

Running head: PARENTING STYLES, SELF-DETERMINATION, AND
DISABILITY

Exploring Relationships among Parenting Styles, Choices, and Family Quality of
Life among Chilean Parents of Pre-schoolers with and without Developmental
Disabilities

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Abstract

The relationships among parenting styles, choices provided to children, and perception of satisfaction about family life was examined in 64 families of pre-schoolers with and without developmental disabilities in the Bio-Bio Region of Chile, South America. Choice-making of young children between 19 and 59 months, with and without developmental disabilities (DD), was assessed, as well as their families' parenting styles and family quality of life. Self-determination was defined as the number of decisions that children were able to make in their daily lives, while family quality of life was defined as parental perception of satisfaction about their family life. Parents filled out questionnaires identifying their parenting style as either authoritative (high in structure, control and affection), authoritarian (high in structure and control and low in affection), or permissive (low in structure and control and high in affection), as well as choices provided to their children and perception of satisfaction about their family life. Intercorrelations among measures and hierarchical multiple regressions revealed that, while parenting styles were not significantly related to decision-making, they were related to parental perception of family quality of life. Implications for professionals include the need to work in collaboration with parents to implement culturally responsive interventions that promote self-determination among young children with disabilities.

Résumé

64 familles d'enfants en âge préscolaire, atteints ou non de déficiences développementales, ont été examinées dans la région de Bio-Bio au Chili, en Amérique du Sud, pour déterminer les relations entre style parental, choix fournis aux enfants et perception de la qualité de la vie de famille. Le processus de choix des jeunes enfants âgés de 19 à 59 mois, avec ou sans déficiences développementales (DD), a été évalué ainsi que le style parental en application dans leur famille et la qualité de vie de la famille. La capacité d'auto-détermination a été définie comme le nombre de décisions que les enfants ont été capables de faire dans leur vie quotidienne, tandis que la qualité de vie de la famille a été définie selon l'appréciation des parents quant à leur vie familiale. Les parents ont rempli des questionnaires identifiant leur style parental comme étant soit démocratiques ou directifs (niveaux de structure, contrôle et affection élevés), autoritaire (niveaux de structure et de contrôle élevé et niveau d'affection faible), ou permissif (niveaux de structure et contrôle faible et niveau d'affection élevé), ainsi que les choix proposés à leurs enfants et leur perception de satisfaction quant à leur vie de famille. Des corrélations entre les mesures et plusieurs régressions hiérarchiques ont révélées que, si le style parental n'était pas relié au processus de décision, il était lié à la perception parentale de la qualité de vie familiale. D'un point de vue professionnel, cela implique un travail nécessaire avec les parents pour mettre en place des interventions culturellement adaptées qui encouragent l'auto-détermination pour de jeunes enfants atteints de déficience.

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Introduction

Self-determination is a psychological construct implying that individuals are the main causal agents in their lives (Mithaug, 1998). It involves the volitional action of choosing to engage in an activity with a full sense of wanting and personal endorsement that override other determinants of behaviour (Wehmeyer, 1996, 2007). Built across the life span, self-determination is considered a set of skills that are the result of a developmental process (Deci & Ryan, 1985). However, despite the recognition of its importance to both typical and atypical populations, and because of its complex acquisition process, individuals with disabilities experience greater difficulties in the development of self-determination skills and experience lower levels of quality of life (Wehmeyer & Schwartz, 1998). To this population, the development of these abilities is particularly important because they support skills important for resiliency, like social competence, autonomy, independence, and a sense of purpose (Zhang & Benz, 2006).

The recognition of that people with disabilities face greater difficulties in exercising autonomy and independence have made the promotion of self-determination as the ultimate goal of special education and core for special educational practices. In fact, in the last 20 years a great amount of literature and research have been developed to support self-determination practices among individuals with disabilities (Ward, 1996). However, most efforts, programs, and practices have tended to be focused on adolescents (Shogren & Turnbull, 2006). As a result, little is known of the acquisition, development, and promotion of self-determination in younger stages of human development. The promotion of self-

determination is a recent phenomenon in research on early development mainly because of the assumption that self-determination skills are the result of capacities acquired throughout the life span. However, the precursors of self-determined behaviour are shown from early in life (Erwin & Brown, 2003; Erwin & Schreiber, 1999).

In accordance with this, this study centers its attention on self-determination practices among pre-schoolers with and without developmental disabilities. However, practices at this early age rely greatly on children's proxy environments and caregivers.

In area the area of special early childhood, educational practices include promotion of independence skills among pre-schoolers with disabilities. However, the family environment has not been consistently included in these practices which, in turn has created a situation where little is known regarding the relations between disability, parenting, and self-determination in young children. For this reason, the present study pays particular attention to the family environment and more specifically to parenting styles as being possible elements related to children's choice-making.

Parenting styles and practices are one focal point within the complex workings of the family environment and these are considered key to children's social emotional and cognitive development. However, research in this area has traditionally focused on typically developing populations (Abery & Zajac, 1996; Hay & Nash, 2004; Shogren & Turnbull, 2006). In typically developing children, research has shown links between parenting styles and practices and children's skill levels in various areas, including self-determination (Hetherington &

Stanley- Hagen, 1999a; Waite & Gallagher, 2000). However, in atypical populations direct associations between parenting styles and self-determination have not been yet demonstrated (Abery & Zajac, 1996) and self-determination practices oriented to pre-schoolers have only been addressed in Western societies such as the North American and European (Shogren & Turnbull, 2006).

