

*Results of Learning Style Assessments*

<table>
<thead>
<tr>
<th>Features</th>
<th>Responses</th>
</tr>
</thead>
</table>
| Quality of tasks or activities  | • **Inherently reinforcing properties:** Min-seo learns best when she is presented with tasks and activities that are inherently reinforcing; that is, tasks or activities that have features she likes, or ones that achieve an outcome that she recognizes and values. These include (1) using a book that produces sounds, (2) using tactile materials while listening to a story, (3) performing tasks with a particular student or teacher whom she feels a rapport with, and (4) using a stamp to put her name on a piece of paper. She is likely to remain attentive and engaged during such cooperative learning arrangements.  
  • **Functional, meaningful outcomes:** Min-seo also learns best when tasks and activities seem functional and useful to her or lead to meaningful outcomes. These include (1) life skill tasks such as delivering books to the library or cleaning up after eating a snack, (2) fine motor-skills tasks such as using a zipper to open and close her snack bag, and (3) art projects that she takes home and shows to her mother.  
  • **Preference because of positive effects on self** (e.g., sensory stimulation, relief of anxiety): (1) accordion pipes that make sounds when she stretches them (2) noise-making toys. |
| Pacing of instruction           | • Min-seo does better with a slower pace and with pauses to help her understand what is being said and read. For example, when teaching colouring, the teacher gives Min-seo a short, simple instruction (e.g., “Colour.”) and then gives her 10 seconds to respond to the instruction. Min-seo benefits from many repetitions of an instruction. |
| Task sequencing                 | • Min-seo does better when 2-3 tasks are presented at the table.                                                                                                                                           |
| Predictability related to learning context (s) and/or task(s) | • Using the verbal instruction “first and then” with signing when there are changes in her daily routines, including in the sequence of familiar activities  
  • Using the verbal instruction “first and then” with signing to let her know how much work she has to do before she gets to do a preferred activity or has a break  
  • Asking Min-seo “yes or no” questions to discover what she wants to earn after completing an agreed-upon amount of work |
<table>
<thead>
<tr>
<th>Features</th>
<th>Responses</th>
</tr>
</thead>
</table>
| Choice-making opportunities      | • A choice of location: e.g., Do you want to go to the library or the playground?  
• A choice of materials: e.g., Do you want to use blue or green markers, or a marker or a crayon?  
• A choice of who to work with, e.g., Do you want to work with an adult or a fellow student?  
• A choice of task sequence, e.g., Do you want to do cutting or coloring first? |
| Types of prompts that are helpful | • Min-seo learns best with physical prompts, especially when they come from behind her and near her elbow  
• She learns best when she is presented with 3D objects and 2D pictures together |
| Types of praise                   | • Min-seo thrives on positive attention from adults, especially acquaintances.  
When teachers deliver sincere praise contingent on cooperation, task engagement, and improvement in task participation or completion, Min-seo is more likely to be cooperative and positively engaged. Min-seo also enjoys praise from her peers. |
| Style of correction procedures    | • When Min-seo is not paying attention to her task, teachers use a prompt combination of pointing to the task and tapping on her desk |
| Facilitating transition          | • Teachers use the verbal instruction of “first and then” with signing |
| Effective deceleration strategies for problem behavior | • Min-seo’s pulling of her own or other people’s hair has decreased.  
Teachers take her for a walk when she shows the signs that she is tired and in need of break |

**Development of behaviour support plan.** The comprehensive assessment information was used to develop a contextually/culturally appropriate and technically sound PBS plan for the first target routine (see Appendix R for the full version of the plan for the independent play routine). The comprehensive assessment information will be used again to develop a PBS plan
for the sibling play routine when the independent play routine has entered the maintenance support phase. Min-seo’s mother collaborated in developing the support plan for the independent play routine. First, she helped to build summary statements and competing behaviour pathways diagrams for each function of Min-seo’s problem behaviour (see Figure 2.1 for the competing pathways diagram of the independent play routine). These diagrams guided the design of a technically sound behaviour plan for the independent play routine that aimed to make problem behaviours irrelevant, ineffective, and inefficient at achieving their purpose (O'Neill et al., 1997).
**Figure 2.1** Competing behaviours pathway diagram for the independent play routine

<table>
<thead>
<tr>
<th>Setting Event(s)</th>
<th>Antecedent Trigger(s)</th>
<th>Problem Behaviour(s)</th>
<th>Maintaining Consequence(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Min-seo has not had enough sleep</td>
<td>Mother asks Min-seo to do a non-preferred task</td>
<td>Negative vocalizations (i.e., whines, says “anniya”, cries, etc.)</td>
<td>Mother withdraws the request/ demand (functions as escape)</td>
</tr>
<tr>
<td>Her seizure medications have negative side-effects</td>
<td>Mother asks Min-seo to go back to the living room to play</td>
<td>Physically aggressive (e.g., pulls her mother’s hair or glasses)</td>
<td>Mother provides cuddling or reprimands (functions as attention)</td>
</tr>
<tr>
<td>She is tired from school</td>
<td>Mother leaves the room while Min-seo is doing independent activities</td>
<td>Dangerous behaviour (e.g., pulls her own hair)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Min-seo is alone in living room (no attention)</td>
<td>Physically resistant (i.e., won’t stand up)</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leaves an assigned area (e.g., walks to the kitchen to find mother)</td>
<td></td>
</tr>
</tbody>
</table>

Desired Behaviour

- Min-seo comes to living room when called
- Plays with her toys independently

Maintaining Consequence

- Min-seo receives positive attention and verbal praise
- She is given access to preferred food

Alternative Replacement Behaviour

- Min-seo asks for help or a break (escape)
- Min-seo asks her mom for attention
After the mother contributed to the construction of the pathway diagrams, for each feature of the problem in the competing behaviours pathways diagrams for the independent play routine (i.e., setting events, antecedents, problem behaviour, maintaining consequences) she helped generate a logically-linked behaviour support strategy. See Table 2.9 for a summary of the behaviour support strategies chosen for the independent play routine.
<table>
<thead>
<tr>
<th>Setting Event Strategies</th>
<th>Preventative Strategies</th>
<th>Teaching Strategies</th>
<th>Consequence Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reduce task demands if Min-seo is tired from school or had inadequate sleep the previous night</td>
<td>1. Use visual supports (&quot;first and then&quot;) to help Min-seo predict tasks, sequences, rewards, and transitions, and to promote expected behaviours (i.e., “nice hands” “sit nice”)</td>
<td>1. Teach Min-seo to play with simple toys independently</td>
<td>1. Provide praise and preferred food contingent on successful completion of play activities</td>
</tr>
<tr>
<td>2. Provide Min-seo with interesting, fun, and modified age-appropriate toys</td>
<td>2. Offer choices from among non-preferred activities</td>
<td>2. Teach Min-seo to use a functional/alternative communication tool (proloquo2go) to ask appropriately for mom (for help, a break, and/or attention)</td>
<td>2. Honour the use of the alternative communication tool to ask for mom as to ask for a break/ more time.</td>
</tr>
<tr>
<td></td>
<td>3. Provide non-contingent attention (check in every 2-4 minutes)</td>
<td>3. Teach Min-seo to understand visual supports to allow her to self-manage tasks and choose expected behaviour</td>
<td>3. Actively ignore and redirect to task in response to the occurrence of problem behaviour</td>
</tr>
<tr>
<td></td>
<td>4. Use a safety signal</td>
<td></td>
<td>4. Engage in de-escalation procedures and redirect Min-seo to her task</td>
</tr>
<tr>
<td></td>
<td>5. Provide Min-seo with verbal pre-corrects before leaving the room</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Min-seo’s mother and I then collaborated on the third step in developing the support plan for the independent play routine, reviewing ecology information to ensure that the support strategies were not only technically sound but also contextually and culturally appropriate given the family’s values, beliefs, and practices. Lucyshyn, Kayser, et al. (2002) suggested that gathering information about the elements of family activity settings (e.g., time and place, resources, tasks) and the larger ecology of the family (e.g., family strengths, social supports, stressors) may contribute to the design of a contextually appropriate PBS plan. Table 2.10 summarizes the contextual and cultural fit considerations that were discussed collaboratively with Min-seo’s family.
### Table 2.10

**Contextual and Cultural Fit Considerations**

<table>
<thead>
<tr>
<th>Family or Child Goal</th>
<th>Contextual Fit Consideration</th>
<th>Cultural Fit Considerations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Promote positive spousal interaction</strong></td>
<td>• Min-seo’s mother and father reported increasing relationship strain and decreasing time together due to Min-seo’s problem behaviour. The research team promoted positive, reciprocal interactions between the mother and father, and all information was presented to both parents to avoid the added stress of one parent having to relay information to the other.</td>
<td>• Min-seo’s mother and father listed as strengths their close family bonds and their capacity to love, support, and show affection to one another in difficult times. To provide support to the mother in parenting training sessions, these strengths were drawn on in the routines developed, thereby minimizing relationship strain.</td>
</tr>
<tr>
<td><strong>Establish equality between Min-seo and younger sister</strong></td>
<td>• Min-seo’s mother felt that sometimes her youngest daughter received less attention than she wanted to give her, due to Min-seo’s daily needs. The research team has therefore created PBS strategies that promote fairness within the independent and sibling play routines.</td>
<td>• Min-seo’s mother and father listed equality between all of the family members, happiness, politeness, and respect as core cultural values. These values set the tone for the intervention in each routine, and is particularly important in the sibling play routine.</td>
</tr>
<tr>
<td><strong>Behaviour support for non-target problematic family routines</strong></td>
<td>• Sleeping issues have a significant impact on both parents’ stress levels and ability to function; therefore, the research team will offer behaviour support in the bedtime routine once the independent play routine is in the maintenance phase of the research project. This support will occur when it can be offered without compromising the integrity of the research design.</td>
<td>• It is typical for Asian families that some young children fall asleep and co-sleep with their parents. In this family, Min-seo and her younger sister were both sleeping with their parents. However, this arrangement caused the parents to be woken periodically throughout the night and to get less sleep overall than they would like. This cultural practice will be taken into consideration when offering behaviour support in the bedtime routine.</td>
</tr>
</tbody>
</table>
Also involving Min-seo’s mother, the fourth step in developing the PBS plan was the task of condensing the strategies listed in the behaviour support plan for the independent play routine into a one- or two-page implementation checklist (see Appendix S). The implementation checklist for the sibling play routine will be written as well, once the family and I develop the behaviour support plan for that routine. Min-seo’s mother used the implementation checklist for the independent play routine and she will use checklists for both routines throughout the intervention phase as self-monitoring and self-management tools to promote implementation fidelity during the interventionist training with child and parent, and maintenance support sub-phases of the intervention phase, and during the follow-up phase.

Following the design of the behaviour support plan and implementation checklist for the independent play routine, an implementation plan was designed in collaboration with Min-seo’s mother. The implementation plan defined (a) the training materials and support activities that were used to empower Min-seo’s mother to effectively implement behaviour support strategies, (b) roles and responsibilities, and (c) a timeline for completing the support process. See Table 2.11 for a summary of the implementation plan.
Table 2.11

*Summary of the Implementation Plan*

<table>
<thead>
<tr>
<th>Plan Section</th>
<th>Description</th>
</tr>
</thead>
</table>
| Training and support activities | • Written positive behaviour support plan  
  • Development of training materials (making visual supports, a visual schedule, and an expected-behaviour visual; preparing proloquo2go for use; modifying age-appropriate toys)  
  • Creation of implementation checklist  
  • Direct intervention training of Min-seo, provided by the student researcher  
  • Parent training (e.g., coaching and modeling of interventions, instructions, feedback, role-playing)  
  • Team meeting to review progress, practice intervention strategies, and problem-solve |
| Roles and responsibilities    | • Min-seo’s mother: primary responsibility for implementing the behaviour support plan  
  • Min-seo’s father: emotional and psychological support for both his wife and his daughter.  
  • Student researcher: responsibility for intensive interventionist training, implementation support for Min-seo’s mother, coordination of support activities, review of all data; implementation of changes (through consultation with family)  
  • Principal investigator: responsibility for attending team meetings and advising as necessary |
| Timeline                      | • Six months of training and support  
  • Four months of maintenance support |
Implementation support. During the implementation support phase, the training and support activities of the implementation plan were initiated. Two sub-phases of implementation support were implemented in the first routine, independent play: (a) intensive interventionist training with child (IITC), and (b) interventionist training with child and parent (ITCP). A third sub-phase of implementation, maintenance support, will be implemented after the child and parent achieve criteria for successful completion of the first routine. These sub-phases of implementation support are described below.

Intensive interventionist training with child (IITC). During the intensive interventionist training (IITC) sub-phase for the independent play routine, I served as the interventionist and implemented the strategies of the behaviour support plan with Min-seo. The purpose of my taking the lead in implementing the behaviour support strategies with Min-seo was to establish stimulus control in the independent play routine before transferring that control to Min-seo’s mother. Prior to beginning IITC, I purchased and developed materials necessary for the implementation of the PBS plan for this routine (i.e., visual supports, reinforcers, and age-appropriate toys). IITC sessions for the independent routine occurred three to four times a week for a total of 10 sessions. Each session lasted between 15 minutes to 45 minutes, with an average length of 25 minutes. The lengthy intensive training was due to three factors: (a) our initial difficulty in finding a strong enough reinforcer to motivate Min-seo; (b) a holiday interruption (between December and January) in intervention; and (c) a health-issue interruption in intervention due to Min-seo being ill. After identifying two powerful reinforcers (pizza and grapes), stimulus control was quickly established in the independent play routine. However, because of Min-seo’s severe intellectual disability, many repetitions of physical and model prompts were required to teach her how to independently play with her modified age-appropriate
toys while her mother was busy in an adjacent room. Given this, the team decided to continue intensive interventionist training while simultaneously beginning initial training with the mother as interventionist as well.

*Interventionist training with child and parent (ITCP).* During the interventionist training with child and parent (ITCP) sub-phase, I continued to provide direct training and support to Min-seo in the independent play routine while concurrently beginning parent training in the routine. I provided Min-seo’s mother with a written behaviour support plan for the independent play routine and a routine-specific implementation checklist. The checklist was comprised of a bulleted list of behaviour-support strategies and a rating scale for Min-seo’s mother to self-evaluate her level of implementation. To date, five ITCP sessions have been completed.

I began the process of transferring stimulus control to Min-seo’s mother by gradually fading her participation into the independent play routine. Min-seo’s mother was initially involved only in the delivery of the reinforcer to Min-seo upon her successful attempts to comply to my prompts and finish each play activity. When Min-seo consistently accepted the delivery of reinforcers from her mother, her mother began to present intermittent requests to Min-seo by asking her at the start of the routine to choose the play activities from a menu of choices. Min-seo’s mother also began to provide non-contingent reinforcement by checking in once every minute while Min-seo was receiving instruction from me to engage in independent play. As Min-seo began to engage in the steps of the independent play routine without my assistance, I began to gradually decrease my instruction and support to Min-seo and her mother began to gradually increase her instruction and support to Min-seo. When Min-seo demonstrates the ability to engage in each play activity within the independent play routine without my prompts or
presence, Min-seo’s mother will implement the routine and support Min-seo’s participation exclusively.

Training activities during ITCP in the independent play routine included: (a) modeling interventions for Min-seo’s mother; (b) coaching Min-seo’s mother by providing prompts, feedback, and social reinforcement (e.g., giving her a thumbs-up) when she was actively engaged in the target routine with Min-seo; (c) teaching Min-seo’s mother to use the implementation checklist to self-monitor and self-manage implementation; and (d) role playing problematic scenarios arising in the routine. Once Min-seo’s mother implements the routine exclusively, the team will hold weekly home meetings with family members to review progress, acknowledge successes, role-play specific support strategies, and discuss and solve problems related to implementation fidelity or intervention effectiveness.

**Maintenance support sub-phase.** After stable and meaningful improvements in Min-seo’s behaviour and routine participation have been observed, and Min-seo’s mother is the sole support to Min-seo in the routine, the independent play routine will enter the maintenance support sub-phase of implementation. At the same time, the sibling play routine will enter the intensive interventionist training with child sub-phase. The focus during the maintenance sub-phase is to empower the parent to become self-sufficient in using the support strategies, thus preventing a relapse into the previous coercive process. I will provide maintenance support to the family approximately once every two to three weeks for about an hour, during which time I will employ the following tools: (a) a revised implementation checklist containing only the core strategies necessary to maintain improvements in Min-seo’s behaviour and routine participation; (b) a coercive-process assessment to identify any recurrence of coercive processes in the target routines; and (c) a relapse-prevention plan, which will identify obstacles to maintenance that
could lead to regression, and which will help Min-seo’s parents continue to support Min-seo effectively, thus building resilience to future setbacks. In my absence, the parents will be encouraged to utilize these tools at least once a week to facilitate maintenance.
Chapter 3. Results

Results involving multiple dependent variables were used to investigate the following questions: (a) was there an association between implementation of the ecological, family-centered, culturally responsive PBS approach and socially significant improvements in child problem behaviour and participation in two valued family routines; (b) did the family view the approach to be socially valid; (c) did the family view the behaviour support plan to fit well with their ecology and culture; and (d) was the implementation of the intervention associated with improvements in family functioning?

During the study, five of eight dependent variables were examined: (a) the percentage of intervals of problem behaviour; (b) the percentage of steps successfully completed in the routine; (c) the average rating of the social validity of the family-centered PBS approach; (d) the average index of the behaviour support plan’s contextual and cultural fit; and (e) family functioning ratings from the Family Quality of Life Survey (FQOL; Park et al., 2003) and Parenting Stress Index (PSI; Abidin, 1995).

Multiple Baseline Design Results

A quasi-experimental, multiple baseline design across two family routines was used to examine whether implementation of the ecological, family-centered, culturally responsive PBS intervention led to socially significant changes in child problem behaviour and in participation in the target routines. Measures of child problem behaviour and steps completed were analyzed using visual analysis procedures (Horner et al., 2005; Kennedy, 2005; Parsonson & Baer, 1986). Observation data for the percentages of intervals of problem behaviour and of steps successfully completed were graphed and visually analyzed. Visual analysis involved examination of the level, trend, and variability of the data points within and across the baseline and intervention
phases. The analysis of basic effects associated with implementation of the intervention involved visually analyzing the immediate change in the level of behaviour at the point of intervention for both target routines (i.e., the phase change between baseline and intervention). Socially significant improvement within the target routines was defined as (a) problem behaviour decreasing to low or near-zero levels (less than 10% of intervals), (b) routine steps successfully completed increasing to 80% or more of total steps in a target routine, (c) documentation of social validity as reported by the parent during the intervention phase, and (d) documentation of contextual/cultural fit as reported by the parent during the intervention phase.

Figure 3.1 presents a visual display of the results obtained in the two target routines of independent and sibling play across the baseline and intervention phases, as represented by (a) the percentage of intervals of child problem behaviour, and (b) the percentage of steps successfully completed. The intervention phase for the independent play routine was divided into intensive interventionist training with child (IITC), and interventionist training with child and parent (ITCP). During IITC, I implemented the behaviour support plan with Min-seo in the independent play routine. During ITCP, in addition to implementing the behaviour support plan with Min-seo, I also began to teach Min-seo’s mother in vivo to implement the behaviour support plan with Min-seo, gradually transferring stimulus control of the steps in the routine to Ji-woo.
Figure 3.1 Percentage of intervals of problem behaviour and percentage of steps completed in the independent and sibling play routines. Note: IITC = Intensive Interventionist Training with Child; ITCP = Interventionist Training with Child and Parent.
Percentage of intervals of child problem behaviour. Figure 3.1 shows the percentage of intervals of child problem behaviour across the baseline and intervention phases within the independent play routine and in the baseline phase within the sibling play routine.

Independent play routine. Baseline data for percentage of intervals of child problem behaviour in the independent play routine show the percentage of intervals to be high but with a moderate decreasing trend over the first three sessions at an average of 54%. However, as baseline observation sessions continued, the stability of the data were reestablished over the final two sessions such that a slight increasing trend was apparent prior to introduction of the intervention phase. Overall, the average percentage of intervals of child problem behaviour during baseline in the independent play routine was 57% (range, 43% – 73%).

Marked improvement in child problem behaviour was evidenced following preliminary implementation of the intervention phase. The average percentage of intervals of problem behaviour decreased to 3.6% (range, 2.8% – 4.7%) during the ITCP sub-phase in which parent training in the independent play routine was initiated concurrent with the continuation of intensive interventionist training with Min-seo.

Sibling-play routine. Baseline data for intervals of child problem behaviour in the sibling-play routine show high yet somewhat variable level over the first three sessions, with an average of 64%. Baseline observations continued in this routine until stability of these data were established, with the final two observation sessions showing a slight increasing trend. Overall, the average percentage of intervals of child problem behaviour during baseline within the sibling play routine was 62% (range, 40% – 79%). Intervention data for child problem behaviour within the sibling-play routine has not yet been collected since the intervention phase in independent play routine was still in progress at the time of this writing.
**Percentage of steps successfully completed.** Figure 3.1 also displays the percentage of steps successfully completed by Min-seo in the independent and sibling-play routines.

*Independent play routine.* The baseline level of steps successfully completed by Min-seo was low and relatively stable, with a slightly increasing trend apparent toward the end of the baseline phase. Given this trend, the Principal Investigator and I sought further verification. However, due to a request from Min-seo’s parents to end the baseline phase, baseline observations were discontinued. In total, the average percentage of steps successfully completed by Min-seo during baseline within the independent play routine was 3% (range, 0% – 8.1%).

Preliminary intervention data show robust improvement in steps successfully completed by Min-seo. Average percentage of steps successfully completed increased to 100% during ITCP, in which I continued to provide intensive training to Min-seo while concurrently conducting *in vivo* parent training with Ji-woo.

*Sibling-play routine.* The baseline level of steps successfully completed by Min-seo in the sibling-play routine was low and relatively stable. The average percentage of steps successfully completed by Min-seo during baseline within the sibling play routine was 0.0%. Intervention data for steps successfully completed within the sibling-play routine has not been collected since the intervention phase of the independent play routine is still ongoing at the time of this writing.

**Social validity of behaviour support approach.** A social validity questionnaire was administered to Min-seo’s mother once during the intervention phase for the independent play routine. The questionnaire will be administered again at the end of the intervention phase in the independent play routine. During the intervention phase for the sibling-play routine, the social validity questionnaire will be administered twice. Results to date indicate that Min-seo’s mother
perceived the goals, procedures, and outcomes of the culturally responsive, family-centered PBS approach to be important and acceptable to her child and family. The average rating of social validity during the intervention phase for the independent play routine was 5.00 (1= disagree; 5= agree). In the comments section of the questionnaire, Min-seo’s mother added the following statements:

“My child couldn’t play on her [own] and I am hoping that this plan will help my child to play independently and cooperatively with others”;
“I don’t think it [strategies] will be difficult to carry out in the house but it will need to patience to keep it up”;
“My child can [has] learn[ed] a lot more than just playing independently”;
“[training activities] were very well organized and easy to follow”;
“the support effort didn’t cause any unanticipated problem in our family”; and
“[the person providing support is] always willing to help.”

**Contextual and cultural fit ratings.** Min-seo’s mother completed a contextual/cultural fit evaluation once during the intervention phase for the independent play routine. Ji-woo will complete another evaluation at the end of intervention in the independent play routine. During intervention in the sibling play routine, Ji-woo will complete the contextual/cultural fit evaluation twice. The average rating of contextual/cultural fit reported during the intervention phase for the independent play routine was 4.8 (1= little; 5=a lot).

**Family functioning ratings.** Family functioning was measured using two family assessment instruments: (a) the FQOL (Park et al., 2003), and (b) the PSI (Abidin, 1995). The assessment instruments were administered to Min-seo’s mother once during the baseline phase.
**Family Quality of Life Survey (FQOL).** The FQOL assessment instrument was administered to Ji-woo once during the baseline phase. The FQOL will be administered again at the end of the maintenance sub-phase of intervention and during the follow-up phase. Ratings are made within five domains (i.e., family interaction, parenting, emotional well-being, physical and material well-being, and disability-related support), where satisfaction scores range from 1 (very dissatisfied) to 5 (very satisfied). A total score represents an average index of family quality of life across the five domains. Results during the baseline phase show an overall score of 4, indicating that the mother was satisfied with her family’s quality of life. Table 3.1 displays the average ratings of family quality of life according to Min-seo’s mother during the baseline phase.

Table 3.1

<table>
<thead>
<tr>
<th>Family Quality of Life survey domain</th>
<th>Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family interaction</td>
<td>4</td>
</tr>
<tr>
<td>Parenting</td>
<td>4</td>
</tr>
<tr>
<td>Emotional well-being</td>
<td>4</td>
</tr>
<tr>
<td>Physical and material well-being</td>
<td>4</td>
</tr>
<tr>
<td>Disability-related support</td>
<td>4</td>
</tr>
<tr>
<td>Total score</td>
<td>4</td>
</tr>
</tbody>
</table>

**Parenting Stress Index Short Form (PSI-SF).** PSI-SF was administered to Min-seo’s mother during the baseline phase to measure her level of stress directly associated with the parenting role. This measure will be administered again at the end of the intervention phase and during the follow-up phase. The PSI-SF consists of 36 statements. Ratings are assessed on three
subscales (parental distress, parent-child dysfunctional interaction, and difficult child) in addition to a total stress score that represents an average index of parenting stress across the three subscales. The total parenting stress score for Min-seo’s mother was 106. Parents who obtain a Total Stress score above a raw score of 90 are considered to be experiencing clinically significant parenting stress. Overall, this result indicates that prior to intervention, Min-seo’s mother experienced clinically high levels of stress. Table 3.2 displays the average rating of parenting stress for Min-seo’s mother.

Table 3.2

*Parent Stress Index Ratings*

<table>
<thead>
<tr>
<th>Parenting stress subscale</th>
<th>Baseline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parental distress</td>
<td>33</td>
</tr>
<tr>
<td>Parent-child dysfunctional interaction</td>
<td>33</td>
</tr>
<tr>
<td>Difficult child</td>
<td>40</td>
</tr>
<tr>
<td>Total stress score</td>
<td>106</td>
</tr>
</tbody>
</table>
Chapter 4. Discussion

The present study is based on the research of Lucyshyn et al. (2014) and Chinn (2012). The study focused on the use of an ecological, family-centered, culturally responsive PBS approach to assessment and intervention with a family of Korean heritage raising a child with an intellectual disability who engaged in problem behaviour in the home. The approach is based upon the ecological construct of coercive processes in family routines. The construct integrates child behaviour, parent-child interaction, and family activity settings into an ecological unit of analysis that is designed to generate necessary and sufficient knowledge for the design of survivable interventions that transforms coercive parent-child relationships into constructive relationships within the context of valued family routines. The study posed 10 questions (see page 30) that sought to examine the extent to which implementation of the approach was associated with: (a) improvements in child behaviour and participation in two target family routines; (b) maintenance of improvements over time; (c) transformation of coercive processes into constructive processes in target routines; (d) improvements in family functioning; (e) high levels of social validity; and (f) high levels of contextual/cultural fit.

Due to professional requirements to graduate by May 2014, the study was not completed. Baseline data and preliminary intervention data were gathered in one target routine and preliminary baseline data were gathered in the second routine. Following my thesis defense, I will continue to implement the study under the supervision of the Principal Investigator, Dr. Lucyshyn. Given these preliminary results, only four of the 10 research questions can be addressed in the discussion, and only partly so. These questions are listed below:

1. Is there a basic effect between implementation of the ecological, family-centered, culturally responsive PBS approach and: (a) a decrease in the percentage of intervals of
child problem behaviour, and (b) an increase in percentage of steps successfully completed in two valued family routines?

2. Is the ecological, family-centered, culturally responsive PBS approach socially valid from the parent's point of view?

3. Does the parent view the child’s behaviour support plan as possessing a good contextual fit with the family's ecology?

4. Is there an association between the implementation of the ecological, family-centered, culturally responsive PBS approach and meaningful improvements in family quality of life and decreases in parenting stress?

**Summary and Interpretation of Results**

In regard to the first research question, results from the quasi-experimental, multiple baseline design across two routines documented a basic effect in the first routine, independent play. During the baseline phase, Min-seo engaged in moderate to high levels of problem behaviour (M = 57% of intervals) and completed only a few steps of the target routine (M = 3% of steps). During the interventionist training with child and parent (ITCP) sub-phase, however, the level of child problem behaviour decreased substantially to an average of 3.6% of intervals, while the percentage of routine steps completed increased to an average of 100%. However, an abundance of caution is needed when interpreting these positive results in the independent play routine because across the four intervention observation sessions, I was still providing intensive training to the child while concurrently conducting parent training with Min-seo’s mother. The true measure of a basic effect will be seen when problem behaviour and routine steps completed maintain at these levels while Min-seo is receiving support only from her mother, and when she
is also able to play independently for up to 15 minutes (the targeted length of time) with minimal parental assistance.

In addition, because this study is not yet complete, documentation related to the second routine, sibling play, has not yet occurred. Intervention in the second routine will proceed after intervention in the first routine has been completed and has entered the maintenance sub-phase. Given these incomplete results, the extent to which the ecological, family centered, culturally responsive PBS approach was associated with meaningful improvements in child behaviour and routine participation remains a largely unanswered question.

In regard to the second research question, preliminary social validity results suggest that the goals, procedures, and outcomes of the ecological, family-centered, culturally responsive PBS intervention were important and acceptable to Min-seo’s mother (M = 5 on a 5-point Likert Scale).

In regard to the third research question, preliminary goodness-of-fit results indicate that Min-seo’s mother perceived the behaviour support plan to be contextually and culturally appropriate within the ecology and culture of the family (M = 4.8 on a 5-point Likert scale). These results suggest that Min-seo’s mother was comfortable implementing the behaviour-support strategies and viewed the behaviour-support plan as fitting well into the family’s home life, addressing family goals and values, building on family strengths, incorporating family resources, and diminishing family stressors.

However, caution is again necessary in the interpretation of these preliminary social validity and contextual/cultural fit measures. These results represent only one measurement of social validity and contextual/cultural fit in only one of two target routines. Additional measurements will be necessary to provide a better understanding of the social validity of the
support approach, the contextual/cultural fit of the behaviour support plans, and their use in the two target routines.

In regard to the fourth question, since only baseline data were gathered on family quality of life using the Family Quality of Life Survey (FQOL) and Parenting Stress Index - Short Form (PSI-SF), an interpretation of the relationship between the behaviour support approach and the family’s quality of life cannot be made. However preliminary baseline findings, in which Ji-woo rated FQOL as high (indicating a good level of family quality of life), but rated PSI-SF as high as well (indicating a high level of parenting stress) require interpretation. The discrepancy between the scores from the FQOL and PSI-SF may be understood as reflecting differences in the domains of family life that each instrument measures. FQOL, on the one hand, measures five broad domains of family quality of life: (a) family interaction; (b) parenting; (c) emotional well-being; (d) physical/material well-being; and (e) disability-related support. The PSI-SF, on the other hand, measures three domains focused on parenting stress: (a) parental distress; (b) parent-child dysfunctional interaction; and (c) difficulty child. Given this, the family’s good level of quality of life reflected by the FQOL may be attributed to overall positive relationships among family members, strong social support from extended family members, the overall health and financial security of the family, the safety of the neighborhood in which the family lived, and the quality of special education services that Min-seo received. The PSI-SF, in contrast, brought to light the stress that Ji-woo experienced in raising a child with a severe intellectual disability who was largely non-verbal and required chronic caregiving to meet her daily wants and needs.

**Contributions to the Literature**

Given that the ecological, family-centered, culturally responsive PBS approach was implemented in only one of two family routines and only preliminary intervention data have
been gathered in one routine, the study makes few contributions to the literature at this point in its conduct. However, the steps in the study have been implemented sufficiently to offer two preliminary contributions to the literature in regard to Korean culture and participation in a PBS study: (a) the influence of Korean families’ cultural values and beliefs during participant recruitment process; and (b) the influence of Korean family cultural values and beliefs during a process of assessment and intervention development and implementation process. These are discussed below.

**Influence of Korean cultural values and beliefs during recruitment process.** During the recruitment process, when I was contacting and screening Korean families for potential participation in the study, it became clear that traditional Korean cultural values and beliefs related to disability continued to influence Korean families living in Canada. Three influences were identified. First, although potential family candidates for the study were assured of confidentiality throughout the study and afterward (e.g., pseudonyms used on all documents, all data stored in locked file cabinets in a locked office in a secure building on UBC campus, all data destroyed after 5 years), some families remained reluctant to participate because another Korean (me) would nevertheless know their actual identities.

Second, some families that I contacted who were eligible to participate in the study could not do so because their child with a disability did not meet the original age criteria for study participation (i.e., children between the ages of 3 to 6). During the recruitment process, one Korean mother told me when that it would be difficult to find a young child for the study since Korean parents do not want to have their children diagnosed. She added that Korean children with disabilities are usually diagnosed only after their schoolteachers express concern about them. That conversation and the difficulty I had finding a young child participant appeared to
confirm research on Korean cultural beliefs about disability. Traditional explanations about the reason for disability caused many families to consider disability as a source of shame for the persons with disability and for their families (Kim & Kang, 2003). Thus before children reach school age, Korean families often deny that their children are acting unusually; at the same time, parents hope that their children will outgrow any problems once they go to school. Third, most Korean families are reluctant to seek professional help due to language barriers and the fear of that their children may be given a diagnosis that confirms what they prefer to deny. As a result of these cultural factors finding one eligible child and family for the study took more than eight months.

Influence of Korean cultural values and beliefs during assessment and intervention. During the study, Korean traditional family structures influenced the conduct of the assessment and intervention process. Kim (1997) described Korean traditional family structures. The father typically serves as the breadwinner, and the primary authority figure and decision-maker in the family. The mother is responsible for monitoring the family’s emotional well-being, raising and providing education for the children, and taking care of financial matters. During the study, only Min-seo’s mother participated during assessment activities (i.e., ecology, cultural, and functional assessments). Also, after selecting two potential routines with me, she asked to obtain her husband’s approval before proceeding. Min-seo’s mother was the only parent that participated in PBS plan development and in parent training activities. Min-seo’s father’s participation was in the form of providing emotional and psychological support to his wife and daughter. Although the father expressed an interest in learning the details of how the study was progressing, it was difficult for me to schedule meetings with him since he was working most of the time and was often travelling for work as well.
Korean cultural values and beliefs also affected the relationship between Min-seo’s mother and me. A display of respect towards authority figures is part of Korean culture (Park, Turnbull, & Park, 2001). Min-seo’s mother always referred to me as “teacher” instead of by my first name. Although I am younger than she is, she was showing respect by addressing me in this way. This behaviour appeared to endorse the view that Korean parents generally develop formal relationships with and display respect for professionals as experts or authorities (Park, 2012). Thus, Korean parents rarely disagree with suggestions from professionals, feeling that doing so is disrespectful. During the design of the behaviour support plan for the independent play routine, I had to be mindful of this self-censoring to ensure that the Ji-woo offered her authentic view about the contextual and cultural appropriateness of proposed plan strategies.

Such respectful behaviour from Koreans may also be understood as reflecting the influence of their collectivistic and Confucian cultural values. Markus and Kitayama (1991) argued that individualist cultures, including that which predominates in Canada, emphasize independence and autonomy by attending to self, the appreciation of one’s differences from others, and the importance of expressing self. In contrast, collectivistic cultures, including that which predominates in Korea, prioritize individuals’ close connections to family and others, the good of the larger community, respect and obedience, caring for others, fitting in, and harmonious interdependence. Also, Confucian cultural values emphasize obedience, harmony, and respect for authority figures (Clarke-Stewart et al., 2006). These two sets of cultural values affect Korean Canadian families in their efforts to achieve harmonious interpersonal relationships by holding them back from expressing thoughts that conflict with the views of professionals. Taken together, Korean cultural values and beliefs clearly influenced the
assessment and intervention process, and my approach to developing and maintaining positive relationships within Min-seo’s family.