Considering that in Western countries self-determination promotion is an integral part of special educational programs (Ward, 1996; Wehmeyer, 2004; Wehmeyer & Palmer, 2000), the international interest in the application of self-determination to special education practices (Zhang, Wehmeyer, & Chen, 2005), the consideration of self-determination as a culturally rooted value (Turnbull & Turnbull, 2001), and the cross-cultural validation of the parenting styles typology (Darling & Steinberg, 1993; Leung, Lau, & Lam, 1998; Querido, Warner, & Eyberg, 2002), and the recent attention to promotion of development of the self-determination precursors from an early age (Shogren & Turnbull, 2006), this study focuses its attention in exploring relationships among parenting styles, choices, and family quality of life in the non-Western culture of Chile.

This particular focus is in response to the fact that self-determination practices are still an unexplored and undeveloped area in many non-North American and European societies and countries including Latin America. In addition, the difficulties family environment in general, and parents in particular, experience in seeing their young children as capable to express preferences and the lesser opportunities they provide to their young children compared to school environment to make choices (Zhang, Katsiyannis, & Zhang, 2002), constitutes another concern that guides this study. The exploration of these ideas is conceived

in a particularly pertinent moment of the Chilean history as it recently started to recognize the rights of its citizens with disabilities and exploring the notion of self-determination in the region. Ultimately, this investigation aims to explore relations between parenting styles, choices, and family quality of life for families with and without a child with a developmental disability with the hopes of contributing to the literature and practices in the Bio-Bio region of Chile and in the country as whole.

Review of Literature

This chapter comprises a review of the literature, including information about the concept of self-determination, as well as a description of research in the area of self-determination and early childhood, positive outcomes of a focus on self-determination, and links with parenting styles. Significant gaps in this research area will become apparent during this chapter, and will be addressed in the objectives and hypothesis section of this study.

Overview of the Present Study

Self-determination theory and research fostered in Western societies is used as a framework for exploring the relationships between parenting styles, choices, and family quality of life among Chilean parents of pre-schoolers with and without developmental disabilities. Guidelines for understanding how the parenting styles of Chilean parents may be related to their children's decision making and quality of life include the recognition of the benefits of self-determination training by individuals with disabilities, the international interest of the application of self-determination to special education, the cultural determinants of self-determination, and the particular inclination of a non-

Western country to adopt self-determination policies and practices in their disability rights legislation (Parlamento del Congreso Nacional de Chile (Parliament of Chile), 2010; Ohtake & Wehmeyer, 2005; Turnbull & Turnbull, 2001; Wehmeyer, 2007; Zhang et al., 2005).

The option of self-determination is critical to the development of critical life skills for three reasons. First, self-determination is a set of skills that facilitate the development of independence and autonomy (Cook, Brotherson, Weigel-Garrey, & Mize, 1996; Wehmeyer & Palmer, 2000). Second, the exercise of these skills is fundamental for the creation and maintenance of the ongoing internal motivation processes that contribute to the formation, development, and consolidation of personal identity (Deci & Ryan, 1985; Zimmerman, 1990). Third, it is also a critical component in successful transitions (Field, Martin, Miller, Ward, & Wehmeyer, 1998), post-secondary success and general quality of life (Ward & Kohler, 1996; Wehmeyer, 2004), and is related to family quality of life (Schalock, Gardner, & Bradley, 2007; Summers, Poston, Marquis, Hoffman, Mannan, & Wang, 2005; Turnbull & Turnbull, 2001).

Despite the positive developmental outcomes mentioned above, the promotion of self-determination skills is most often associated with North-American and European societies because of their general emphasis on independence (Shogren & Turnbull, 2006; Zhang et al., 2005). In these societies, the notion of self-determination is found in history with its beginnings being traced to the seventeenth century with the French Revolution and political movements. The French Revolution proclaimed the ideal of self-governance, in which all people living in the same territory were considered to be equal citizens.

However, the emergence of Psychology as independent discipline in the nineteenth century provoked a shift and changed the emphasis and understanding of self-determination. The shift put the person at the center of the concept and two main aspects were highlighted: the internal aspect, expressed as internal motivation and the external aspect expressed as empowerment (Frankland, Turnbull, Wehmeyer, & Blackmountain, 2004). Nowadays, current representations of self-determination are attached generally to disability rights movements and more specifically to various advocacy groups and the movement toward inclusion (Frankland et al., 2004; Ward, 1996).

In accordance with the long history of the concept of self-determination and the move toward advocacy, there is a significant amount of research from the last 20 years that addresses efforts and practices to promote self-determination among individuals with disabilities in Western countries (Ward, 2006; Wehmeyer & Palmer, 2000). In contrast, despite the international recognition of people with disabilities' rights, the creation of better and more inclusive practices within the special education field, and the benefits in independence levels of people with severe disabilities through inclusive practices (Ohtake & Wehmeyer, 2004; Wehmeyer, 2007; Zhang & Benz, 2006; Zhang et al., 2005), self-determination in non North American and European cultures is still a very recent initiative and very little development has been carried out in Latin American countries (Shogren & Turnbull, 2006; Yaradola, 2010).

In consideration to the recent interest in the application of self-determination practices in Chilean society and the recent research on self-determination trends aimed at respecting the ultimate purpose of self-

determination which is “to intentionally create experiences in people’s lives that are consistent with their unique beliefs, needs, and preferences” (Field et al., 1998, p.148), this study focuses on self-determination among Chilean children with and without disabilities. In Chile, despite the recent passage of the National Disability Law (Parlamento del Congreso Nacional de Chile (Parliament of Chile), 2010), which seeks to address critical issues such as respect, recognition, and autonomy of people with disabilities through inclusive practices and self-determination, there are currently no practical programs addressing self-determination nor particular strategies for different age groups. Though it is well known that people with disabilities experience greater difficulties with the transition from youth to adulthood (Zhang & Benz, 2006), very little is known regarding the development of self-determination. Hence, this study focuses its attention on young children in the critical preschool years with and without developmental disabilities to explore the precursors of self-determination. Further, as the family context is particularly influential in these early years, this study also the role of the parenting styles in the promotion of self-determined behaviour in young children with and without developmental disabilities. We focused on the opportunities parents give to children to make their own choices and how this is related to family quality of life and children’s adaptive behaviours.

By looking at the notion of self-determination in relation to parenting variables among parents of a non-Western society we can have some part in starting discussions about cultural background in relation to self-determination and see how it may be valued differently among different societies.

Focus on Developmental Disabilities

Consistent efforts to support the equal rights, independent living, normalization, and inclusion of people with disabilities have been highlighted since the 1960s (Nirje, 1972). In the 1960's, the independent living movement became more powerful and many advocated for integration and meaningful opportunities of people with disabilities including those with very high needs. Advocacy movements focused on the right of individuals to choose, belong, and to participate as full and equal members of society. This emphasis on the role of the individual and on freedom in decision making resulted in an increased respect for individuality as a core concept of their claims (Ward, 1996, Wehmeyer, 1996).

However, despite the efforts of advocacy groups to represent the needs and rights of people with disabilities, it was not until the early 1990s that these efforts were translated into practical programs oriented towards the enhancement of the lives of people with disabilities by developing life skills, especially skills related to autonomy and independence (Ward & Kohler, 1996). These programs were mainly developed by the governments of Western countries, and were aimed at developing innovative instructional approaches for developing self-determination skills of people with disabilities. Until today, these efforts still explain and provide guidelines for self-determination policies and practices of all people with disabilities in Western countries. Practices are supported for research policies aimed at finding better strategies to improve the quality of life among this population. In fact, research done in the area has shown that different disability groups, including developmental disabilities benefit from these types of programs that not only foster particular skill development among people with disabilities in

their everyday lives, but also have an impact on long-term quality of life in mainstream environments (Algozzine, Browder, Karvonen, Test, & Wood, 2001; Cooper & Browder, 1998; Wehmeyer, 2007).

The term “developmental disabilities” (DDs) refers to a group of disorders that are related to significant difficulties in cognitive and physical realms of development and that are considered to be life-long. Developmental disabilities appear before the individual reaches age 22 and is likely to continue indefinitely. Developmental disabilities are associated with a myriad of difficulties that affect daily functioning in a variety of areas, such as independent living, economic self-sufficiency, learning, mobility, receptive and expressive language, self-care, and self-direction (Developmental Disabilities Association of Canada, 2010).

Different types of disabilities fall under the umbrella of developmental disabilities including cerebral palsy, autism spectrum disorders, severe language impairment, and genetic and chromosomal disorders, such as Down syndrome, fragile X syndrome and fetal alcohol syndrome. Despite the different characteristics associated with specific disabilities, this study employs the term generally as it is exploratory in nature. Notwithstanding the different characteristics related to various types of developmental disabilities, people with developmental disabilities share certain characteristics. Individuals with developmental disabilities often have difficulties with expressive language and communication skills that limit their ability to express preferences and choices, and often have difficulties with flexible and adaptive problem solving (Wehmeyer, 2007). Further, many individuals with developmental disabilities share a common history of stigmatization and limited opportunities as their own

personal experiences of disability interacts with limited societal expectations. As a result, because of both societal and personal limitations, people with developmental disabilities may not have the same opportunities to develop the skills to make their own decisions (Kishi, Teelucksingh, Zollers, Park-Lee, & Meyer, 1988; Stancliffe, 1994; Stancliffe & Wehmeyer, 1995; Wehmeyer, Kelchner, & Richards, 1995; Wehmeyer & Metzler, 1995).

Restricted abilities and opportunities to make decisions means that people with developmental disabilities have limited opportunities for exercising autonomy and independence skills, which negatively affects their quality of life (Schalock, 1996; Wehmeyer & Garner, 2003). The complex interaction between severe disabilities, choice and decision-making, and quality of life outcomes is the focus of recent research that highlights the role of self-determination skills as a moderator between severity of the disability and better quality of life outcomes (Martin, Valenzuela, Woods, & Borland, 2004; Wehmeyer, Agran, & Hughes, 2000; Wood, Fowler, Uphold, & Test, 2005). The potential beneficial outcomes obtained from instruction make self-determination training crucial for people with developmental disabilities. In fact, research has shown that the dropout rate is lower for students with self-determination educational training (Zhang & Hasto Law, 2005) and once out of the school system, students who have received training in the associated skills are more likely to live outside the family home, experience greater independence, and have jobs with better pay and benefits (Ward, 1996, 2006). Further, these positive outcomes have been also demonstrated in students with severe disabilities.

The particular characteristics people with developmental disabilities share, the challenges they have to face to become more independent, the consideration of self-determination as the result of a life-long process, and the positive benefits obtained of self-determination instruction, support the need to examine self-determination skills in young children with developmental disabilities.

Self-Determination in a Non-Western Cultural Environment

Different international efforts to better recognize and include individuals with all types of disabilities have been emerged in the last 30 years. These efforts, mainly lead by Western countries of the United Nations, have been translated into practical initiatives focused on supporting the participation of people with disabilities, advancing their rights, protecting their dignity, and promoting their equal access to employment, education, information, and goods and services, all objectives of the office for Human Rights of the United Nations (United Nations, 2010). Results from successful practices have been recognized by leaders in different countries and have lead to an interest in implementing similar practices to promote the development of self-determination skills among individuals with disabilities because of the higher levels of independence and autonomy obtained from specialized training. In recognition of the beneficial practical outcomes obtained by people with disabilities and because of its own commitment to better support inclusive practices Chile has begun to participate in these initiatives. Thus, in 2004, for the first time in the nation's history, Chile conducted a national survey aimed at providing a comprehensive snapshot and analysis of the situation of people with disabilities in Chile. This survey found that one in eight Chileans has a disability, constituting 12.9% of the total population (Fondo Nacional de la