Implications for Practice

Due to its incompleteness, the study offers few implications for practice in regard to the use of the activity setting as a unit of analysis, the transformation of coercive processes into constructive processes and the effect of the approach on family functioning. These implications await the completion of the study. However, given the steps in the ecological, family centered, culturally responsive PBS approach implemented so far, the study offers preliminary implications for infusing cultural sensitivity and responsiveness into the comprehensive assessment, plan design, and implementation support activities. Four implications may be considered: (a) use of a cultural assessment tool during comprehensive assessment; (b) use of an implementation checklist, and social validity and cultural fit questionnaires during intervention; (c) ways to overcome language barriers; and (d) considerations for developing a therapeutic alliance with Korean families. These implications are discussed below.

Use of cultural assessment tool during comprehensive assessment. During the study, I used the cultural assessment tool developed by Chen et al. (2002) to facilitate cultural responsiveness during a process of PBS with families of diverse cultural and linguistic backgrounds. One benefit that service providers may find in using this assessment tool with families is that it provides a means to reflect on and identify differences between the service provider and the family’s cultural values, beliefs, and attitudes. The cultural assessment tool fosters awareness of and a willingness to accept differences, and can guide interventionists toward developing cultural competence. Understanding differences in perspectives can increase empathy and inform the development of behaviour support plans that are a good fit with the
culture and ecology of the family. For example, based on information gained from the cultural assessment about Min-seo’s family’s structure and values, I did not push Min-seo’s father to participate during the assessment process. Instead, we waited until Min-seo’s mother had discussed the assessment and target routines with the father, and he had given his approval before I proceeded to building a behavior plan for the target routine. Showing my respect in this way for the family’s system in turn contributed to Min-seo’s father feeling respected by me. Over the course of the study, his willingness to be involved in the work increased. He began to attend meetings with me and Ji-woo, some of which were also attended by the Principal Investigator. Even though I share the family’s ethnic background and language, the cultural assessment tool was beneficial for me in that it helped me to reflect on my own views and personal beliefs. Consequently, Min-seo’s parents and I were better able to develop an acceptable and culturally appropriate PBS plan, whose design and implementation were facilitated by the trust and respect that developed between us.

**Use of implementation checklist and social validity and cultural fit evaluations.**

Arranging for parents to complete implementation checklists during plan implementation in target routines, and to periodically complete social validity and contextual fit questionnaires can help service providers to determine the extent to which service provision is responsive to the culture and ecology of the family. Furthermore, these three evaluation tools also assist therapists in understanding how parents are perceiving and carrying out the selected intervention strategies. This may be especially valuable when service providers are working with parents who have limited English proficiency. Given that these evaluations take a short amount of time for family members to complete (i.e., between 5 and 10 minutes for each evaluation) but provide useful
information that can improve the quality of plan design and training and support to the family, their use is feasible and potentially valuable to service providers.

**Ways to overcome language barriers.** While I was able to communicate with the study family in Korean, thus precluding language barriers, the assistance of a translator is crucial if the service provider does not speak the same language as the family. Ideally, qualified interpreters would be used, but if no such interpreters are available, parents should be encouraged to identify people in their community who might serve as translators. When working with a translator, however, service providers should consider the following elements: (a) because they may feel embarrassed or ashamed about disclosing certain information, family members (particularly children) should not be placed in the role of interpreting for their families (Arroyo, 1998); (b) interpreters do not necessarily understand the family’s culture merely because they are fluent in the family’s language (Arroyo, 1998); (c) some educational terminology is difficult to translate, and terms related to special education services are unfamiliar to most people in many cultures (e.g., explaining terms such as *positive behaviour support, antecedent, and consequence*, which have no Korean equivalent); (d) the interpreter should be introduced to PBS and its features and processes prior to doing translation work for the family and service provider; and (e) the interpreter must appreciate the importance of abiding by professional ethics, especially as they relate to protecting the family’s confidentiality. A family may have strong reservations about talking about private family issues when the interpreter is a stranger to them. In these circumstances, service providers must make sure that open communication is possible, that the family understands the service providers’ ethical duty to protect the family’s confidentiality, and the family as fully as possible understands the potential benefits of the interpreter service.
When there are language differences between immigrant parents and service providers, and service providers are unable to find an interpreter, alternatives may be explored. First, although the majority of Korean immigrants may speak little English, they can read English fairly well due to English requirements in Korean secondary schools. Service providers thus may provide written interview assessment questions to parents prior to meetings so that the parents have time to read them over or ask a friend about them before the meeting begins. Second, service providers should speak slowly and allow ample time for parents to familiarize themselves with and think about questions, strategies, and documents. Third, parents can be provided with a video camera and asked to record their interactions with their child during specific activities so that service providers can then review these interactions with the parents.

**Considerations for developing therapeutic alliances with Korean families.** Based on my experience and interactions with Min-seo’s family, I offer five suggestions for developing therapeutic alliances with Korean immigrant families. First, learning key phrases in Korean such as greetings will help service providers to break the ice and build rapport by demonstrating respect for the families they serve (Correa, 1987; Hyun & Fowler, 1995). One of most useful phrases is “Annyoung haseyo?” meaning “how are you?” The word “Annyoung” means “peacefulness” and “well-being,” and “haseyo?” makes a noun into a verb and so in this case shows respect. This phrase can be used any time of the day, morning, afternoon, or evening. The word “Annyoung” alone also can be used with a younger person. Another useful expression is “Kamsa hamnida,” meaning “thank you.”

Second, service providers should show respect to those who are older than they are so that families will reciprocally show respect to service providers. Age difference is one of the most important elements that define relations among Koreans (Kim-Rupnow, 2005). Thus,
service providers talking to elderly people may need to remember not to use their first names, to be sure to use two hands to pass something instead of just one hand, and to bow their heads slightly as a greeting rather than waving or saying “Hi.”

Third, service providers should pay attention to subtle nonverbal and non-confrontational communication. Korean people usually do not make eye contact, considering it impolite, and they use silence and long pauses to indicate that they need more time to think before giving answers. Koreans may smile and nod even when they don’t agree or don’t understand what others, especially professionals, are talking about because they want to save face and are reluctant to openly disagree with professionals. Therefore, it is important for therapists to be patient but also to make every attempt to be sure that parents ask questions and fully understand their conversations.

Fourth, professionals should acknowledge the help of natural supports to the family such as extended family members and friends from religious or alumni groups. If the parents lack such support, service providers should help them make connections with other Korean parents who are in similar situations and/or parent support groups. According to Shin (2004) and Cho et al. (2000), Korean American parents of children with disabilities reported more social support from extended families than Korean parents reported. Due to their emphasis on interdependence, Korean immigrants have close ties to their local Korean community and they rely on strong social support systems within that community (Cox & Ephross, 1998; Delgado & Rivera, 1997). Since willingness to help others is natural to Korean people, learning about existing community-based nonprofit organizations and Korean churches will help professionals to connect families to others who are or have been in similar situations and who can help them (Cho & Gannotti, 2005).
Last, practitioners should acknowledge that Koreans have special interpersonal affective bonds called “jeong” which can promote particularly deep and long-lasting relationships as they develop over time. While there is no exact English equivalent for “jeong,” the word embraces the meanings of such words as closeness, empathy, sympathy, emotional attachment, trust, sentiment and even love (Kim, Kim, & Kelly, 2006). Koreans consider jeong to be a crucial element in forming and keeping relationships with others. The word jeong changes in meaning as it applies to different people. For example, a mother’s love and caring for her child can be called “mo-jeong,” a father’s love and emotional support of his child is “bu-jeong,” friends’ caring about each other and developing close bonds is “wo-jeong,” and lovers’ relationships are “ae-jong.” Kim et al. (2006) pointed out that jeong may be hard for Westerners to understand because they tend to view interpersonal relationships in heterosexual, homosexual, or homophobic frames of reference. However, entering into these non-erotic, quiet, warm, caring, nurturing, and giving interpersonal relationships of jeong, Koreans easily are accepted as members of cohesive groups at home, school, or work. Within these groups, Jeong promotes interpersonal commitment, emotional trust, and loyalty. From a Westerner’s point of view, however, the expression of jeong in daily life may be viewed as an intrusion on one’s privacy. Koreans, nonetheless, believe that being connected to others in their lives is more meaningful and important than maintaining their privacy. Therefore, interventionists working with Korean immigrants should understand that the caring, giving, and generosity represented, for example, in the family offering to share a cup of tea or snack with the service provider or in the family asking about the service provider’s well-being and that of his or her family are expressions of jeong. If the service provider does not accept this symbolic offer of connection, the family might be less inclined to be open and more likely to interact only superficially with the service provider (Kim, 1996). Conversely, service
providers should be mindful that they also can provide *jeong* to the family by showing modest forms of generosity within the boundaries of professional standards and etiquette. For example, service providers may ask if they can bring some small snacks for the child or family, occasionally offer modest forms of help to the family that are unrelated to the service that they are providing to the child, or inquire with discretion about small matters in the family’s life that family members may be willing or eager to share. If service providers do not reciprocate with at least a modest level of the *jeong* that the family has provided, the family might consider that person to be selfish. Consequently, families may not be willing to connect with service providers in a way that strengthens the therapeutic alliance, or develop the level of trust necessary replace traditional parenting strategies based on negative reinforcement and punishment with proactive, positive behaviour support strategies. Taken together, this culturally specific knowledge and these cultural values may contribute to a foundation upon which service providers can develop cultural competence with families of Korean heritage.

**Limitations and Caution**

The study has four limitations and one caution that require comment. These are: (a) lack of demonstration of two basic effects; (b) absence of maintenance and follow-up data for both routines; (c) lack of sequential analysis data and analysis; (d) limited external validity; and (e) efficiency of intervention process. These limitations and caution are discussed below.

**Lack of demonstration of two basic effects.** A quasi-experimental, multiple baseline design across two family routines was employed for the purpose of documenting two basic effects of intervention. Due to the study’s incompletion only a preliminary basic effect was documented in the first routine, independent play. In addition, documentation of this basic effect did not occur within the context of the terminal vision for the routine; that is, the mother
successfully supporting Min-seo’s participation in the independent play routine on her own without the presence or assistance of the interventionist (me). Although the data from the ITCP (interventionist training with child and parent) sub-phase showed dramatic improvements in child behavior and steps completed, stimulus control had not been transferred entirely to Min-seo’s mother during the routine. I still provided direct instruction to Min-seo while concurrently providing parent training with Min-seo’s mother. Therefore, these preliminary results need to be interpreted with caution. A robust basic effect will be documented when problem behaviour is at or near zero levels and routine steps are above 80% completed in the context of Min-seo receiving support only from her mother within the defined elements of the independent play routine. Given these nascent preliminary results, documentation of an association between implementation of the ecological, family centered, culturally responsive PBS approach and improvements in child behaviour and participation in two valued family routines awaits further intervention and data collection and analysis.

Absence of maintenance and follow-up data for both routines. The intervention phase for the sibling-play routine, and maintenance and follow-up phases for both routines were not conducted due to the amount of time required to complete the initial training phase of the independent play routine, and to overall time constraints. The collection of maintenance and follow-up data would have provided evidence as to the durability and sustainability of the ecological, family-centered, culturally responsive PBS approach to intervention with the child and family. The absence of such data prevents conclusions from being drawn related to long-term outcomes for Min-seo and family members (e.g., mother, younger sister) within the independent and sibling-play routines.
Lack of sequential analysis data and analysis. Another limitation is the absence of sequential analysis data and a comparative analysis of coercive and constructive processes across the baseline and intervention phases. A sequential analysis of parent-child interaction during the baseline and intervention phases would have permitted an analysis of hypothesized coercive processes and constructive processes operating in the independent and sibling-play routines. Such an analysis was not feasible due to time constraints. Collection of sequential analysis data would have provided preliminary categorical evidence of the transformation of coercive parent-child interactions into constructive ones after the implementation of the ecological, family-centered, culturally responsive PBS intervention. The results would have contributed to an expanded understanding of coercive processes operating in family routines, and to the design of interventions that efficiently ameliorated these more subtle and complex patterns of parent-child interaction. The absence of such data prevents conclusions from being drawn related to the statistical analysis of change in both coercive and constructive processes from baseline to interventions as well as in the maintenance and follow-up phases.

Limited external validity. The inclusion in the study of only one child with developmental disabilities in a Korean family and the selection of two family routines that are similar in terms of the function of the problem behaviour involved, routine expectations, and behaviour support strategies can limit the extent to which results can be generalized to other populations, settings, and different behavioural challenges if the intervention is successful upon completion. The study’s work with parents who immigrated from Korea to North America over 15 years ago might not apply or be relevant to other Korean immigrant families because of differences in levels of acculturation. In addition, the use of two quite similar home-based activity settings as the unit of analysis for change may limit the degree to which findings can be
generalized to other settings within or outside of the home of Korean families. In addition to research conducted across a variety of family settings and with children exhibiting different behavioural difficulties, further research conducted with families of Korean culture as well as with families of other cultural and linguistic backgrounds would assist in establishing the external validity of the ecological, family-centered culturally responsive PBS approach.

**Efficiency of intervention process.** An important caution is the considerable amount of time required to conduct the study through preliminary intervention in the first family routine. An important factor in this inefficiency was the use of collaborative research procedures throughout the conduct of the study. An important element of collaborative research procedures is that participating families share control over the pace of clinical assessment and intervention activities, as well as the scheduling of experimental observation sessions in the home (Albin, Dunlap, & Lucyshyn, 2002). Albin et al. argued that the adoption of collaborative research procedures such as these can contribute to the willingness of families of children with developmental disabilities to participate in intervention research as well as to the reduction of attrition during intervention research with families. In adherence to the tenets of collaborative research, I proceeded with the implementation of research and clinical intervention procedures no faster than the participating family permitted. According to Lucyshyn et al. (2014), this pace is slow by clinical research standards because participating parents integrate their schedule into research activities weekly and monthly while at the same time attending to the many functions of family life. These functions include “caring for other family members, participating in religious activities and events, taking vacations, recovering from illness or injury, and responding to unexpected stressors or crises (e.g., the death of a parent or friend, termination of employment, financial loss)” (p. 188).
During the study, although I proceeded at a slow pace, this collaborative research procedure aided me in building trust with the family because it did not interfere with natural family functions and responsibilities. As a result, the family permitted me to continue to conduct the study in their home, and to provide training and support to the child and mother.

**Future Research**

If the outcomes of the study are successful upon completion, two areas of future research should be considered: (a) strengthening the internal and external validity of the ecological, family-centered, culturally responsive PBS approach; and (b) replicating and extending findings to Korean families who are more recent immigrants. These areas are discussed below.

**Strengthening internal and external validity.** If the completion of the study documents two robust basic effects, future research should strengthen the internal and external validity of the ecological, family-centered, culturally responsive PBS approach. To strengthen internal validity, future research should employ an experimental single-case research design across a minimum of three family routines with a family of Korean heritage. Doing so will allow for the empirical analysis of a functional relation between implementation of the approach and improvements in child behaviour and routine participation. To strengthen the external validity of the approach, future research should replicate the study across families that vary in terms of child age, family composition, and ethnicity, as well as across a wider range of family routines.

**Replication with recent immigrants from Korea.** Future research should replicate the study with Korean families of children with developmental disabilities and problem behaviour who recently immigrated to North America. Doing so also would contribute to the external validity of the study, but in addition potentially reveal differences in the way in which culturally responsive PBS services are delivered to new immigrant families. Since the parents participating
in this study were fairly well acculturated, they were observed to have adopted many North American values. For example, Min-seo’s parents were able to speak fluent English, educated in high schools in North America, and had some non-Korean friends. As a result, when developing the PBS plan for the independent play routine in collaboration with Min-seo’s mother, she was relatively accepting of the assessment and plan design process, and of the function-based behaviour support strategies that were recommended. Replication with Korean families that more recently immigrated to North America could offer new insights into accommodating aspects of family culture into the assessment, plan design and implementation process. When conducting such a study, the use of a standard measure of acculturation to identify levels of family acculturation will be helpful. These measures include the Vancouver Index of Acculturation and the Asian Value Scale (Ryder et al, 2000; Kim et al., 1999).
References


Appendix A

Letter of Initial Contact

Dear Parent/Guardian,

The purpose of this letter is to inform you of an opportunity to participate in a research study. This study is aimed at helping families of young children with developmental disabilities who engage in problem behaviour during valued family routines in the home. The study is entitled “Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour.” This study will be conducted in the Faculty of Education at the University of British Columbia. The principal investigator of the study is Dr. Joseph Lucyshyn, Associate Professor in the Faculty of Education of the University of British Columbia. The graduate student researcher and co-investigator of the study is Samantha Jin-Oh Kwon. This research is for the fulfillment of degree requirements for Samantha Jin-Oh Kwon’s Master of Arts degree.

The purpose of this study is to examine the effectiveness, acceptability, sustainability, and durability of a positive behaviour support approach to behaviour intervention in the family of a child with developmental disabilities and problem behaviour in the home. This approach is distinctive because it is ecological, family-centered, and culturally responsive. It is also based on best practices in behavioural support with the family of a child with developmental disabilities. The approach therefore is a collaborative process in which family members and the graduate student researcher will work together in equal partnership to decrease the problem behaviour of the child with a disability and to improve the overall quality of life for that child and the child’s family. The study will evaluate the extent to which behavior interventions accomplish the following:

1. Decrease child problem behaviour and improve parent-child interactions in two valued family routines, such as dinner, free time while a parent is busy, or getting ready for bed;
2. Promote the child’s successful participation in home-based routines;
3. Empower the parent and other family members to successfully support the child; and
4. Enhance the quality of life of the child and family.

Participation in the study would involve the parent and family collaborating with the graduate student researcher in four family support activities and in five research activities.

The four family support activities are as follows:

1. Comprehensive assessment of the child’s problem behaviour and of family ecology;
2. Collaborative development of a behaviour support plan;
3. Implementation support to help the parent use behaviour support in family routines; and
4. Follow-up support for up to three months.
The five research activities are as follows:

1. Two screening activities prior to determine whether the child meets the criteria for study participation
2. A preliminary assessment to identify two valued family routines and to identify the child’s problem behaviour;
3. Videotaped observations of the two family routines under conditions that may produce problem behaviour, to confirm the purpose of problem behaviour;
4. Videotaped observations of the two family routines, to measure child and family outcomes;
5. An assessment of overall family quality of life, child behavioral and emotional functioning, parental stress, and family functioning.

Prior to the start of the study, the child and family will participate in screening activities. First, a brief phone-screening interview will be used to determine the match between the child and family, and the criteria for study participation. If the child and family appear to match the criteria, then a more formal preliminary screening process will occur. This will include a brief interview about child problem behavior and family routines, and observation in routines identified for intervention and support. If the screening process confirms that the child is a good fit for the study, the family will be invited to participate in the study.

The entire research study will take eight to ten months to complete. During the first month, videotaped observations will occur in two routines. During the second to six months, the child and family will be involved in support or research activities for two to four hours per week, according to the family’s available time and needs. Support activities will include the researcher conducting assessments, collaborating with the family to design a behaviour support plan, and helping the family implement plans for the selected home routines. During the final two months of the study, the follow-up phase, the child and family’s involvement in research and support activities will decrease to one or two hours per month. Follow-up will begin after the child has improved in his or her behavior in the two targeted family routines. All of these activities will be scheduled for days and times that are convenient for family members.

The participating family may experience four benefits. First, the child’s problem behaviour may decrease to acceptably low levels during the two family routines. Second, the child may develop new positive behaviours and adaptive skills that help him or her to participate in the two family routines. Third, the parent’s experience of parent-child interactions may improve during the two routines, and parental knowledge and skills about how to support the child during the two routines may be enhanced. Lastly, other families who have children with disabilities may be helped through the sharing of the academic knowledge gained in this study.
If you are interested in participating in the study or learning more about it, please contact Dr. Joseph Lucyshyn at (604) 822-1904 or Samantha Kwon at (604) xxx-xxxx. Alternatively, you may also contact the agency representative who gave or sent to you this introductory letter. At that time, if you give the agency representative permission to release your name and phone number to her, Samantha Kwon will telephone you to answer any questions that you may have. Depending on your preference, either a follow-up phone call or a meeting at a place convenient for you will be arranged to answer any questions you have regarding the screening process and study. All screening, assessment, and intervention and support activities will be conducted in Korean or English, according to your preference. Thank you for your time and consideration.

Sincerely,

Joseph M. Lucyshyn, Ph.D
Associate Professor
Faculty of Education
University of British Columbia

Samantha Jin-Oh Kwon, B.A.
Graduate Student Researcher
Faculty of Education
University of British Columbia
이 편지의 목적은 연구에 참여하실 수 있는 기회를 알려 드리는 것입니다. 부모와 아이는 UBC대학의 특수교육학과 교수 Dr. Joseph Lucyshyn의 지도하에 있는 연구에 참여하실 수 있습니다. 이 연구는 특수 교육 석사 과정 학생인 Samantha Jin-Oh Kwon의 논문을 위한 연구입니다. 이 연구의 목표는 장애아를 양육하고 있는 한인 교포 가족의 집안 일상에서 힘든 과정을 찾아 가족과 함께 동력된 위치에서 프로그램을 결정하고 부모님과 아이의 삶의 질 항상에 목표를 두고 있습니다.

이 연구는 아래의 항목들을 연구 할 것입니다.
1. 집안에서 일어나는 일들 종 (예: 저녁식사 시간, 부모님이 바쁘시고 아이가 혼자 노는 시간, 취침시간) 아이의 문제행동을 줄이고 부모님과 아이의 관계개선
2. 집에서 일어나는 일들 중 두가지 일에 아이의 성공적인 참여
3. 부모님과 다른 가족구성원들의 성공적인 삶
4. 부모님과 아이의 삶의 질을 향상

연구 활동은 다음과 같습니다.
1. 연구의 시작에 앞서, 어린이와 가족이 검사 활동에 참여합니다.
2. 가족의 집안에서 일어나는 일들을 식별하고 예비 평가합니다.
3. 자녀의 문제 행동과 부모님의 반응을 녹화 관찰합니다.
4. 두가지 일상생활 결과를 녹화 관찰합니다.
5. 가족의 삶, 아동 행동 및 감정, 부모의 스트레스, 가족 기능등을 평가합니다.

일시 연구는 8~10개월정도 걸릴예정입니다. 처음 2개월은 부모님께서 고르신 평소일들중 두개를 활성하고 관찰합니다. 다음 6개월동안은 자녀와 가족과 함께 일주일에 2~4시간에 연구 활동 (계획을 설계 하고 실행 하는일등)에 참여합니다. 마지막 2달 동안은 연구 후속 단계입니다. 이과정에선 한달에 1시간에 2시간 정도가 소요될 것입니다. 모든 시간과 스케줄은 부모님과 아이의 가능하신 시간에 따라서 결정될 것입니다.

이 연구를 통해 가족은 보다 우리를 이해할 수 있도록, 첫째, 아동의 문제행동은 두 가족 일상 생활 활동에서 낮게 감소 할 수 있습니다. 둘째, 아이는 참여하는 동안, 도움이되는 긍정적 행동을 배우고 적용할 수 있습니다. 셋째, 부모와 아이의 관계가 개선되고 부모님께선 새로운 지식과 기술을 배우실 수 있습니다. 마지막으로 비슷한 자녀를 가지신 다른 가정께 연구에서 얻은 학문적 지식을 공유함으로써 도움이 되실 수 있습니다.
이 연구에 관심이 있으시거나 이 연구에 대해서 궁금하신 점이 있으시다면, Dr. Joseph Lucyshyn at (604) 822-1904 나 Samantha Kwon at (604) xxx-xxxx 으로 연락주십시오. 귀하의 시간과 배려에 감사드립니다. 감사합니다.

Sincerely,

Joseph M. Lucyshyn, Ph.D
Associate Professor
Faculty of Education
University of British Columbia

Samantha Jin-Oh Kwon, B.A.
Graduate Student Researcher
Faculty of Education
University of British Columbia
Appendix B

Telephone Pre-Screening Interview

Parent Name: __________________________  Phone number: ______________________

Date contacted: ________________________

This is a six month research project designed to investigate an approach to behavioural family intervention that seeks to transform problematic parent-child interactions within valued family routines.

1. The study is recruiting families that meet the following criteria:
   a. The focus child has a formal diagnosis of a developmental disability (e.g., autism, Asperger syndrome) and/or mental retardation,
   b. The child is between the ages of 3 and 8 years old,
   c. The child engages in low to moderate intensity problem behaviour in a minimum of two typical home-based family routines,
   d. The parent(s) speak(s) Korean and enough English to ensure that the support will be understood and potentially helpful,
   e. The parent(s) do(es) not perceive themselves to be in “crisis” due either to the focus child’s problem behaviour (e.g., the child engaging in severe physically aggressive or self-injurious behaviour that has harmed the child or another family member; the family seeking or receiving crisis intervention services) or to family issues that are unrelated to the focus of the study (e.g., a sibling with a behavior disorder, marital conflict between the parents, a parent with a psychological disorder),
   f. The parent(s) agree(s) to allow an observer to videotape parent-child interactions in typical family routines in the home,
   g. One parent is willing to serve as the primary interventionist with their child throughout the research and family-support processes,
   h. Initial screening observations of at least two family routines in the home provide clinical evidence of the presence of escape-driven coercive patterns of parent-child interaction, and
   i. The family is planning to remain in the lower mainland of British Columbia for the next 12 months.

Do you have questions about these criteria? Do your child and family meet the criteria I’ve described?

2. I’d like to ask some questions about your child, your family, and your reasons for wanting to participate in the study.
   a. Please describe your child:
      • Age –
      • Disability –
      • School program or other services –
b. Please describe your family:
   • Members –
   • Occupations –
   • Ability to participate in the study –

c. Briefly describe the problem behaviors your child displays:

d. Briefly describe the routines during which behaviors are most likely to occur:

e. Briefly describe your reasons for wanting to participate in this study:

f. Tell us about any questions or concerns you have about participating in the study:

3. The next step is screening. Screening involves a researcher making an appointment to visit your home, so as to obtain your consent to conduct interviews and observations that will help us confirm that your child and family are eligible candidates for participation in the study.

Following screening, one family will be selected to participate in the study. The research activities will consist of the following:

a. A comprehensive functional assessment of the focus child’s problem behaviour.

b. An assessment of problematic family routines: family members will be asked to describe important family routines that are currently problematic and that they would like to improve. The family will then be asked to choose the two routines for which they most desire intervention. These routines will likely be targeted for intervention.

c. The development by the student researcher, working with family members, of a behaviour support plan, and training of family members to implement the plan.

d. Videotaping and the collection of other data by the student researcher of the problematic routines before and after the behaviour support plan is implemented. Only the researchers (i.e., the principal investigator, student researcher, and student data coder) will view the videotapes, which will be stored in a secure location. No confidential information will be shared with anyone outside the research team.

e. The revision of behavioural support as needed.

f. A minimum of six months of behavioural consultation and support in regard to each of the two problematic routines identified.

4. Do you have any questions?
5. Are you interested in participating in the screening process?

Thank you for participating in this pre-screening interview. A researcher will contact you within the next 7 to 10 days.
Appendix C

CONSENT FORM: PARTICIPATION IN SCREENING PROCESS
Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour

Dear Parent/Guardian,

The purpose of this form is to request your consent for the participation of you and your child with a disability, and other family members (e.g., the focus child’s brothers or sisters) in the screening process for a research study. The study is entitled “Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour.” This study will be conducted in the Faculty of Education at the University of British Columbia. The principal investigator of the study is Dr. Joseph Lucyshyn, Associate Professor in the Faculty of Education. The graduate student researcher and co-investigator of the study is Samantha Jin-Oh Kwon. This research is for the fulfillment of degree requirements for the Master of Arts degree. Your family is invited to participate in the screening process because you or a representative of a local social service agency has recommended your child and family’s participation. After reading the consent form, if you have any questions, we will be happy to answer them to ensure that the screening procedures are clear to you.

Purpose of this Study

The purpose of this study is to examine the effectiveness, acceptability, sustainability, and durability of an ecological, family-centered, culturally responsive positive behaviour support approach to behaviour intervention with the family of a child with developmental disabilities and problem behaviour. The approach is based on best practices in behavioural support with families of children with developmental disabilities. The approach emphasizes a collaborative process in which family members and the graduate student researcher work together in equal partnership to decrease the problem behaviour of the child with a disability and to improve the overall quality of life for this child and the child’s family. The study will evaluate the extent to which behaviour interventions achieve the following:

1. Decrease the child’s problem behaviour and improve parent-child interaction in two valued family routines, such as dinner, free time while a parent is busy, or getting ready for bed;
2. Promote the child’s successful participation in home-based routines;
3. Empower the parent and other family members to successfully support the child; and
4. Enhance the quality of life for the child and the family.

Summary of Family Support and Research Activities

The entire research study will take eight to ten months to complete. During the first month, videotaped observations will occur in two routines. During the second to six months, your child and family will be involved in support or research activities for two to four hours per week, according to the family’s available time and needs. Support activities will include the
researcher conducting assessments, collaboratively designing a behaviour support plan, and helping the family implement plans in the selected home routines. During the final two months of the study, the follow-up phase, your child and family’s involvement in research and support activities will decrease to one or two hours per month. Follow-up will begin after your child has improved in his or her behavior in the two targeted family routines. All activities will be scheduled for days and times that are convenient for family members.

Participation in the study would involve you and your family collaborating with the graduate student researcher in four family support activities and in four research activities. The four family support activities are the following:

1. Comprehensive assessment of the child’s problem behaviour and the family ecology;
2. Collaborative development of a behaviour support plan;
3. Implementation support to help you use behavior support in family routines; and
4. Follow-up support for up to three months.

The four research activities are as follows:

1. A preliminary assessment to identify two family routines for intervention and to identify problem behaviour;
2. Videotaped observations of those two family routines under conditions that may produce problem behaviour, to confirm the purpose of problem behaviour;
3. Videotaped observations of those two family routines to measure child and family outcomes; and
4. Assessment of the family’s overall quality of life.

Screening Process

We have developed a screening process to assess whether your child and family would be eligible to participate in the study. If you contact us by telephone, we will begin by reviewing the criteria for participation and answering any questions you may have. We will then decide together whether to proceed with the screening process. The specific steps in the screening process are described below.

1. *Preliminary interview*. We will first meet with you for an approximately an hour in your home or another place that is convenient for you to conduct a preliminary interview (i.e., to assess your family’s routines and to make a brief functional assessment of the focus child). The interview is aimed at understanding your child’s problem behaviour during valued but problematic home-based family routines. During the interview, we might ask you to authorize the release of information from biographical records to document your child's birth date, most recent IQ score and test, diagnostic information, and medical records.

2. *Preliminary observations*. If the interview indicates that your child is a good fit for this study, we will request permission to observe problematic routines involving your child in your home. With your permission, we will observe you and your child during the routines that you have identified as regularly involving problem behaviour. During at least two
observation sessions, each lasting between three and fifteen minutes, we will use an observation form to gather data about your child’s problem behaviours.

3. *Informed consent for study participation.* If these observations confirm the presence of durable problem behaviours in two family routines in the home, then we will invite you to participate in the study. At that time, we will ask you to read and sign an informed consent letter for participation.

**Potential Risks and Safeguards**

If you agree to participate and permit your child and family to participate in the screening process, you will need to consider four potential risks: (1) physical; (2) psychological; (3) legal; and (4) loss of confidentiality.

1. *Physical risk.* Because the child participant engages in problem behaviour, there is a more than minimal risk that the child or other family members may experience physical injury during the study. However, every precaution will be taken to minimize this risk:
   a. Member of the research team have the extensive experience working with children who engage in problem behaviour in the home;
   b. Children who engage in severe problem behaviour such as high intensity aggression (i.e., high intensity problem behavior that may cause injury to self or others) will not be included in the study;
   c. Behaviour support strategies will focus on preventing behaviour problems and on teaching positive behaviour that is designed to replace problem behaviour;
   d. Observation sessions and training and support activities will be terminated if the child begins to engage in medium- to high-intensity problem behaviour; and
   e. As needed, the research team will be available to assist the family, the child, and other family members during the observation sessions and during training and support activities.

2. *Psychological risk.* Because the family will be observed during two home-based routines and will participate in training and support activities, the parents, child, or other family members may experience psychological risk. That is, the parents, child, or other family members may feel some discomfort or stress during these activities. However, several steps will be taken to guard against this risk:
   a. During observation sessions, the observer will minimize her presence;
   b. Any person in the family will be able to terminate an observation session at any time;
   c. As far as possible, the “family-friendly” features of the family-support process (e.g., the family’s schedule determining meeting/observation/training schedules; collaboration in the development of support plans) will reduce any stress associated with the study; and
   d. Counseling support by a Counseling Psychologist who is a member of the research team will be provided as needed or requested by the family.

3. *Legal risk.* A minimal potential risk relates to the legal requirements concerning the reporting of any witnessed abuse. If members of the research team witness any abuse of
the focus child by any person, they are obliged to report it to the appropriate provincial authorities. This risk will be guarded against in the following ways:

a. Families who are at risk for maltreatment of their child with a disability will be excluded from the study. These include families with a child who engages in severe problem behavior, and families who have had past involvement with child welfare services;

b. The study focuses on providing family members with positive, non-punitive ways to prevent and manage child problem behaviour. Family members who develop these skills are unlikely to engage in child maltreatment; and

c. If abuse is observed, the parents will be informed and invited to participate in reporting the incident. The research team will then refer the parents to appropriate family support services or a community agency.

4. Loss of confidentiality. There is a risk that the child participant or other family members may experience a loss of confidentiality. To guard against this risk we will do the following:

a. Change names of all persons, places, and programs described in the study;

b. Provide only members of the research team with access to information;

c. Keep all data, notes, and videotapes in a locked file in a secure office; and

d. Destroy data collected solely for the study five years after the study has been completed.

Potential Benefits

By participating in the screening process, you and your child will experience one of two sets of potential benefits:

1. Participation in a family support research study. If the screening process indicates that your child is a good fit for the family support study, you will be invited to participate in the research study. Although the following five benefits are likely to be experienced by the participating family, the family may not experience all of the benefits listed below since behavioural and quality of life improvements cannot be assured.

a. Your child’s problem behaviour may decrease to low or acceptable levels in two selected family routines;

b. Your child may develop new positive behaviors and adaptive skills that help him or her participate in two family routines;

c. Your parenting knowledge and skills, along with the quality of your interactions with your child, may improve during these two routines; and

d. The sharing of academic knowledge gained through your participation in this study may help other families who have children with disabilities.

2. Assessment report and recommendations. If the screening process indicates that your child is not a good fit for the study, we will nevertheless provide you with three benefits:

a. A summary of the preliminary interview and/or observations;

b. Behaviour-support recommendations that are based on the interview and/or observations; and

c. Referrals to appropriate alternative sources of family and behavioral support in your community.
Alternatives

If during the screening process you decide not to participate in the study, we will refer you to appropriate alternative sources of family and behavioural support in your community.

Rights of Research Participants

Your participation and that of your child and other family members in this study is voluntary. Your decision whether or not to participate and to allow your child and other family members to participate will have no effect on your child’s education, the provision of support from a community agency, or future opportunities for behaviour consultation and support. If you agree to participate and allow your child and other family members to participate, you are free to withdraw consent and to refuse to continue your participation and that of your child and family. You may do so at any time without giving any reasons and without penalty or loss of benefits to which you, your child, or other family members are otherwise entitled. Terminating your participation in the study will also have no negative impact whatsoever on the graduate student’s thesis research: if you withdraw early in the study, the graduate student will recruit another family for the study. If you withdraw later, the graduate student will complete her thesis, with your permission using the data gathered up to the point of study termination. By signing the consent form, you do not waive any of your legal rights.