Discapacidad (National Disability Fund), 2004). These statistics helped to identify and contextualize the notion of disability leading to the Chilean government signing the United Nations Convention on the Rights of Persons with Disabilities in 2007. In addition to these efforts, programs to accelerate the application of the National Disability Law were undertaken and have been in effect since 2010. This law establishes norms regarding the equality of opportunities and social inclusion of people with disabilities, with special attention given to universal design, universal accessibility, independent living, participation, and social dialogue (Parlamento del Congreso Nacional de Chile (Parliament of Chile), 2010). In particular, Article 4 establishes the obligation of the Chilean government to support “programs aimed to obtain positive impacts on people with disabilities’ quality of life through the promotion of personal relationships, personal development, self-determination, social inclusion, and the exercise of their rights” (Parlamento del Congreso Nacional de Chile, Ley Nacional de Discapacidad (Parliament of Chile, National Disability Law), 2010, p. 2). Although the term “social inclusion” is not clearly defined within the new Disability Law, several other definitions such as “active participation” and “respect of human diversity” are included. In addition, Article 7 tacitly speaks about social inclusion within the definition of equality of opportunities for individuals with disabilities as “the adoption of positive and active measures aimed at avoiding or compensating the disadvantages of a person with a disability to fully participate in the political, educational, working, economical, cultural, and social sphere.” (Parlamento del Congreso Nacional de Chile, Ley Nacional de Discapacidad (Parliament of Chile, National Disability Law), 2010, p. 5).

With the new Disability Law, the Chilean government recognizes the interest and intention to adopt and apply international policies and examples to its legislation, the adoption of particular constructs linked to field of disability such as self-determination (Zhang et al., 2005), the rights of people with disabilities, and respects its commitment to develop better inclusive practices by creating experiences in people's lives in accordance to their beliefs, needs, and preferences (Turnbull & Turnbull, 2001). However, promotion of these programs in societies other than the North America and European is a complex endeavour as the values associated with self-determination such as individuality, autonomy, and independence tend to vary by culture (Ohtake & Wehmeyer, 2004; Zhang & Benz, 2006). The case of Chile as other non-Western societies in these matters involves serious challenges in adopting and applying Western concepts that may be attached to prevailing cultural values. Traditionally, Chilean society has valued collectivism, in which a sense of self is understood in relationship with others. In such collectivist societies, people often value the goals of the collective over their own personal goals. As a result, personal objectives and practices that are not aligned to the main societal discourse are discouraged (Browder, Wood, Test, Karvonen, & Algozzine, 2001). Therefore, the practice of personal individuality may be seen as a menace to prevailing societal system and may discourage self-determination practices in Chilean society. Despite recognizing the significant differences in societal norms and values between Western societies and their society, the Chilean government has been interested in programs that include the development of self-determination skills. This is due to the positive developmental outcomes of self-determination development for people with

disabilities (Abery & Zajac, 1996; Wehmeyer, 1996), the benefit to their daily lives (Erwin & Schreiber, 1999), the reduced dropout rates of students with developmental disabilities (Zhang & Hasto Law, 2005) and better inclusion into the labour market (Ward, 1996). Currently, the academic outcomes of Chilean students with disabilities are bleak; only half finish primary school, only one in seven finishes high school, and only one in twenty goes on to post-secondary education (Fondo Nacional de la Discapacidad (National Disability Fund), 2004). Given this, Chilean government has written legislation to provide opportunities to all Chileans with disabilities so that they may experience full inclusion and citizenship rights. With this new policy the Chilean government not only seeks to provide inclusive opportunities for their citizens with disabilities but also provides a useful example to investigate how promotion of the self-determination is carried out in non-Western societies and more specifically within the Latin- American region, and to consider promotion of self-determination within a specific cultural context. This opportunity represents an ideal moment to see how Chilean families may include self-determination practices among their young children.

Self-Determination in Early Childhood

The achievement of fundamental milestones critical for the later acquisition and development of more complex and sophisticated skills and capacities, including those related to self-determination, take importance during the stage of early childhood (Brown & Cohen, 1996). Early childhood is marked by dramatic developmental changes and it is at this stage where children start impacting their world through the preferences they make (Maccoby, 1984). However, despite the recognition that vital developmental outcomes are acquired

in early childhood, and that it is the period where the building blocks of self-determination are emerging, little research has focused on the development of self-determination skills in young children with disabilities (Brotherson, Cook, Erwin, & Weigel, 2008; Zhang et al., 2005). This, along with the developmental process involved in the development of self-determination, highlights the need to accentuate efforts for this age group. In fact, it is during early childhood that children begin to practice the skills associated with self-determination, i.e. autonomy, self-regulation, psychological empowerment, and self-realization (Doll, Sands, Wehmeyer, & Palmer, 1996). However, the development of these skills during this stage is dependent on children having opportunities to make their own decisions (Abery & Zajac, 1996). By expressing choices, young children can state who they are, what they want, and experience the consequences of their decisions. This, in turn, permits the maturation of their decision-making skills (Doll et al., 1996; Wehmeyer, 1996; Wehmeyer & Palmer, 2000).

The mechanism for making decisions is present as early as at birth; however, making an intentional selection between two or more choices requires relatively sophisticated levels of communication. This is particularly challenging for young children with developmental disabilities due to their often-limited communication skills; acquisition and development of developmental milestones becomes more difficult. Despite these limitations, research has demonstrated that decision-making practice does benefit people with disabilities (Ward, 2006; Wehmeyer & Garner, 2003). However, young children face one more limitation: the increased dependency involved in early ages. In accordance to their own vision of the world, young children's caregivers may facilitate and/or obstruct

many types of interactions which in turn may represent the opportunity to foster or obstaculize children's independence. However, due to the limitations young children with developmental disabilities face in terms of communication and problem solving, caregivers tend to restrict more their decision making opportunities and create greater dependency on their proxy environment (Erwin & Schreiber, 1999; Shogren & Turnbull, 2006). However, although young children including those with disabilities may not present a set of clearly defined values and beliefs associated with self-determination abilities, they do express preferences for what brings them comfort, joy, pleasure, and security (Erwin & Brown, 2003). These fundamental precursors are crucial to building more sophisticated skills and behaviours, constituting the developmental base from which self-determination is constructed. Thus, the promotion of self-determination practices in early childhood across the various environments children relate to is critical for the enhancement of higher levels of autonomy in adulthood.