If you have any questions, please contact Dr. Joseph Lucyshyn, Faculty of Education, University of British Columbia, 2125 Main Mall, Vancouver, B.C., V6T 1Z4, (604) 822-1904. Alternatively, you may contact Samantha Jin-Oh Kwon, Graduate Researcher, at (604) xxx-xxxx. If you have any concerns about your rights or treatment as a research participant, you may contact the Research Subject Information Line in the UBC Office of Research Services at (604) 822-8598.

Your signature below indicates that you have received a copy of this consent form for your records. Your signature also indicates that you, your child with a disability, and other family members (e.g., siblings) consent to participate in the screening process.

Sincerely,

Joseph M. Lucyshyn, Ph.D
Associate Professor
Faculty of Education
University of British Columbia

Samantha Jin-Oh Kwon, B.A.
Graduate Student Researcher
Faculty of Education
University of British Columbia
CONSENT FORM FOR PARTICIPATION IN SCREENING PROCESS
Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour

Principal Investigator: Joseph Lucyshyn, Ph.D., Faculty of Education, UBC
Graduate Student Researcher: Samantha Jin-Oh Kwon, B.A., Faculty of Education, UBC

I have read and received a copy of this consent form and have had an opportunity to ask questions about the screening process and the research project.

I have received an adequate description of the purpose, goals, and procedures of the screening process, and I consent to participate in the screening process.

I also consent to and authorize the release of information from biographical records to document my child's birth date, most recent IQ score and test, diagnostic information, and medical records.

I understand that all information will be kept confidential, that my participation is voluntary, and that I may withdraw my consent at any time and discontinue my participation at any time without penalty or loss of benefits to which I am otherwise entitled, and that I am not waiving any legal claims, rights, or remedies.

By signing below, I am agreeing to participate in the screening process for the research study of parent-child interaction in family routines, according to the terms stated above.

____________ YES, I consent to participate in the screening process and give permission for my child with a disability and other family members (e.g., that child’s brothers and/or sisters) to participate in the screening process.

____________ NO, I do not consent to participate in the screening process, and my child with a disability and other family members do not have my permission to participate in the screening process

Name of Focus Child: ____________________________________________

Name(s) of other family Members Living with Focus Child (if any): ______________________

Name(s) of Parent(s)/Guardian(s): ________________________________________________

Signature(s) of Parent(s)/Guardian(s): ___________________ Date: ___________________

__________________ Date: ___________________

PLEASE RETURN THIS PAGE TO:
Samantha Jin-Oh Kwon
Graduate Student Researcher
BROTHER OR SISTER ASSENT FORM: SCREENING PROCESS

We are interested in learning how to help your parents support ________ during different times at home. We plan to do this by doing a study. But before we begin the study, we need to find out if ________ is a good fit for our study. To figure that out, we will interview your parents and watch ________, you, and your family doing different activities together in the home.

If you would like to be part of our study, we will ask you to do what you usually do during these different activities. We will make sure that while you and your family are doing these activities together, everybody stays safe.

When we begin, a person will visit your home to watch you, ________, and your parents during different times. That person will watch your family once or twice to find out if ________ acts in a way that makes it hard for everyone to help him or her during these activities. When that person is watching and making notes of what is happening, he or she will try to stay out of the way. The notes that this person collects will be shared only with other members of our study team.

If the notes show that ________ is a good fit for our study, then we will invite your family to join our study. During the study we will help your family create a happier life for ________ and your family. We will guide your family to successfully help ________ in two family activities in the home. But if the notes do not show ________ to be a good fit for the study, then we will give your parents a summary of the information we have gathered and we will suggest to them some other ways that they can help ________ in the activities that we have watched.

While we are watching ________, you, and your other family members, if you decide that you do not want to be part of our study, just tell us. You won’t get into any trouble. And if you don’t want to join us at all, you don’t have to. Just say so. Also, if you have any questions about what you will be doing, or if you cannot decide whether you want to join our study, just ask us if there is anything you would like us to explain.

If you want to try joining our study, please sign your name on the line below. Your parent(s) have already told us that it is okay with them. But remember, you don’t have to, and once you start you can take a break or stop whenever you like.

Signature of participant: ________________________________

Name of participant (please print): ________________________________

______YES, I agree to participate. ________NO, I do not agree to participate.
Appendix D

CONSENT FORM FOR PARTICIPATION IN RESEARCH STUDY
Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour

Dear Parent/Guardian,

The purpose of this form is to request your consent for you, your child with a disability, and other family members (e.g., the focus child’s brothers and/or sisters) to participate in a research study. The study is entitled “Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour.” This study will be conducted in the Faculty of Education at the University of British Columbia. The principal investigator of the study is Dr. Joseph Lucyshyn, Associate Professor in the Faculty of Education. The graduate student researcher and co-investigator in the study is Samantha Jin-Oh Kwon. This research is for the fulfillment of degree requirements for Samantha Jin-Oh Kwon’s Master of Arts degree. Your family is invited to participate in this research study because you or a representative of a local social service agency has recommended your child and family’s participation. After reading the consent form, if you have any questions, we will be happy to answer them to ensure that the screening procedures are completely clear.

Purpose of this Study

The purpose of this study is to examine the effectiveness, acceptability, sustainability, and durability of an ecological, family-centered, culturally responsive positive behaviour support approach to behaviour intervention in the family of a child with developmental disabilities and problem behaviour in the home. The approach is based on best practices in behavioural support with families of children with developmental disabilities. The approach emphasizes a collaborative process in which family members and the graduate student researcher will work together in equal partnership to decrease the problem behaviour of the child with a disability and improve the overall quality of life for that child and the child’s family.

The study will evaluate the extent to which behavior interventions accomplish the following:

1. Decrease the child’s problem behaviour and improve parent-child interactions in two valued family routines, such as eating dinner, using free time while a parent is busy, or getting ready for bed;
2. Promote the child’s successful participation in home-based routines;
3. Empower the parent and other family members to successfully support the child; and
4. Enhance the child’s and family’s quality of life.
Summary of Family Support and Research Activities

The entire research study will take eight to ten months to complete. During the first month, videotaped observations will occur in two routines. During the second to six months, your child and family will be involved in support or research activities for two to four hours per week, according to the family’s available time and needs. Support activities will include the researchers conducting assessments, collaboratively designing a behaviour support plan, and helping the family implement plans in the selected home routines. During the final two months of the study, the follow-up phase, your child and family’s involvement in research and support activities will decrease to one or two hours per month. Follow-up will begin after your child has improved in his or her behavior in the two targeted family routines. All activities will be scheduled for days and times that are convenient for your family members. Participation in the study would involve you and your family collaborating with the graduate student researcher in five family-support activities and in two research activities. The five family support activities are described below.

1. **Preliminary assessment.** Preliminary assessment activities will involve two interviews (an assessment of family routines and a brief functional assessment) with you and your other family members at a time and place of your choosing. These interviews will last between one and two hours. The purpose of these interviews is to identify two valued family routines in your home and to develop a preliminary understanding of your child’s problem behaviour. Following the interviews, we will conduct two or three pilot observations of the identified routines. The purpose of these observations will be to verify the occurrence and purpose of your child’s problem behaviour. Each observation session will last between three and fifteen minutes.

2. **Comprehensive assessment.** After the preliminary assessment has been completed a comprehensive assessment will be performed. This assessment will include both interviews and observations. First, a functional assessment interview (FAI) lasting between one and two hours will be conducted. Next, we will then confirm the results of the functional assessment interview by conducting a series of observations of parent-child interactions in the two identified family routines in your home. The observations will occur during one session and will take approximately between one and two hours to complete. This assessment will help us develop a thorough understanding of the reasons that your child engages in problem behaviour. This information will help us develop an effective behaviour support plan. Third, we will complete family culture and ecology assessments. In this one- to two-hour meeting, we will learn about your family’s strengths, social supports, resources, stressors, and goals, as well as your family’s cultural values, practices, and beliefs. This information will help us develop a plan that works well for your family.

3. **Positive behaviour support plan design.** Following these assessment activities, we will collaborate with you to build a culturally responsive behaviour support plan for the two problematic family routines. This process will occur over two meetings, each lasting between one and two hours. During the first meeting, family members and the graduate student researcher will review assessment information, while in the second meeting they will work together to create a support plan that fits well with the routine. The plan will
include several behaviour support strategies designed to decrease your child’s problem behaviour, improve parent-child interactions, and support the success of the routine.

4. **Implementation support.** Training and support to help you and your family members implement the support plan in the identified routines will occur in meetings lasting one to two hours and occurring approximately twice a week for four months. During these meetings, the graduate student researcher will teach you and your family members how to implement support strategies with your child. These meetings may therefore include such activities as the discussion of written instructions, role-playing, and coaching in the routine.

5. **Follow-up support.** After you have succeeded in decreasing your child’s problem behaviour in the selected family routines, we will transition to the follow-up support phase. The graduate student researcher will meet with your family once a month for three months to provide whatever support or retraining you may need.

The two research activities that your participation in the study would involve you in are described below.

1. **Videotaped observations.** Videotaped observations in two family routines will occur during the experimental phases of the study. These phases are baseline, intervention (i.e., initial training and support, maintenance support), and follow-up. Observation sessions will NOT occur on the same day as training sessions. During observation sessions, an observer will videotape your child and family’s participation in both selected family routine. Each observation session will last up to thirty minutes. During the baseline phase, observations will occur on average between one and four times per week over two to eight weeks. Approximately ten observations will be completed. During intervention, observation sessions will occur on average once a week over seventeen weeks. Approximately sixteen observations will be completed. During the follow-up phase, observation sessions will occur once a month for three months.

2. **Assessment of family functioning.** The other research activity that will take place is an assessment of your family’s well-being. This will occur twice, at the beginning and at the end of the study. Each time, you will be asked to fill out four questionnaires about the overall quality of your family life. Completing each questionnaire will take approximately thirty minutes.

**Potential Risks and Safeguards**

If you agree to participate and permit your child and family to participate in the screening process, you will need to consider four potential risks: (1) physical risks, (2) psychological risks, (3) legal risks, and (4) loss of confidentiality.

1. **Physical risks.** Because the child participant engages in problem behaviour, there is a more than minimal risk that the child or other family members may experience physical injury during the study. However, every precaution will be taken to minimize this risk:
a. Members of the research team have extensive experience working with children who engage in problem behaviour in the home;
b. Children who engage in severe problem behavior such as high intensity aggression (i.e., high intensity problem behavior that may cause injury to self or others) will not be included in the study;
c. Behavior support strategies will focus on preventing behaviour problems and on teaching positive behaviour that is designed to replace problem behaviour;
d. Observation sessions and training and support activities will be terminated if the child begins to engage in medium-to high-intensity problem behaviour; and
e. As needed, the research team will be available to assist the family, the child, and other family members during the observation sessions and during training and support activities.

2. Psychological risks. Because the family will be observed during two home-based routines and will participate in training and support activities, the parents, child, or other family members may be exposed to psychological risks. That is, the parents, child, or other family members may feel some discomfort or stress during these activities. Several steps will be taken to guard against this risk:
   a. During observation sessions, the observer will be as unobtrusive as possible;
   b. Any family member will be able to terminate an observation session at any time;
   c. The “family-friendly” features of the family-support process should help to reduce any stress associated with the study (e.g., the family’s schedule will determine the meeting/observation/training schedules; the support plans will be developed collaboratively); and
   d. Counseling support from a counseling psychologist who is a member of the research team will be provided to the family as needed or requested by the family.

3. Legal risks. A potential but minimal risk relates to the legal requirements around reporting abuse if it is witnessed. If members of the research team witness any abuse of the focus child by any person, they are obliged to report it to the appropriate provincial authorities. This risk will be guarded against in the following ways:
   a. Families who are at risk for maltreatment of their child with a disability will be excluded from the study. These include families with a child who engages in severe problem behavior and families who have had past involvement with child welfare services;
   b. The study focuses on providing family members with positive, non-punitive ways to prevent and manage the child’s problem behaviour. Family members who develop these skills are unlikely to engage in child maltreatment; and
   c. If abuse is observed, the parents will be informed and invited to participate in reporting the incident. The research team will then refer the parents to an appropriate family support services or a community agency.

4. Loss of confidentiality. There is a risk that the child participant or other family members may experience a loss of confidentiality. To guard against this risk we will take the following steps:
   a. Change the names of all persons, places, and programs described in the study;
   b. Allow only members of the research team access to information;
   c. Keep all data, notes, and videotapes in a locked file in a secure office; and
d. Destroy data collected solely for the study five years after the study has been completed.

Potential Benefits

The family that chooses to participate may experience four benefits. First, your child’s problem behaviour may decrease to low or acceptable levels in the two selected family routines. Second, your child may develop new positive behaviours and adaptive skills that help him or her to participate in the two family routines. Third, the quality of your parent-child interactions may improve during the two routines, and your parental knowledge and skills in supporting your child during the two routines may be enhanced. Lastly, other families who have children with disabilities may be helped through the knowledge gained in this study. Although the following four benefits are likely to be experienced by the participating family, the family may not experience all of the benefits listed below since behavioural and quality of life improvements cannot be assured.

Alternatives

If, during the screening process, you choose not to participate in the study, we will refer you to appropriate, alternative sources of family and behavioral support in your community.

Rights of Research Participants

Your participation and that of your child and other family members is voluntary. Your decisions about whether or not to participate and to allow your child and other family members to participate will not in any way affect your child’s education, the provision of support from a community agency, or future opportunities for behavior consultation and support. If you agree to participate and to allow your child and other family members to participate, you are free at any time to withdraw your consent and to refuse to continue your participation and that of your child and family. You may do so at any time without giving any reasons and without penalty or loss of benefits to which you, your child, or other family members are otherwise entitled. Terminating your participation in the study will also have no negative impact on the graduate student’s thesis research whatsoever: if you withdraw early in the research, the graduate student will recruit another family for the study; if you withdraw later, the graduate student will complete her thesis using, with your permission, the data gathered up to the point of study termination. By signing the consent form, you do not waive any of your legal rights.
If you have any questions, please contact Dr. Joseph Lucyshyn at (604) 82201904 or Samantha Kwon at (604) xxx-xxxx. If you have any concerns about your rights or treatment as a research participant, you may contact the Research Subject Information Line in the UBC Office of Research Services at (604) 822-8598.

Your signature indicates that you have received a copy of this consent form for your records and that you consent to you, your child with a disability, and other family members (e.g., siblings) participating in the study.

Sincerely,

Joseph M. Lucyshyn, Ph.D                                          Samantha Jin-Oh Kwon, B.A.
Associate Professor                                          Graduate Student Researcher
Faculty of Education                                          Faculty of Education
University of British Columbia                                  University of British Columbia
CONSENT FORM FOR PARTICIPATION IN RESEARCH STUDY
Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour

Principal Investigator: Dr. Joseph Lucyshyn, Faculty of Education, UBC
Co-investigator: Samantha Jin-Oh Kwon, Faculty of Education, UBC

Consent: I have read and understood the attached letter of request to participate in the study entitled “Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour.” I also understand that my participation in this study will involve videotaping in our home of me, my child with a disability, and other family members. I may request that the researchers stop the videotaping at any time if I or a member of my family does not want to be videotaped. I understand that all videotaped materials will be kept in a secure and locked location, and that only the researchers will have access to these videotapes. Also, I understand that five years after the completion of the research project, all data will be destroyed.

I understand that all information will be kept confidential; that my participation and that of my child and other family members (e.g., the focus child’s brothers and/or sisters) is entirely voluntary; that I, my child, and/or other family members may at any time withdraw their consent and refuse to participate without any penalty or loss of benefits to which my family is otherwise entitled; and that by participating, I am not waiving any legal claims, rights, or remedies. I also understand that I will receive a copy of this letter of request for consent for my own records. My decision regarding my participation, that of my child with a disability, and that of my other family members is indicated below.

________________________ Yes, I consent to participate in the study and I give permission for my child with a disability and other family members (e.g., child’s brothers and/or sister(s)) to participate in the study.

________________________ No, I do not consent to participate in the study, and my child with a disability and other family members do not have my permission to participate in the study.

Name of Focus Child: __________________________________________________________

Name(s) of other Family Members Living with the Focus Child (if any): __________________

Name(s) of Parent(s)/Guardian(s): ________________________________________________

Signature(s) of Parent(s)/Guardian(s): ______________________ Date: _________________

________________________ Date: _________________

PLEASE RETURN THIS PAGE TO:
Samantha Jin-Oh Kwon
Graduate Student Researcher
We are interested in learning how to help your parents support Min-seo during different times at home. We plan to do this by doing a study. We know that sometimes it’s hard for Min-seo to do certain things with the family without getting upset. We would like to help him/her and your family do this by teaching your parents ways to help Min-seo stay calm and happy during family activities at home. We may also spend some time teaching Min-seo ways to get what he/she wants by using words or pictures instead of getting upset. The things that Min-seo and your parents will learn will be pretty helpful.

We would like to ask you to join in these different activities in the home. If you agree to join us, we will ask you to do what you typically do during these different activities. We will make sure that while you and your family are doing these activities together, everybody stays safe. We will do our best to make Min-seo’s life more enjoyable. By doing so, we also hope to make your life and your family’s life more enjoyable.

When we begin, a person will visit your home to videotape you, Min-seo, and your parents during different home activities. The person will videotape about twice a week at the beginning of our work together. Later, he or she will videotape you, Min-seo, and your parents just once or twice a month. He or she will try hard to stay out of the way. Later, we will look at the videotapes to see how well our help is working. We will make sure that only those people who need to see the videotape have a chance to see it. We would like to help your family for a pretty long time – up to ten months.

We believe that by saying yes to join us, you can help make a happier life for Min-seo and for everyone else in your family. You will also help us learn better ways to support other families. But while we are helping your family or while a person is videotaping, if you do not want to participate, just tell us. You won’t get into any trouble. If you don’t want to participate at all, you don’t have to. Just say so. Also, if you have any questions about what you will be doing, or if you cannot decide whether or not to participate and want us to explain our project to you some more, just ask us.

If you want to try joining in, please sign your name on the line below. Your parent(s) have already told us that it is okay with them if you want to participate. But remember, you don’t have to, and once you start you can rest or stop whenever you like.