Self-Determination and Family Environment: The Influence of Parenting Styles

In recognition of the importance of early childhood as a critical stage in the acquisition, development, and promotion of self-determination, recent educational initiatives in Western countries have focused on early ages (Erwin & Brown, 2003). Research has focused on how early childhood educators engage children and their role in providing decision-making opportunities (Brotherson et al., 2008; Shogren & Turnbull, 2006). As a result of this focus on professionals in the context of early childhood education, little is known about the role of the

family environment in promoting decision-making abilities (Brotherson et al., 2008) and very little research has focused on the influences of families and family environment on the development of self-determination skills. Limitations to including families in self-determination training efforts are exacerbated by the additional obstacle of viewing their children with disabilities as independent. Thus, parents may be less likely than teachers to participate in engaging activities that support the development of self-determination (Zhang, Katsiyanis, & Zhang, 2002; Zhang et al., 2005) and tend to overprotect children from exposure to frustration and failure (Brotherson et al., 2008). However, the recognition of family environment as the primary learning setting for most young children (Cook, Brotherson, Weigel-Garrey, & Mize, 1996; Dunst, Hamby, Trivette, Raab, & Bruder, 2000) and the place where children have the earliest opportunities to make choices, experience control, and exhibit competence (Brotherson et al., 2008; Cook et al., 1996) highlight the need to include it within self-determination practices.

Family members, especially parents, fulfill an important role in providing children with a myriad of opportunities including choice-making. These opportunities are provided in the context of facilitating and/or limiting many types of interactions and by interpreting their children's communications about their preferences and choices (Abery & Zajac, 1996). In early childhood, opportunities for expressing preferences and choices are associated with the development of autonomy. Thus, engagement in choice making is crucial to build the precursors of self-determination abilities. Research has shown that students with disabilities that have lacked choice making opportunities in early life are more likely to

engage in problem behaviours such as non-compliance, aggression, and self-injury (Ruef & Turnbull, 2002).

Due to the close proximity of children and their parents in early childhood, parenting behaviours have a crucial influence as regulatory mechanisms by balancing their children's security, limits, and freedom (Cunningham, Warschausky, & Dixon-Thomas, 2009; Turnbull & Turnbull, 1996) and influencing children's development through direct and indirect pathways (Ladd, Profilet, & Hart, 1992). Whereas direct pathways are those parental actions aimed at structuring the child's immediate environment in a goal directed manner, indirect pathways are less goal-oriented and refer to the parent-child relationship (Cunningham et al., 2009). Although both pathways are instrumental for children's competencies, this study focuses on the influence of one of the indirect pathways, parenting styles. The parenting styles typology provides a useful framework for examining the influence of parenting on children's acquisition and development of a wide range of competencies (Woolfson & Grant, 2005). Each parenting style represents different ways in which parents behave towards their children, and each is associated with different developmental outcomes and achievements (Abery & Zajac, 1996). Research has shown that parenting styles differ for children with and without developmental disabilities (Cunningham et al., 2009; Kim & Mahoney, 2004; Woolfson & Grant, 2005). However, research attempting to identify how parenting behaviours and styles may change in response to the challenges imposed by the disability has been inconclusive, and only a few studies have addressed this topic in early childhood (Woolfson & Grant, 2005). Furthermore, there is virtually no research on the influence of

parenting styles on the promotion of self-determination among pre-schoolers with disabilities (Shogren & Turnbull, 2006).

Baumrind (1967, 1977) the main theorist of parenting styles, classified parents into four different parenting styles: authoritative (high control and structure, high involvement and affection), authoritarian (high control and structure, low involvement and affection), permissive (low control and structure, high involvement and affection) and neglective (low control and structure, low involvement and affection). Parenting style classification is determined by the demands parents place on their children and how responsive they are to their parenting function (Grolnick, 2003). Widely used, the model has been validated cross-culturally (Robinson et al., 1996).

In typically developing populations, authoritative parents structure family environment by setting clear standards, establishing firm rule enforcement, and by maintaining control in an affectionate and responsive way. Authoritative parents recognize children's rights and encourage children's independence and individuality. In turn, children of these parents have higher levels of self-esteem, achievement, and motivation (Abery & Zajac, 1996), present lower levels of delinquency and aggression (Loeb, Horst, & Horton, 1980), and are generally more self-reliant, self-controlled, self-regulated, and socially responsive (Baumrind, 1991; Baumrind & Black, 1967; Grolnick & Ryan, 1989). In contrast, authoritarian parents are high in control but low in affection, setting strict standards by being controlling and directive. Children of these parents have higher levels of approval-seeking but lower achievement levels since they lack individuation, autonomy, and initiative (Grolnick, 2003). They are also more

detached, controlling, and exhibit low levels of social responsibility (Abery & Zajac, 1996; Baumrind, 1991; Baumrind & Black, 1967). In contrast to authoritative and authoritarian parents, permissive parents make few demands on children, are overly tolerant of children's impulses, and rarely employ any kind of discipline. Children from nondirective homes are often immature and lack impulse control and have low levels of achievement orientation, competence, and self-regulation. They also have the lowest levels of independence and social responsibility compared to children of other parenting styles (Abery & Zajac, 1996; Baumrind, 1991; Baumrind & Black, 1967). Finally, neglective parents don't exercise control, don't show affection, and are emotionally detached. Children from unengaged families exhibit the poorest outcomes, including high levels of acting-out behaviours and low levels of achievement (Abery & Zajac, 1996; Woolfson & Grant, 2005). Despite the importance of the aforementioned findings, research carried out in populations with disabilities is more scant and not conclusive (Zhang & Benz, 2006).