Signature of participant: ____________________________________________

Name of participant (please print): ____________________________________

_______YES, I agree to participate. _________NO, I do not agree to participate.
VIDEOTAPING CONSENT FORM

Transforming Coercive Processes with a Korean Family of a Child with a Developmental Disability and Problem Behaviour

Principal Investigator: Dr. Joseph Lucyshyn, Faculty of Education, UBC
Co-investigator: Samantha Jin-Oh, Kwon, Faculty of Education, UBC

Consent: I understand that my participation in this study will involve videotaping in our home of me, my child with a disability, and other family members. I also understand that I may request that the researchers stop the videotaping at any time if I or a member of my family does not want to be videotaped. I also understand that all videotaped materials will be kept in a secure and locked location, and that only the researchers will have access to these videotapes.

My consent regarding the videotaping of my child’s participation and that of my family in this study is indicated below. I understand that I will receive a copy of this consent for my personal records.

____________ YES, I consent to the videotaping of my child and family.

____________ NO, I do not consent to the videotaping of my child and family.

Focus Child’s Name: ________________________________________________

Siblings’ Names (if any): ____________________________________________

Parent/Guardian Names: ____________________________________________

Parent/Guardian Signature: __________________________ Date: ______________

Parent/Guardian Signature: __________________________ Date: ______________

Witness: __________________________________________ Date: _____________

If I have questions or concerns about videotaping of my child or family, I understand that I may contact:

Dr. Joseph Lucyshyn                                                                 Samantha Jin-Oh Kwon
Faculty of Education                                                               Faculty of Education
University of British Columbia                                                    University of British Columbia
2125 Main Mall                                                                    (604) xxx - xxxx
Vancouver, B.C., V6T 1Z4                                                          joe.lucyshyn@ubc.ca
Appendix E

Assessment of Family Activity Settings

<table>
<thead>
<tr>
<th>Person of Concern</th>
<th>Age</th>
<th>Sex</th>
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<tbody>
<tr>
<td>Date of Interview</td>
<td>Interviewer</td>
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</table>

Respondents

A. Child’s Typical Schedule of Daily Activities (Home Routines)

<table>
<thead>
<tr>
<th>Time of Day</th>
<th>Weekday</th>
<th>Weekend</th>
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</thead>
<tbody>
<tr>
<td>Morning</td>
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<td>Mid-day</td>
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<td>Afternoon</td>
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<tr>
<td>Evening</td>
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</table>
B. Home Routines in Which Problem Behaviors Typically Occur, and Your Priorities for Improvement

<table>
<thead>
<tr>
<th>Routine</th>
<th>Problem Behaviors</th>
<th>Priority Rank</th>
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<tbody>
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</table>
C. Home Routines That You Have Significantly Altered or No Longer Do Because of Problem Behavior, and Your Priorities for Improvement

<table>
<thead>
<tr>
<th>Routine</th>
<th>Problem Behaviors</th>
<th>Priority Rank</th>
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<tbody>
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</table>
D. Family Vision of a Successful Activity Setting (Routine 1)

1. What would a realistic and successful routine, activity, or event look like?

2. Where would it take place and when would it occur?

3. Who would be there?

4. What material and social resources would be available to support the routine, activity, or event?

5. What would participants be doing? How would tasks be organized to support the routine, activity, or event’s success?

6. What family goals and values would be reflected by child and family participation in the successful routine, activity, or event?
E. **Family Vision of a Successful Activity Setting (Routine 2)**

1. What would a realistic and successful routine, activity, or event look like?

2. Where would it take place and when would it occur?

3. Who would be there?

4. What material and social resources would be available to support the routine, activity, or event?

5. What would participants be doing? How would tasks be organized to support the routine, activity, or event’s success?

6. What family goals and values would be reflected by child and family participation in the successful routine, activity, or event?
Appendix F

Brief Functional Assessment of Problem Behavior

<table>
<thead>
<tr>
<th>Person of Concern</th>
<th>Age</th>
<th>Sex</th>
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</thead>
<tbody>
<tr>
<td>Date of Interview</td>
<td>Interviewer</td>
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<tr>
<td>Respondents</td>
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</tbody>
</table>

A. Describe the Behavior

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Topography</th>
<th>Frequency</th>
<th>Duration</th>
<th>Intensity</th>
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<tbody>
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<td>a.</td>
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</table>
B. Predictors

1. Time of day (When):

2. Setting (Where):

3. People (Whom):

4. Activity (What activity):

C. Possible Functions of Behavior

<table>
<thead>
<tr>
<th>Behavior</th>
<th>Particular Situations</th>
<th>What Does He/She Get?</th>
<th>What Exactly Does He/She Avoid?</th>
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<tbody>
<tr>
<td>a.</td>
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</table>
D. Brief Functional Assessment Summary for Identified Problematic Routines

<table>
<thead>
<tr>
<th>Time</th>
<th>Routine or Activity</th>
<th>Predictors</th>
<th>Problem Behavior</th>
<th>Maintaining Consequence</th>
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## Appendix G

### Child Problem Behavior Interval Recording Form

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<th>Interval</th>
<th>CPB</th>
<th>CPN</th>
<th>CNC</th>
<th>COA</th>
<th>Time</th>
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**Total**

<table>
<thead>
<tr>
<th>Time</th>
<th>CPB</th>
<th>CPN</th>
<th>CNC</th>
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Appendix H

Steps Completed Form

Routine 1: ____________

<table>
<thead>
<tr>
<th>Phase</th>
<th>Phase</th>
<th>Phase</th>
<th>Phase</th>
<th>Phase</th>
<th>Phase</th>
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<tbody>
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</tr>
</tbody>
</table>

Steps Completed

Date: Date: Date: Date: Date: Date: Date:

# of Steps Completed

% of Steps Completed

% IOA

√ = Complete  X = Not Complete  NO = No Opportunity  NA = Not Applicable
### Appendix I

**Parent Accurate Use of Behavior Support Strategies Interval Recording Form**

<table>
<thead>
<tr>
<th>Family</th>
<th>Routine</th>
<th>Phase</th>
<th>Date</th>
<th>Coder</th>
<th>IOA Coder</th>
</tr>
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<tbody>
<tr>
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</table>

<table>
<thead>
<tr>
<th>Interval</th>
<th>Time (Min:Sec)</th>
<th>Setting Event Strategies</th>
<th>Preventative Strategies</th>
<th>Teaching Strategies</th>
<th>Consequence Strategies</th>
</tr>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td>2</td>
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<td>12:30</td>
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</table>
Appendix J

Social Validity Evaluation

<table>
<thead>
<tr>
<th>Family:</th>
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</thead>
</table>

<table>
<thead>
<tr>
<th>Date:</th>
<th></th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Family member completing evaluation:</th>
<th></th>
</tr>
</thead>
</table>

The purpose of this questionnaire is to obtain information that will aid in: (a) the selection and improvement of behavioral support strategies implemented in the home by family members, and (b) the improvement of our process for providing families with behavioral consultation and support. Please circle the number that best describes your agreement or disagreement with each statement (1 = disagree, 5 = agree). You also have space to write comments or suggestions for change or improvement.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
</table>

1. The goals of the behavior support plan are appropriate for my child.

Disagree | Agree
---|---
1 | 2 | 3 | 4 | 5

Comments:

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
</table>

2. The goals of the plan are consistent with my family’s goals, values, and beliefs.

Disagree | Agree
---|---
1 | 2 | 3 | 4 | 5

Comments:

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
</table>

3. The strategies and procedures used are difficult to carryout in the home.

Disagree | Agree
---|---
1 | 2 | 3 | 4 | 5

Comments:

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
</table>

4. The goals of the behavior support plan are appropriate for my child.

Disagree | Agree
---|---
1 | 2 | 3 | 4 | 5

Comments:
5. The outcomes of the support effort are beneficial for my child.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

6. The outcomes of the support effort are beneficial to my family as a whole.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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</tr>
<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

7. The support effort has caused some unanticipated problems in our family.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

8. Training activities have been well organized, clear, and helpful.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
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<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

9. The person(s) providing technical assistance has shown respect for our family’s values and beliefs.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Comments:

10. Overall, this behavioral support effort has strengthened our family.

<table>
<thead>
<tr>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
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<tr>
<td>3</td>
<td>4</td>
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<tr>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

Comments:
Appendix K

Contextual and Cultural Fit Evaluation for Treatment Plan Used by Family

Name of family:

Family member(s) completing checklist:

Date:

Introduction: This survey is for use by families working with consultants to improve the behaviour and lifestyle of their son or daughter. The survey is based on our experience that the success of a support plan depends a great deal on whether the plan “fits” with the cultural values and lifestyle of a family. Your responses will help us: (a) improve the quality of the plan, (b) understand better how to build support plans that are most helpful. Below are 14 questions about the plan and its prospects for success. Please answer each question by rating the number that most closely matches your current view. The rating is from 1 (little) to 5 (a lot). If you can’t tell or don’t know then circle the question mark (?).

<table>
<thead>
<tr>
<th>Question</th>
<th>Little</th>
<th>A lot</th>
<th>Can’t Tell</th>
</tr>
</thead>
<tbody>
<tr>
<td>1) Do you believe that the treatment plan takes into account your understanding of your child (e.g., strategies that encourage positive behaviour, child preferences)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>2) Does the plan address your highest priority goals (e.g., level of independence, communication of needs)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3) Do you understand what you are expected to do within this plan?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>4) Are you comfortable with what you are expected to do?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>5) Do you understand what others are expected to do within this plan (i.e., Samantha, other family members)?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>6) Are you comfortable with what others are expected to do?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>7) Does the treatment plan recognize and support your needs as a parent?</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
8) Overall, how does the support plan fit with the daily routines of your family, including cultural routines (e.g., meals, social events, bed time)?

9) Does the plan for the target routine disrupt that time of day to the point that stress or hardship will be created?

10) Does the plan recognize and build on your family’s strengths, values and customs?

11) Was the support plan respectful of your family’s cultural background?

12) All things considered, how difficult will it be for you to use this treatment plan for the target routine?

13) Do you believe the treatment plan will be effective?

14) If the plan is effective, do you believe you can keep using the strategies for a long time (e.g., over one year) even though Samantha will not be available as much (little to no contact with Samantha, some assistance by phone)?

Comments:
Appendix L

Family Quality of Life Survey (FQOL)

Survey Information and Instructions

Thank you for agreeing to complete this survey. This survey has questions about:

- the services you and your child need and/or receive,
- the things that make your life together as a family good,
- you and your family in general.

We will use your answers to help us improve policies and services for children with disabilities and their families.

All the information you give us is confidential. Your name will not be attached to any of the information you give us. It is important that you answer as many questions as you can, but please feel free to skip those questions that make you feel uncomfortable.

When answering these questions, please think about your experiences over the last 6 months. Please use a pencil to shade completely the circles for your answers. If you change any answers, please erase completely any previous answers or any extra pencil marks on the page. Please do not make any stray marks, including comments, on the form, except where you are asked (for example, in the general information section).

Thank you so much for sharing your opinion with us!

By completing this survey, you indicate that you have been informed of the important aspects of this study and you are willing to participate.
Where does your child usually receive services? (Shade only one)

- At home
- At a community preschool or childcare center (*for children with and without disabilities; such as KinderCare or church preschool*)
- Public school
- Private school
- Special or alternative school
- Other community setting
- Work setting
- Other

### Support and Services

**A. Please tell us about the type of services your CHILD needs and receives.**

<table>
<thead>
<tr>
<th>Which of the following services...</th>
<th>Does your child currently need?</th>
<th>If YES, how much service does he or she get?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services for your CHILD with special needs:</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>1. Special equipment to help your child live, learn, and grow (assistive and communications technology)</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>2. Health services (medical evaluations, nutrition, nursing)</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>3. Hearing and/or vision services</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>4. Physical and/or occupational therapy</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>5. Speech and/or language services</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>6. Special education services</td>
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<td>O</td>
</tr>
<tr>
<td>7. Counseling and psychological services</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
Support and Services (cont.)

<table>
<thead>
<tr>
<th>Which of the following services...</th>
<th>Does your child currently need?</th>
<th>If YES, how much service does he or she get?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services for your CHILD with special needs:</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8. Behavior support</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>9. Transportation and/or mobility services</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>10. Self-care skills training (example: help with dressing or bathroom use)</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>11. Service coordination</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>12. Transition services</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>13. Employment or vocational services</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>14. Other (please describe)</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
Support and Services (cont.)

B. Please tell us about the type of services your FAMILY needs and receives.

<table>
<thead>
<tr>
<th>Which of the following services...</th>
<th>Does your family currently need?</th>
<th>If YES, how much service does your family get?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Services for your FAMILY:</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>15. Respite care</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>16. Child care</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>17. Money to help pay bills</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>18. Homemaker and/or housekeeping services</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>19. Transportation</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>20. Support groups</td>
<td>O</td>
<td>O</td>
</tr>
<tr>
<td>21. Counseling</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>
Support and Services (cont.)

<table>
<thead>
<tr>
<th>Services for your FAMILY:</th>
<th>Does your family currently need?</th>
<th>If YES, how much service does your family get?</th>
</tr>
</thead>
<tbody>
<tr>
<td>22. Sibling support</td>
<td>Yes: ☐  No: ☐</td>
<td>None: ☐  Some, but not enough: ☐  Enough: ☐</td>
</tr>
<tr>
<td>23. Parent or family training</td>
<td>Yes: ☐  No: ☐</td>
<td>None: ☐  Some, but not enough: ☐  Enough: ☐</td>
</tr>
<tr>
<td>24. Information about specific disabilities</td>
<td>Yes: ☐  No: ☐</td>
<td>None: ☐  Some, but not enough: ☐  Enough: ☐</td>
</tr>
<tr>
<td>25. Information about where to get services for your child</td>
<td>Yes: ☐  No: ☐</td>
<td>None: ☐  Some, but not enough: ☐  Enough: ☐</td>
</tr>
<tr>
<td>26. Information about where to get services for your family</td>
<td>Yes: ☐  No: ☐</td>
<td>None: ☐  Some, but not enough: ☐  Enough: ☐</td>
</tr>
<tr>
<td>27. Information about legal rights</td>
<td>Yes: ☐  No: ☐</td>
<td>None: ☐  Some, but not enough: ☐  Enough: ☐</td>
</tr>
<tr>
<td>28. Other (please describe)</td>
<td>Yes: ☐  No: ☐</td>
<td>None: ☐  Some, but not enough: ☐  Enough: ☐</td>
</tr>
</tbody>
</table>


Family Quality of Life

In this section of the survey, we want you to tell us how you feel about your life together as a family. We will use what we learn from families to improve policies and services for children with disabilities and their families.

Your “family” may include many people – mother, father, partners, children, aunts, uncles, grandparents, etc.

For this survey, please consider your family as those people

- Who think of themselves as part of your family (even though they may or may not be related by blood or marriage), and
- Who support and care for each other on a regular basis.

For this survey, please DO NOT think about relatives (extended family) who are only involved with your family every once in a while. Please think about your family life over the past six months.

**Step 1: Importance** – First, please shade in the circle in the first set of columns to show how important you think that statement is.

- Shading the first circle means you think the statement is only a little important.
- Shading the fifth circle means you think that statement is critically important.

**Step 2: Satisfaction** – Please shade in the circle in the next set of columns to show how satisfied you are with that statement.

- Shading the first circle means you are very dissatisfied.
- Shading the last circle means you are very satisfied.

Please remember to answer both IMPORTANCE and SATISFACTION for each question.

Thank you so much for sharing your opinion with us!
## Family Quality of Life

<table>
<thead>
<tr>
<th>For my family to have a good life together...</th>
<th>A little important</th>
<th>Important</th>
<th>Critically important</th>
<th>Very dissatisfied</th>
<th>Neither</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. My family enjoys spending time together.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>2. My family members help the children learn to be independent.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>3. My family has the support we need to relieve stress.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>4. My family members have friends or others who provide support.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>5. My family members help the children with schoolwork and activities.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>6. My family members have transportation to get to the places they need to be.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7. My family members talk openly with each other.</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Family Quality of Life (cont.)

<table>
<thead>
<tr>
<th>For my family to have a good life together...</th>
<th>A little important</th>
<th>Important</th>
<th>Critically important</th>
<th>Very dissatisfied</th>
<th>Neither</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>8. My family members teach the children how to get along with others.</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. My family members have some time to pursue their own interests.</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. My family solves problems together.</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. My family members support each other to accomplish goals.</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. My family members show that they love and care for each other.</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. My family has outside help available to us to take care of special needs of all family members.</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Adults in my family teach the children to make good decisions.</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td>0 0 0 0 0 0 0 0 0</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Family Quality of Life (cont.)

<table>
<thead>
<tr>
<th>For my family to have a good life together...</th>
<th>A little important</th>
<th>Important</th>
<th>Critically important</th>
<th>Very dissatisfied</th>
<th>Neither</th>
<th>Very satisfied</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. My family gets medical care when needed.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. My family has a way to take care of our expenses.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. Adults in my family know other people in the children's lives (friends, teachers, etc.).</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. My family is able to handle life's ups and downs.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. Adults in my family have time to take care of the individual needs of every child.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. My family gets dental care when needed.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. My family feels safe at home, work, school, and in our neighborhood.</td>
<td>☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐ ☐</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Family Quality of Life (cont.)

*Please answer the following questions about your child with a disability. If you have more than one child with a disability, please keep in mind the one who has the most impact on your family quality of life.*

*For my family to have a good life together…*

<table>
<thead>
<tr>
<th>How <strong>important</strong> is it that...</th>
<th>How <strong>satisfied</strong> am I that...</th>
</tr>
</thead>
<tbody>
<tr>
<td>A little important</td>
<td>Important</td>
</tr>
<tr>
<td>---------------------------</td>
<td>------------</td>
</tr>
<tr>
<td>22. My family member with a disability has support to accomplish goals at school or workplace.</td>
<td>o</td>
</tr>
<tr>
<td>23. My family member with a disability has support to accomplish goals at home.</td>
<td>o</td>
</tr>
<tr>
<td>24. My family member with a disability has support to make friends.</td>
<td>o</td>
</tr>
<tr>
<td>25. My family has good relationships with the service providers who provide services and support to our family member with a disability.</td>
<td>o</td>
</tr>
</tbody>
</table>
General Individual and Family Information

The last thing we need to do is to ask a few questions about you and your family. We will use this information to generally describe the people who responded to our survey. We will describe people in groups, never as individuals, so your answers will be kept confidential.