Considering that children of highly responsive parents have healthier psychosocial outcomes (Cunningham et al., 2009) and that there is a strong positive correlation between parenting styles and the self-determination competencies of typically developing children (Abery & Zajac, 1996), it is believed that children with developmental disabilities raised by autonomy-supportive parents who provide age-appropriate and ability-appropriate opportunities for self-determination, assume greater control of their lives and have better self-determination outcomes than their counterparts who do not have such opportunities (Abery, McGrew, & Smith, 1995; Grolnick, 2003). However, these

associations have not been reliably demonstrated (Abery & Zajac, 1996).

Therefore, these associations seem to be fundamental for understanding the influence of different parenting styles on self-determination and the perceived quality of life of the families of young children with significant disabilities including those with developmental ones.

Aligning Self-Determination's Definitions with the Purposes of this Study

Self-determination is a complex, multidimensional concept that includes all main areas of the human experience as well as affective, cognitive, and behavioural components (Deci & Ryan, 1985; Turnbull & Turnbull, 1996, 2001). It is the result of a developmental process and every stage of human development across the life span contributes to its acquisition and development. In early childhood, providing opportunities to children to express preferences and make decisions promotes the development of self-determination.

The findings of this study will be placed in the context of the functional model of self-determination. The model involves the development of practical capacities by the individual throughout the life span, creating a personal and a unique approach consistent to his/her own characteristics. This model defines individuals with high levels of self-determination as “those who know how to choose, what they want, and how to get it, choosing their goals and persistently pursue them” (Martin & Marshall, 1995, p. 147). Wehmeyer (1996) states that being self-determined implies that “the person makes or causes things to happen in his or her life” (p.146). Both definitions suggest that the individual is the causal agent in his/her own life and has the power to decide and to change undesirable

things by making their needs known, evaluating their progress toward meeting goals, and adjusting their problem-solving strategies.

However, these two definitions of self-determination do not cover all related areas involved in the present study. While skills associated with self-determination are universally important for achieving positive life outcomes, one's societal and cultural background also influences how self-determination is developed and exercised. Turnbull and Turnbull (2001) address this issue by including, in their definition of self-determination, societal values as "the means for experiencing quality of life consistent with one's own values, preferences, strengths, and needs" (p.58). This takes into account people's desire to make choices that are consistent with their environments and particular belief systems, including their needs and preferences.

Putting it all Together

Self-determination, the ability by younger children to make meaningful choices and express preferences, is a fundamental set of skills that leads to the development of autonomy and independence. Since both autonomy and independence are considered the most important developmental outcomes of adolescence, research on self-determination has focused on adolescents. Thus, our knowledge about self-determination is confined to this later developmental stage (Shogren & Turnbull, 2006). However, recent approaches have advocated beginning the promotion of self-determination skills in early childhood because it provides the earliest opportunities to exercise these precursors of full self-determination. Since young children spend the majority of their time at home, it is critical that parents and primary caregivers provide meaningful interactions

leading to self-determination. The opportunities for developing self-determination skills that parents provide their children is heavily influenced by beliefs about independence, individuality, and freedom. Parental beliefs about their role in fostering autonomy skills, and the efforts they make to promote these skills, are highly influential on the development of self-determination competencies (Brotherson et al., 2008).

This study, which focuses on the parents of pre-schoolers with and without developmental disabilities of a non North American or European culture, seeks to identify relationships between parenting styles, choices, and perceived family quality of life. In typically developing children research has clearly established connections between parenting styles and children's levels of competency, especially those related to self-determination. However, in children with developmental disabilities, "much of the current evidence connecting parenting styles to self-determination is indirect in nature" (Abery & Zajac, 1996, p.174).

This study was conducted in the Bio-Bio Region of Chile of South America. Its aim is to explore relationships among parenting styles on self-determination and family quality of life in pre-schoolers with and without developmental disabilities, by identifying how parents promote choice-making among their young children.

According to the National Statistics Centre of Chile (2006) 12.9% of the total population has a disability and in the Bio-Bio Region, in which this study was conducted, holds the second largest population of individuals with disabilities (Instituto Nacional de Estadísticas (National Statistics Center), 2006).

Considering these statistics, the recent promulgation of the Chilean National

Disability Law in February 2010, and the suggestion that more research on self-determination should be conducted in non-Western societies (Shogren & Turnbull, 2006; Zhang & Benz, 2005), several positive effects may emerge from this study's findings, i.e. more culturally-appropriate strategies and practices for developing young children's self-determination skills in the home environment and also the development of better strategies in this area for multicultural societies.

The Present Study

Self-determination in young children.

Defining self-determined behaviour. Self-determination in this study is defined as the number of decisions parents allow their children to make within the family environment. In early childhood, rudimentary forms of expressing preferences and choices are considered precursors to build decision-making abilities, important skills leading to autonomy. In order to measure self-determined behaviour a new scale was created, one that takes into consideration both the difficulties that young children with disabilities have in expressing preferences and making decisions and also the obstacles in their environment against respecting and fostering them. Self-determination measures were taken from recommendations by Doll, Sands, Wehmeyer, and Palmer (1996) for school- and-family-based interventions supporting the development of young children's self-determination. The number of decision-making opportunities was ranked by a 3-point Likert scale in which parents identified the most appropriate statement of how many opportunities for exercising self-determination they provided to their children.