Please answer these questions about yourself.

1. What is your gender?
   - Male
   - Female

2. What year were you born? 

3. Are you of Hispanic or Latino origin?
   - Yes
   - No

4. What is your race? (Shade all that apply.)
   - American Indian or Alaskan Native
   - Asian or Pacific Islander
   - Black or African American
   - White
   - Other (Please specify) ____________________________

Next Page
General Individual and Family Information (cont.)

5. What is your marital status?
   ○ Married/Living with someone
   ○ Not married (widowed, divorced, separated, never married)

6. What is your employment status?
   ○ Working full-time for pay or profit for a company or family business
   ○ Working part-time for pay or profit for a company or family business
   ○ Unemployed but looking
   ○ Not employed (for example, stay-at-home parent or care-giver, retired, public assistance pay, disability)

7. What is the highest level of education that you have completed?
   (Please shade ONLY one.)
   ○ No schooling completed
   ○ Formal schooling but no high school diploma or GED
   ○ High school graduate (diploma or GED)
   ○ Some college or post-high school, but no degree
   ○ Associate degree (AA, AS, etc.)
   ○ Bachelor's degree (BA, BS, etc.)
   ○ Graduate Degree
8. What is your relationship to the child with a disability in your family?
   O Parent (Biological, Step, Foster or Adoptive)
   O Other relative (grandparent, aunt, uncle, sibling, etc.) Please specify: ________________________________
   O Other non-relative (family friend, etc.) Please specify: ________________________________

Now we want to ask you a few questions about your child with a disability. If you have more than one child with a disability, please consider the one who has the most impact on your family life. Remember, your answers will be kept confidential and only reported as a group, not as individuals or families.

9. What is the gender of your child with a disability?
   O Male
   O Female

10. What year was your child with a disability born? __________

11. What is the level of your child’s disability?
   O Mild
   O Moderate
   O Severe
   O Unknown
General Individual and Family Information (cont.)

12. What is the nature of your child's **PRIMARY** disability? (Please shade **ONLY** one.)
   - ADD or ADHD
   - Autism spectrum disorder
   - Developmental delay or early childhood disability
   - Emotional or behavioral disorder
   - Hearing impairment including deafness
   - Learning disability
   - Mental retardation
   - Physical disability
   - Speech or language impairment
   - Traumatic brain injury
   - Vision impairment including blindness
   - Health impairment (Please specify) ________________
   - Other disability (Please specify) ________________
   - No specific diagnostics

13. Does your child have any **SECONDARY** disabilities in addition to the primary disability?
   - Yes
   - No
General Individual and Family Information (cont.)

The following questions pertain to your family. Remember, your answers will be kept confidential.

14. Which of the following best describes the size of the community in which you live?
   - Large city or metropolitan area (population greater than 200,000)
   - Urbanized area (between 50,000 and 200,000)
   - Town or small city (between 2,500 and 50,000)
   - Rural area or town with population less than 2,500

15. What was your total household income from all sources for the past year? Be sure to include income from all sources (such as family subsidy or child support).
   - Less than $14,999
   - Between $15,000 and $19,999
   - Between $20,000 and $24,999
   - Between $25,000 and $29,999
   - Between $30,000 and $34,999
   - Between $35,000 and $39,999
   - Between $40,000 and $49,999
   - Between $50,000 and $59,000
   - Between $60,000 and $74,999
   - Over $75,000

16. How many people are supported on this income?
   - 1
   - 2
   - 3
   - 4
   - 5
   - 6
   - 7
   - 8 or more
Thank you! You have finished completing this survey. Please make sure you erase any extra marks and have answered all the questions.
## Appendix M

### Parenting stress index – Short Form

<table>
<thead>
<tr>
<th>Name</th>
<th>Gender</th>
<th>Date of birth</th>
<th>Ethnic group</th>
<th>Marital status</th>
<th>Child’s name</th>
<th>Child’s gender</th>
<th>Child’s date of birth</th>
<th>Today’s date</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>SA = Strongly Agree</th>
<th>A = Agree</th>
<th>NS = Not Sure</th>
<th>D = Disagree</th>
<th>SD = Strongly Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I often have the feeling that I cannot handle things very well.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I find myself giving up more of my life to meet my children’s needs than I ever expected.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. I feel trapped by my responsibilities as a parent.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Since having this child, I have been unable to do new and different things.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Since having a child, I feel that I am almost never able to do things that I like to do.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. I am unhappy with the last purchase of clothing I made for myself.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. There are quite a few things that bother me about my life.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Having a child has caused more problems than I expected in my relationship with my spouse (or male/female friend).</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. I feel alone and without friends.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. When I go to a party, I usually expect not to enjoy myself.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. I am not as interested in people as I used to be.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. I don’t enjoy things as I used to.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. My child rarely does things for me that make me feel good.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Sometimes I feel my child doesn’t like me and doesn’t want to be close to me.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15. My child smiles at me much less than I expected.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16. When I do things for my child, I get the feeling that my efforts are not appreciated very much.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17. When playing, my child doesn’t often giggle or laugh.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18. My child doesn’t seem to learn as quickly as most children.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19. My child doesn’t seem to smile as much as most children.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20. My child is not able to do as much as I expected.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21. It takes a long time and it is very hard for my child to get used to new things.</td>
<td>SA A NS D SD</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

For the next statement, choose your response from the choices “1” to “5” below.

<table>
<thead>
<tr>
<th>22. I feel that I am:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. not very good at being a parent.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. a person who has some trouble being a parent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. an average parent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. a better than average parent</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. a very good parent</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

| 23. I expected to have closer and warmer feelings for my child than I do and this bothers me. | SA A NS D SD | | | |
| 24. Sometimes my child does things that bother me just to be mean. | SA A NS D SD | | | |
| 25. My child seems to cry or fuss more often than most children. | SA A NS D SD | | | |
| 26. My child generally wakes up in a bad mood. | SA A NS D SD | | | |
| 27. I feel that my child is very moody and easily upset. | SA A NS D SD | | | |
| 28. My child does a few things which bother me a great deal. | SA A NS D SD | | | |
| 29. My child reacts very strongly when something happens that my child doesn’t like. | SA A NS D SD | | | |
| 30. My child gets upset easily over the smallest thing. | SA A NS D SD | | | |
| 31. My child’s sleeping or eating schedule was much harder to establish than I expected. | SA A NS D SD | | | |
For the next statement, choose your response from the choices “1” to “5” below.
32. I have found that getting my child to do something or stop doing something is:
   1. much harder than I expected
   2. somewhat harder than I expected
   3. about as hard as I expected
   4. somewhat easier than I expected
   5. much easier than I expected

For the next statement, choose your response from the choices “10+” to “1-3”.
33. Think carefully and count the number of things which your child does that bother you.
   For example: dawdles, refuses to listen, overactive, cries, interrupts, fights, whines, etc.
   10+  8-9  6-7  4-5  1-3
34. There are some things my child does that really bother me a lot.
35. My child turned out to be more of a problem than I had expected.
36. My child makes more demands on me than most children.

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Appendix N

Family Ecology Assessment

<table>
<thead>
<tr>
<th>Family:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date:</td>
</tr>
<tr>
<td>Family member completing evaluation:</td>
</tr>
</tbody>
</table>

1. What would you characterize as strengths of your family?

2. What might be some positive contributions that your child makes or has made to the family?

3. What are sources of stress in your family?
   a. What is the effect of your child’s problem behavior on you as a parent?
   b. What is the effect of your child’s problem behavior on the family as a whole?
   c. What are other sources of stress in the family?

4. What formal or informal resources have you used to improve the situation (e.g., respite care, participation in a parent support group, help with childcare and household chores from other family members)?

5. What are your sources of social support (e.g., someone with whom you discuss problems and find solutions; someone with whom you do leisure activities; someone who validates your worth as a person)?

6. What are your goals for your child? What are your goals for yourself as a parent? What are your goals for the family as a whole?
Appendix O

Cultural Assessment Tool

_Adapted from Chen et al. (2002)_

**Planning**

1. How do I learn about the family’s interactions and communication styles?

2. How does the family communicate with each other in a direct or indirect manner?

3. Does the family tend to interact in a quiet manner or a loud manner?

4. How do I ensure that the meaning of words I use are translated accurately from English into the family’s language?

5. How will I discuss differences with the family when their practices conflict with the program or mainstream values?

6. What is the most efficient way for the family to collect data (e.g., writing, videotaping, audiotaping)?

**Family Assessment**

**Family Structure:**

1. Who are members of the family, including the extended family?

2. Who makes decisions in the family?

3. Is decision making individual or group oriented?

4. Who is the primary caregiver(s)?

5. Is there conflict between caregivers regarding appropriate practices?

6. What is the hierarchy within the family? Is status related to gender or age?

**Resources:**

1. To whom does the family turn for support, assistance, and information?

2. What are some sources of social support to the family (i.e., someone with whom to discuss problems and find solutions, someone with whom to do leisure activities)?
3. What community resources can I use to better serve this family (e.g., respite care, parent support groups, cultural support groups)?

Family Perceptions and Attitudes:

1. What does the family characterize as its major strengths?
2. What are some sources of stress to the family?
3. What are the family’s values and customs? Are there cultural or religious factors that would shape family perceptions?
4. What is considered respectful and disrespectful in the family?
5. What are the family’s childrearing practices (e.g., feeding and sleeping patterns), forms of discipline, and expectations of children?
6. What is the family’s approach to medical needs?
7. What are the family’s concerns and priorities related to their child with a disability?
8. To what/who/where does the family assign responsibility for their child’s disability?
9. How does the family view their role in intervening with their child?

Self-Evaluation

1. What information do I need to help this family?
2. Have I clarified what the family expects of me and other service providers?
3. Have I discussed the roles and responsibilities of family members and service providers in a process of PBS
4. Have I provided information on the family’s legal rights regarding their child’s educational program?
5. Are there concerns about my interaction with the family that need to be discussed or clarified?
Appendix P

Functional Assessment Interview (FAI)
(Adapted from O’Neill et al., 1997)

<table>
<thead>
<tr>
<th>Person of Concern</th>
<th>Age</th>
<th>Sex</th>
</tr>
</thead>
<tbody>
<tr>
<td>Date of Interview</td>
<td>Interviewer</td>
<td></td>
</tr>
<tr>
<td>Respondents</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

SECTION A: Describe the Behavior
1. For each of the behaviors of concern, define the topography (how it is performed), frequency (how often it occurs per day, week, or month), duration (how long it lasts when it occurs), and intensity (how damaging or destructive the behaviors are when they occur).

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<thead>
<tr>
<th>Behaviour</th>
<th>Topography</th>
<th>Frequency</th>
<th>Duration</th>
<th>Intensity</th>
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2. Which of the behaviors described above are likely to occur together in some way? Do they occur about the same time? In some kind of predictable sequence or “chain”? In response to the same kind of situation?
SECTION B: Define Ecological Events/Setting Events That Predict or Set Up the Problem Behavior

1. What medication(s) is the person taking (if any), and how do you believe these may affect his/her behavior?

2. What medical or physical conditions (if any) does the person experience that may affect his/her behavior (e.g., asthma, allergies, rashes, sinus infections, seizures, problems related to menstruation)?

3. Describe the sleep patterns of the individual and the extent to which these patterns may affect his/her behavior.

4. Describe the eating routines and diet of the person and the extent to which these may affect his/her behavior.

5. Briefly list:
   a. The person’s typical daily schedule of activities. Check the boxes by those activities the person enjoys and those activities most associated with problems.

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<th>Enjoys</th>
<th>Problems</th>
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   b. To what extent are the activities on the daily schedule predictable for the person, with regard to what will be happening, when it will occur, with whom, and for how long?

   c. To what extent does the person have the opportunity during the day to make choices about his/her activities and reinforcing events (e.g., food, clothing, social companions, leisure activities)?
6. How many other persons are typically around the individual at home, school, or work (including housemates, classmates, and staff)? Does the person typically seem bothered in situations that are more crowded and noisy?

7. What is the pattern of staffing support that the person receives in home, school, work, and other settings (e.g., 1:1, 2:1)? Do you believe that the number of staff, the training of staff, or their social interactions with the person affect the problem behaviors?

SECTION C: Define Specific Immediate Antecedent Events That Predict When the Behaviors are Likely and Not Likely to Occur

1. Times of the Day: When are the behaviors most and least likely to happen?
   Most Likely:

   Least Likely:

2. Settings: Where are the behaviors most and least likely to happen?
   Most Likely:

   Least Likely:

3. People: With whom are the behaviors most and least likely to happen?
   Most Likely:

   Least Likely:

4. Activity: What activities are most and least likely to produce the behaviors?
   Most Likely:

   Least Likely:

5. Are there particular or idiosyncratic situations or events not listed above that sometimes seem to “set off” the behaviors (e.g., particular demands, noises, lights, clothing)?
6. What one thing could you do that would most likely make the undesirable behaviors occur?

7. Briefly describe how the person’s behavior would be affected if:
   a. You asked him/her to perform a difficult task.
   
   b. You interrupted a desired activity, such as eating ice cream or watching TV.
   
   c. You unexpectedly changed his/her typical routine or schedule of activities.
   
   d. He/she wanted something but wasn’t able to get it (e.g., a food item up on a shelf).
   
   e. You didn’t pay attention to the person or left him/her alone for a while (e.g., 15 minutes)

SECTION D: Identify the Consequences or Outcomes of the Problem Behaviors That May Be Maintaining Them (i.e., The Functions They Serve For the Person in Particular Situations)

1. Think of each of the behaviors listed in SECTION A and try to identify the specific consequences or outcomes the person gets when the behaviors occur in different situations.

<table>
<thead>
<tr>
<th>Behavior of Concern</th>
<th>Particular Situation (i.e., antecedent trigger)</th>
<th>What Exactly Does He/She Get?</th>
<th>What Exactly Does He/She Avoid?</th>
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SECTION E: Consider the Overall Efficiency of the Problem Behavior. Efficiency is the Combined Result of (a) How Much Physical Effort is Required, (b) How Often the Behavior is Performed Before It is Rewarded, and (c) How Long the Person Must Wait to Get the Reward.

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<tr>
<th>Behavior</th>
<th>Low Efficiency</th>
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SECTION F: What Functional Alternative Behaviors Does the Person Already Know How to Do?

1. What socially appropriate behaviors or skills can the person already perform that may generate the same outcomes or reinforcers produced by the problem behaviors?

SECTION G: What are the Primary Ways the Person Communicates with Other People?

1. What are the general expressive communication strategies used by or available to the person? These might include vocal speech, signs/gestures, communication boards/books, or electronic devices. How consistently are the strategies used?

2. On the following chart, indicate the behaviors the person uses to achieve the communicative outcomes listed:
### Communicative Functions

| Function                                      | Complex speech | Multiple-word | One-word | Echolalia | Other vocalizing | Complex signing | Single signs | Pointing | Leading | Shakes head | Grabs/reaches | Gives objects | Increased | Moves close to you | Moves away or | Facial expression | Aggression | Self-injury | Other |
|-----------------------------------------------|----------------|---------------|----------|-----------|------------------|----------------|--------------|-----------|---------|-------------|----------------|---------------|-------------|------------------|---------------|-------------|-------|
| Request attention                             |                |               |          |           |                  |                |              |           |         |             |                |               |             |                  |               |             |       |
| Request help                                  |                |               |          |           |                  |                |              |           |         |             |                |               |             |                  |               |             |       |
| Request preferred food/objects/activities     |                |               |          |           |                  |                |              |           |         |             |                |               |             |                  |               |             |       |
| Request break                                 |                |               |          |           |                  |                |              |           |         |             |                |               |             |                  |               |             |       |
| Show you something or some place              |                |               |          |           |                  |                |              |           |         |             |                |               |             |                  |               |             |       |
| Indicate physical pain (headache, illness)    |                |               |          |           |                  |                |              |           |         |             |                |               |             |                  |               |             |       |
| Indicate confusion or unhappiness             |                |               |          |           |                  |                |              |           |         |             |                |               |             |                  |               |             |       |
| Protest or reject a situation or activity     |                |               |          |           |                  |                |              |           |         |             |                |               |             |                  |               |             |       |

3. With regard to the person’s receptive communication, or ability to understand other persons:
   a. Does the person follow spoken requests or instructions? If so, approximately how many?

   b. Does the person respond to signed or gestural requests or instructions? If so, approximately how many? (List only a few)

   c. Is the person able to imitate if you provide physical models for various tasks or activities? (List only a few)

   d. How does the person typically indicate *yes* or *no* when asked if he/she wants something, wants to go somewhere, and so on?
SECTION H: What are the Things You Should Do and Things You Should Avoid in Working With and Supporting This Person?

1. What things can you do to improve the likelihood that a teaching session or other activity will go well with this person?

2. What things should you avoid that might interfere with or disrupt a teaching session or activity with this person?

SECTION I: What are the Things the Person Likes and are Reinforcing for Him/Her?

1. Food items:

2. Toys and objects:

3. Activities at home:

4. Activities/outings in the community:

5. Types of interaction with others:

6. Other:

SECTION J: What Do You Know About the History of the Undesirable Behaviors, the Programs That Have Been Attempted to Decrease or Eliminate Them, and the Effects of Those Programs?

<table>
<thead>
<tr>
<th>Behavior</th>
<th>How has this been a problem?</th>
<th>Programs</th>
<th>Effects</th>
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SECTION K: Develop Summary Statements for Each Major Predictor and/or Consequence

<table>
<thead>
<tr>
<th>Distant Setting Event</th>
<th>Immediate Antecedent (Predictor)</th>
<th>Problem Behavior</th>
<th>Maintaining Consequence</th>
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Diagram Summary Statement and Competing Behavior Paths

Setting Event(s) → Antecedent/Predictor(s) → Problem Behavior(s) → Desired Behavior(s) → Maintaining Consequences → Maintaining Consequences/ FUNCTION → Alternative/Replacement Behavior(s)

Strategies that Make the Problem Behavior Irrelevant, Ineffective, & Inefficient

<table>
<thead>
<tr>
<th>Setting Event Strategies</th>
<th>Preventative Strategies</th>
<th>Teaching Strategies</th>
<th>Consequence Strategies</th>
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</table>
## Functional Assessment Observation Form

### Behaviors
- Eating
- Adaptive
- Communication
- Toilet
- Transfer

### Predictors
- Attention
- Social
- Vocalization
- Physical

### Perceived Functions
- Get/Obtain
- Escape/Avoid

### Actual/Expected
- Observed
- Expected
- Skilled

### Time
- Events: 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25

### Name:

### Starting Date: 

### Ending Date:

### Date:
Appendix Q

Learning Style Assessment

Student:____________________________________
Informant(s):_________________________________
Date:_______________________________________

**Introduction:** The purpose of this assessment is to learn the qualities and characteristics of instructional activities that promote learning for the student – essentially the things you do that appear to promote learning and those things you have experienced that do not appear to promote learning. Each topic below relates to a feature of the learning context or task(s) that has relevance to the student.

1. Quality of tasks or activities
   a. Inherently reinforcing properties
   b. Functional, meaningful outcomes to student
   c. Preference because of positive effects on self (e.g., sensory stimulation, relief of anxiety)

2. Pacing of instruction

3. Task sequencing

4. Predictability related to learning context and/or task(s)

5. Choice-making opportunities

6. Types of prompts that are helpful

7. Types of praise

8. Style of correction procedures

9. Facilitating transition

10. Effective deceleration strategies for problem behavior
Appendix R

Positive Behavior Support Plan – Independent Play Routine

Summary of Focus Person and System Strengths / Concerns

Min-seo is a happy, affectionate, and persistent 8-year-old girl who lives at home with her family. Her family includes her parents and older and younger sisters. Her home environment is warm and loving and her family is highly supportive in terms of fostering her growth. She has the diagnosis of significant global developmental delay and hypotonia, which affects language development and learning. Min-seo loves meeting new people and has close bonds with each member of her family.

The main goal for Min-seo at this time is to teach her to enjoy playing successfully and independently with age-appropriate toys for 15 minutes or longer, while for her parents the goals are to effectively support her in learning these new skills and for Min-seo’s mother to have more time for herself, to cook or to spend with her other daughters while Min-seo is playing alone. Specifically, Min-seo’s priorities include (a) coming to the living room when called; (b) making play choices; (c) getting toys; (d) playing with toys appropriately; (d) when finished, putting toys away, and (e) asking for her mom as necessary. Currently, Min-seo is not able to play with any toys by herself. When asked to do so, she will often refuse by whining, saying “anniya” (no), crying, or screaming, any of which ends the demand. The consistent occurrence of such problem behaviour has necessitated the creation of this positive behaviour support plan. The plan draws on the results of a comprehensive functional assessment and valuable information from educational support team (i.e., school education support teachers, occupational therapist, and speech and language pathologist), and was developed in collaboration with Min-seo’s parents. The plan includes a summary of her functional assessment and a description of a multi-component positive behavioral support plan developed to address her needs.

Caution

Because this plan is based on a comprehensive functional assessment of each factor relevant to Min-seo’s problem behavior (i.e., non-supportive environmental features, triggers, and the functions of her problem behavior), it necessarily considers multiple components (ecological/lifestyle strategies, preventive strategies, teaching strategies, and effective consequences). Thus, the plan addresses most if not all of the issues that develop or maintain Min-seo’s problem behavior. As a practitioner reading the plan for the first time, however, you may understandably feel overwhelmed by this comprehensiveness.

In that case, three considerations may prove reassuring. First, it is not necessary to implement all of the interventions at once. Selecting the most important and/or the most doable interventions is a good start, and over time, additional interventions can be added to that foundation as needed. Second, concentrating on implementing the ecological/lifestyle and preventive strategies will most likely prevent many problem behaviors from recurring and thus reduce how often the plan’s reactive strategies (its de-escalation procedures) need to be employed. Third, the comprehensive plan saves you from having to “reinvent the wheel” for every problem that arises: when judiciously consulted, the plan can help explain and solve many new and situation-specific problems without your having to start from scratch.
Functional Assessment Summary

Behaviours of concern

- **Physical Aggression**: Min-seo engages in negative physical contact (including hair-pulling, hitting, kicking/slapping, head-butting, biting, or throwing objects), that causes others distress, pain, or injury.

- **Dangerous/Destructive / Disruptive Behaviour**: This group of behaviours includes a wide variety of actions that are disruptive to family members and to the success of the chosen routines, that are destructive to objects, or that are injurious to Min-seo. For example, she may bite objects, pull her own hair, grab items away from others, bang/kick objects (toys) with her feet, rapidly pull the strings of toys back and forth in her mouth (three or more times in one second), pull at her parents’ clothing, climb onto and sit on her parents, or climb onto a table.

- **Negative Vocalization**: These are non-verbal or verbal vocalizations that are agitated, distressed, or negative in tone. They can range from low to high intensity. Specific examples include her saying “anniya” (“no” in Korean) in an agitated and distressed or negative tone, whining, crying, or screaming. A non-exemplar is Min-seo saying “anniya” in a neutral tone.

- **Physical Resistance**: Min-seo engages in physical resistance to a parent’s physical assistance or restraint. For instance, she may push or pull away from her parent, fall limp to the floor after her parent’s attempt to physically assist her, arch her back, or slide down and out of her parent’s grasp.

- **Leaving Assigned Area / Running Away**: During a family routine, Min-seo may physically leave the area that her parent has chosen for that routine, or run away from a parent during a task or an activity. Specific examples of this behaviour may include the child leaving her assigned area (i.e., living room) and grabbing a bag, going to the front door, or going to kitchen.

- **Inappropriate Demand**: Min-seo may make a verbal request or demand that is clearly inappropriate to the circumstances: for instance, she may give her mom her own or her mom’s shoes or bag in a demand to go out, even though doing so is inappropriate because Min-seo should be playing alone.

- **Inappropriate Physical Assistance**: Min-seo may engage in a physical behaviour aimed at prompting or helping the parent to engage in a task or activity step that clearly is not part of the expectations of the routine, or is clearly not what the parent wants to do. Specific examples may include Min-seo physically pulling her mother away from the task area and/or physically pulling her towards an activity that is clearly not part of the routine (e.g., pulling her mother towards the front door when the routine requires that Min-seo should be moving towards the living room).

Functions of problem behaviours

Min-seo’s problem behaviours serve two separate purposes. First, she engages in problem behavior to avoid or escape aversive demands, tasks, or items. Second, she engages in problem behavior to get attention or adult assistance.
Ecological Influences
Personal characteristics that set the stage for problem behavior include the following:

• **Developmental disability:** Min-seo’s disability is a pervasive factor that sets the stage for many escape-motivated problem behaviours. Due to her disability, she has delays in language development, poor verbal memory skills, deficits in fine and gross motor skills, and difficulty paying attention. Each of these skill deficits makes learning and doing new things difficult for Min-seo.

• **Physical impairments:** two physical issues affect Min-seo’s willingness and ability to participate in tasks and activities. Min-seo needs glasses to see clearly; and she is taking medication (Clobazam and Lamotrigine) for seizures.

Setting Event Influences

• Min-seo sleeps poorly at night. Min-seo is currently taking melatonin nightly to address the latter problem, but if she nevertheless gets insufficient sleep, she may be less cooperative during the day.

• Min-seo is tired after coming home from school.

• Min-seo takes medications for seizures.

Triggers

Antecedent events that trigger problem behaviors include the following:

• Requests/demands to engage in independent play activities.

• Being alone without an adult’s attention.

Functional Assessment Summary Statement

When Min-seo is asked to do an activity, she is likely to attempt to escape the demand or request by refusing to comply. When her mom is absent, Min-seo will stop doing her activities in order to find her mom and get her attention.

Positive Behaviour Support Plan

Setting Event Strategies

1. **Reduce task demands** if Min-seo is tired from school or had inadequate sleep the previous night. If Min-seo had a poor sleep the night before and is tired from school, demands related to the amount or type of her play activities can be reduced. As well, each break she earns will be longer than usual and verbal praise will be issued for all appropriate behaviour.

2. **Provide Min-seo with interesting, fun, and modified age-appropriate toys.** Min-seo will be presented with interesting, fun, and modified age-appropriate toys that she can enjoy and that she can learn to play independently with. Such toys include Playdoh with scent, books that make sounds, various shapes with an approximately 1cm wide raised black border to colour, velcro-backed math pieces that can be easily matched, and a dress-up doll. Please see photos below for each toy.
Antecedent / Preventative Strategies

1. *Use visual supports* (“first and then”)/schedules to help Min-seo predict tasks, sequences, rewards, and transitions, and to promote expected behaviours (e.g., “nice hands” and “sit nice”).

   a. A “first and then” visual board (see below) will be used throughout the routine to help Min-seo to predict tasks, sequences, rewards, and transitions. A picture of an activity that Min-seo has to do will be placed in the “first” box; and to motivate her to finish that activity, a reward she has chosen will be shown in the “then” box. Immediately after finishing the activity on the board, Min-seo will be given access to her chosen reward (i.e., play with mom). The “first and then” board has space for three activities and will be placed on the table in the living room, near where Min-seo engages in her independent play routine.

   ![A “first and then” visual board](image)

   b. Min-seo will be provided with a picture schedule (see below) of an independent play routine to show its sequence of activities and to increase her knowledge of expectations. The picture schedule should be placed on the table of the living room. Prior to Min-seo’s transitioning to her next toy activity, the therapist can review the visual schedule verbally with her while pointing to each step so that Min-seo understands what she has to do in each activity.

   ![An example of a picture schedule](image)
c. Pictures of sitting nicely and having nice hands (see pictures below) will be used to teach Min-seo expected behaviour. Therapists or parents will give Min-seo rewards immediately (e.g., small pieces of her favorite fruit or pizza) every time she is sitting nicely or has nice hands. When giving these rewards, the adults will point to the picture depicting the reason for the reward, so that Min-seo can visually understand which positive or expected behaviour she is being rewarded for.

![Sit Nicely and Nice Hands](image)

2. **Provide a choice from among non-preferred activities.** Min-seo can be given a choice from among non-preferred independent activities before starting any activity. In this way, she can select the activity that she finds to be more reinforcing/desired, a step which will encourage her to do that non-preferred activity.

3. **Provide non-contingent attention.** Every 2-4 minutes while Min-seo is sitting at the table and playing with her toys, her mother will check on her and give her some attention. By reducing her need to seek attention, this practice will prevent Min-seo from engaging in attention-motivated problem behaviour.

4. **Use safety signals to build Min-seo’s endurance for difficult tasks.** Her parents can use safety signals to help prevent escape-motivated behaviour by warning Min-seo when she is almost done a specified step in the routine and making clear that reinforcement will be delivered soon. For example, when Min-seo is doing a difficult task, her mother can say, “first do one more piece; then I will help you” or “you play nicely; I will be back in one minute.”

5. **Provide Min-seo with verbal pre-correction before leaving the room.** When Min-seo is likely to need help or a break, the interventionist can remind her to ask for either by providing simple reminders: for example, “if you need help, you can ask for help.” These kinds of reminders can help Min-seo understand what her parents or therapist expects her to do and at the same time can help prevent her from engaging in problem behaviours.

**Teaching Strategies**

1. **Teach Min-seo to play independently** with modified age-appropriate toys. Using errorless teaching (e.g., moving from a hand-over-hand (HOH) prompt to a partial HOH prompt at the wrist, a partial HOH prompt at the forearm, a point prompt, and then no prompt), Min-seo will be taught to play independently with age-appropriate toys. Assistance will be decreased as she shows more independence. All physical assistance will be prompted...
from behind Min-seo, to help her to see which toy she is playing with and to concentrate on that activity without being distracted by the sight of others.

2. *Teach Min-seo to use a functional/alternative communication tool (proloquo2go) to ask her mom appropriately for help, a break, and/or attention.* Using a speech output app (the proloquo2go app), Min-seo will be taught how to ask her mom for help, a break, and/or attention. Min-seo will learn to touch the “mom” picture on her iPad as appropriate to play a recording of this word. For example, Min-seo will be taught that when she finishes an activity, she can press the image that will play “mom” to get her mother’s attention in an appropriate way.

3. *Teach Min-seo to understand visual supports to allow her to self-manage tasks and choose expected behaviour.* The visual support and play schedule described under antecedent/preventative strategies will be used to help Min-seo to manage her tasks and activities independently. Additionally, pictures of sitting nicely and having nice hands will be used to teach Min-seo expected behaviour.

**Consequence Strategies**

1. *Provide praise, physical attention, and preferred food contingent on successful completion of play activities on the visual board.* When Min-seo has finished her activities, she will immediately receive verbal praise and her chosen reward (e.g., playtime with mom). This kind of response will increase the likelihood that she will continue to behave similarly in the future.

2. *Honour the use of the alternative communication tool to ask for mom as to ask for a break/more time.* If Min-seo appropriately asks for her mother to give her help, a break, or attention, her parents should comply.

3. *Actively ignore and redirect to task in response to the occurrence of problem behaviour.* Min-seo is redirected back to appropriate behaviour by her mother prompting her to complete the immediate demand (e.g., physically assisting her to the table, physically assisting her to focus on a toy), and then reviewing the visual schedule and the expected behaviour visuals of “sit nicely” and “nice hands.”

4. *Engage in de-escalation procedures and redirect Min-seo to her task.* If Min-seo engages in physical aggression/self-injurious behaviour, this behaviour is blocked and she is redirected to the task at hand. If Min-seo leaves the living room, her mother will walk away from her but stay in the living room until Min-seo comes back to that room. Once Min-seo is back in the living room, her mother will redirect her to appropriate play-time behaviour while prompting her to “sit nicely.”
**Evaluation**

1. *Clinical data.* The student researcher will collect clinical data during each independent play session. All data will be reviewed frequently in order to allow the interventionist to adjust the PBS plan to best foster improvement and ensure overall success in the independent play routine. This data will include measures of the following:
   a. steps completed in the routine;
   b. occurrence of major and minor problem behaviour; and
   c. number of times Min-seo follows play schedules independently.

2. *Implementation checklist.* An implementation checklist will be created and provided to Min-seo’s parents for use during the intervention phase. Min-seo’s parents should fill out the checklist weekly in order to monitor the use of core strategies and to maintain any gains Min-seo may have made. This checklist can be used to:
   a. remind Min-seo’s parents of the strategies they should implement while supporting Min-seo in the play routine;
   b. evaluate the level of implementation;
   c. assess the level of problem behaviour; and
   d. evaluate the social validity of the plan made.
Appendix S

Implementation Checklist - Independent Play Routine

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
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</thead>
<tbody>
<tr>
<td>1.</td>
<td>I addressed any physical factors that may have impacted the independent routine (e.g., satiation, illness, fatigue). For example, I limited Min-seo’s reward food.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>2.</td>
<td>I used a “first and then” visual board.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>3.</td>
<td>I asked Min-seo to choose 3 play activities and then placed the relevant pictures and 3D objects on the “first and then” visual board.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>4.</td>
<td>I placed the “first and then” visual board on the table.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>5.</td>
<td>I moved the boxes containing toys next to Min-seo and arranged them to follow her toy activity schedule.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>6.</td>
<td>When Min-seo was sitting nicely or having nice hands, I gave her treats while pointing to the relevant pictures.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>7.</td>
<td>Before I left the room, I reviewed the play schedule with her and placed it on the table.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>8.</td>
<td>Every minute, I went to the living room to give her verbal praise for playing nicely. Before I left I told Min-seo “if you play nicely, mommy will be back in one minute!”</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>9.</td>
<td>Whenever I heard a “mom” sound from her iPad, I went to the living room and gave her praise for using her words. If she needed help, I helped her. If she needed a break, I gave her break for one minute. I didn’t give her any attention while she was having her break.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>10.</td>
<td>When Min-seo was finished playing with her toy, I gave her lots of verbal praise and treats. I also gave her physical attention for playing nicely.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>11.</td>
<td>When Min-seo displayed minor problem behaviour, I redirected her back to appropriate behaviour by prompting her (e.g., physically assisting her to the table, physically assisting her to focus on a toy) and then reviewing the visual schedule and the expected behaviour visuals of “sit nicely” and “nice hands.”</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>12.</td>
<td>When Min-seo engaged in physical aggression/self-injurious behaviour, I remained calm and physically blocked her from leaving the table or physically assisted her to return to sit at the table to sit and then redirected her to the task at hand.</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>13.</td>
<td>When Min-seo left the living room to find me in the kitchen, I walked away from her and stayed in the living room until Min-seo came back there. Once Min-seo was back in the living room, I redirected her to appropriate play-time behaviour while prompting her to “sit nicely.”</td>
<td>Yes</td>
<td>No</td>
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### Occurrence of Major and Minor Behaviours

<p>| | | | | | |</p>
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</thead>
<tbody>
<tr>
<td><strong>1.</strong> Negative vocalization  (e.g., says “annya” in a whining voice, whines, cries, screams, etc.)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>2.</strong> Physical aggression  (e.g., hitting, pulling hair)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>3.</strong> Destructive behaviour  (e.g., throwing toys, biting toys)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>4.</strong> Physical resistance  (e.g., falling on the floor)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>5.</strong> Leaving living room</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>6.</strong> Inappropriate demand  (e.g., grabbing shoes, bags, etc.)</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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</tbody>
</table>

### Evaluation of Social Validity

<table>
<thead>
<tr>
<th></th>
<th>Disagree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1.</strong> The goals of the independent routine are acceptable and important.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>2.</strong> The strategies are useful and effective.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>3.</strong> The strategies are difficult to use.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>4.</strong> Min-seo is successful in participating in the independent routine.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td><strong>5.</strong> I believe that the independent routine is successful.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>