Defining family quality of life. Family quality of life is a derivation of perceived individual quality of life which has been defined as core concept within the self-determination literature (Shogren & Turnbull, 2006; Summers, Poston, Turnbull, Marquis, Hoffman, Mannan, & Wang, 2005). Created with the aim to broaden the concept and understanding of quality of life, family quality of life measurement has been the focus of the latest trends within the disability field research. Family quality of life is affected by physical health factors as well as mental well-being and perception of life circumstances, and highly influenced by one's self-perceived position in life and how it aligns with one's goals and expectations (Lee et al., 2009). Therefore, in this study, parental perceptions of the aforementioned influences on their own quality of life may affect how they perceive their family's general quality of life (Summers et al., 2005; Verdugo, Córdoba, & Gómez, 2005). Since families of children with disabilities are more likely to experience difficulties (Benson, 2006), parental stress play a significant role in the development of behaviour problems of children with developmental disabilities (Sipal, Schuengel, Voorman, Van Eck, & Becher, 2009), and parenting style is a significant factor in the quality of life of children with cerebral palsy (Aran, Shalev, Biran, & Gross-Tsur, 2007), parental perception of family quality of life was measured. The definition of family quality of life in this study is consistent with that of the Family Quality of Life Survey (Hoffman, Marquis, Poston, Summers, & Turnbull, 2006). Parents ranked their perception of family quality of life within a 5-Likert point scale.

Hypotheses

This study explores the notions of self-determination and family quality of life in a group of young children and their parents in the Bio-Bio region of Chile, South America. Self-determination and quality of life literature is used to examine the opportunities to express preferences that parents provide to their young children. In this study, these opportunities are defined as decision-making opportunities, provided by parents in the home environment, which help children develop higher levels of autonomy and independence. There is a dearth of research addressing the self-determination opportunities available to young children in general and in Latin American countries in particular, even as the Chilean government is making policies that recognize the rights of people with disabilities. This shows the need to explore not only how Chilean parents of young children with developmental disabilities engage in promoting competencies related to autonomy in their children, and how this compares to parents of children without developmental disabilities, but also how the promotion of specific skills and attitudes may be interpreted within their own cultural context (Shogren & Turnbull, 2006; Zhang, 2005; Zhang et al., 2005; Zhang & Benz, 2006). Within this context, the following hypotheses were examined. In light of the need to contextualize self-determination within the family environment in Chile, parenting styles, the number of decision-making opportunities provided and available to children, and the perception of family quality of life were studied. Considering that children with disabilities raised in families that provide opportunities for self-determination assume greater control of their lives (Abery et al., 1995), that more democratic families provide more opportunities for

autonomy (Baumrind, 1991; Abery & Zajac, 1996), and that children's behaviour problems are associated more with parental stress derived from situational factors such as income, health status, job satisfaction, and difficulties in balancing stress and support (Sipal et al., 2009), it is hypothesized that these demographic variables will be related to the number of decisions children make. In regards to family quality of life, there is a lack of research linking parenting styles and this variable. However, in consideration to Aran et al.'s (2007) findings that parenting style was the most important factor affecting the psychosocial aspects of quality of life in children with severe disabilities, and this influence is not shown when parenting typically developing children (Woolfson & Grant, 2005), it is hypothesized that parenting style will have a direct impact on family quality of life.

The best self-determination outcomes, as well as those of a wide range of competencies, are associated with the authoritative parenting style, which fairly balances control, structure, and affection (Grolnick, 2003). Therefore, it is expected that this style will be strongly related to children's decision making and family quality of life.

Finally, considering the diversity of outcomes in children with similar levels of disability, which may be related to both the interplay of the child and family functioning and to the context of families (Sipal et al., 2009), group differences by disability are also expected.

Method

Participants

The participants of this study were 64 families of pre-schoolers in the Bio-Bio Region of Chile. All participant families defined themselves as members of Chilean society. Sixty-two families participated in the study; 30 families had young children with a developmental disability (DD) while 32 families had young children without it.

Seven schools with specialized programs for infants and toddlers with developmental disabilities and nine childhood care centers for pre-schoolers with typically developing children were approached to participate in the study; all agreed to participate. With the exception of one private childcare centre, all participant institutions were financially supported by the government of Chile.

Participants from specialized programs had already been officially diagnosed with mental retardation and/or a developmental disability. The 32 participants from specialized programs were matched with participants without a developmental disability. Matching criteria included a history of neither developmental disabilities nor any other disability. In addition to disability status, gender, chronological age, and, in most cases, by family income (27 pairs) were considered.

Participant ages ranged from 19 to 59 months, with a mean age of 41.69 months ($SD= 10.34$). The mean age for the group of participants with DD was 41.97 months ($SD= 10.37$), while the mean age for the group of participants without DD was 41.41 months ($SD= 10.47$). Table 1 has a summary of age means and standard deviations by group.

Demographic information about the participants, such as family income, family type parental level of education, and type of disability, was collected. Of the group of young children with DD, eighteen families reported earning less than \$245.000 Chilean pesos, eight families reported earning between \$245.000 and \$440.000 Chilean pesos, and six families reported earning between \$440.000 and \$670.000 Chilean pesos. Seventeen families from the group of young children without DD reported earning less than \$245.000 Chilean pesos, ten families reported earning between \$245.000 and \$440.000 Chilean pesos, four reported earning between \$440.000 and \$670.000 Chilean pesos, and one family reported earning between \$670.000 and \$1.800.000 Chilean pesos. Monthly family income is summarized in Table 2.

Family arrangement was also reported. In the group of young children with developmental disabilities twenty-five lived in a nuclear family setting (participant lives with no other family members apart of his/her parent(s) and sibling(s)), and seven young children lived with relative(s) apart their nuclear families. In the group of children without developmental disabilities nineteen lived in a nuclear family setting and thirteen lived with more relatives other than their nuclear families.

In regard to parental level of education, five mothers from the group of young children with developmental disabilities had completed primary school, thirteen had completed high school, ten had technical degrees, and four had university degrees. Six fathers in this group had completed primary school, nineteen had completed high school, two had technical degrees and five had university degrees. In the non- disability group, six mothers had completed

primary school, fifteen had completed high school, four had technical degrees, and seven had university degrees. Five fathers in this group had completed primary school, seventeen had completed high school, five had technical degrees, and five had university degrees. Parental level of education by group is summarized in Table 3.

Parents and institutions reported the type of disability of young children with developmental disabilities. Eleven young children (34.4%) had Down syndrome, nine (28.1%) had autism spectrum disorder, two (6.3%) had severe language impairment, four (12.5%) had genetic disorders, three (9.4%) had cerebral palsy, and three (9.4%) were categorized as “other” since their diagnoses either did not fall into any of the mentioned categories or diagnostic was still under study. Disability type is summarized in Table 4.

Measures

Five measures were used to assess the main objectives of this study. Appendix A contains an English version of the measures used in this study.

Demographic-questionnaire. Parents were asked to fill out a demographic questionnaire, which included questions about their children’s age, sex, disability type, and any specialized program or childcare centre children may be attending. This questionnaire also included questions about the parents and family environment of the children, including age, parental level of education, family income, and family type.

The family quality of life survey of the Beach Center (FQOL survey). (Hoffman et al., 2006). The FQOL is a derivation of the individual quality of life concept widely addressed within disability literature (Shogren & Turnbull, 2006;

Summers et al., 2005). The focus on family quality of life came from family-centered approaches recognizing that disability impacts the whole family; hence the extension of the individual quality of life concept. The FQOL is self-administered and determines family satisfaction towards different aspects of their family life. Factors measured by the scale include family interactions, parenting, emotional well-being, physical/material well-being, and disability-related support. Although the Beach Center is still collecting evidence for psychometric properties, initial results have yielded excellent psychometric results: $\alpha = .88$ satisfaction (Summers et al., 2005). For the present study, parents were asked to rank their satisfaction about their family life by choosing between 5 different options ranging from very unsatisfied to very satisfied. The family quality of life satisfaction scores were calculated by summing the numbers assigned to each preference and dividing the total scores by the number of items asked. This measure has been translated to Spanish; this Spanish version has been validated (Verdugo et al., 2005).

Vineland adaptive behaviour scales, first edition (Vineland-I). (Doll, 1963). The Vineland is a widely-used scale that determines individual social competence and adaption. It measures eight main domains: dressing, personal self-care, eating, self-direction, occupation/vocational skills, locomotion skills, and social and communication skills from birth to age 26. This scale is administered by an interviewer who determines the score assigned to each item based on caregiver answers. Widely utilized in special education to identify individual strengths and weaknesses, the Vineland is recommended by the Ministry of Education of Chile for assessing special populations (Ministerio de

Educacion de Chile (Ministry of Education of Chile), 2009). Although there is an updated English edition of this scale with higher reliability coefficients, the author of this study and her supervisor decided to use the 1963 version because it is translated into Spanish, has norms for the Chilean population, and it is the version recommended by the Ministry of Education of Chile. Parents in this study provided information about their children's adaptive behaviours and functional abilities. A mental/social age is obtained from the scale and represents the functional abilities the child has acquired.

An adaption of the choice questionnaire. The target population of this study was young children; however, no existing measures assessed the number of choices provided by children's self-determined behaviour and their environments. Thus, the author of this study and her supervisor created an adaption of the choice questionnaire (Stancliffe & Parmenter, 1999) based on Doll, Sands, Wehmeyer, & Palmer's (1996) recommendations for school-and-family-based interventions supporting the development of self-determination in young children. The adaption of the choice questionnaire measures the amount of preference choice and decision-making opportunities parents provide to their young children. Choices are age-appropriate and are identified as an indicator of productivity. The questionnaire is a 15- item scale, including items focused on areas such as clothing, food, bedtime, recreation, friends and friendship, family holidays, pets, homework, and toy organization. Scores were calculated by summing the numbers assigned to each preference and dividing the total scores by the number of items asked. Since this instrument is new, its psychometric properties have not yet been measured.

The parenting styles and dimensions questionnaire (PSDQ). (Robinson, Mandlco, Olsen, & Hart, 1995). The PSDQ is a 62-item inventory designed to assess parenting practices and styles in accordance with Baumrind's (1967, 1977) authoritative, authoritarian, and permissive typologies. The instrument assesses not only general parenting styles, but also dimensions associated with those typologies. PSDQ's psychometric scores are: $\alpha = .91$ for authoritative parenting style; $\alpha = .86$ for authoritarian parenting style; $\alpha = .75$ for permissive parenting style (Robinson et al., 1995; Touliatos, Permuter, Strauss, & Holden, 2001) and it has been validated cross-culturally (Robinson et al., 1996). The PSDQ is a self-report measure; its scores are calculated according to each parent's perceptions of their own parental role and his/her partner's performance. For this study, following the reverse scoring of three items (24, 38, and 52), scores for the three primary and eleven secondary subscales were obtained by summing items within each dimension and dividing the total score by the 62 total items of the questionnaire.

Parenting styles questionnaire: Dealing with missing data. The Parenting Styles Questionnaire used in this study has different questionnaires for fathers and mothers to fill out. For some young children, it was not possible to obtain questionnaires from both their father and mother. The actual number of parents who filled out this questionnaire was 32 mothers and 21 fathers for the group of young children with DD and 31 mothers and 27 fathers for the group of young children without DD. The main consequence of this missing data is a loss of statistical power, results that yield to biased parameter estimates (Graham, 2008) and having to remove valuable data from the research sample, which can lead to

estimates with larger standard errors due to reduced sample size. The mean imputation procedure for missing data was used to fix the situation by replacing each missing value with the mean of the observed values for the variable (Gelman & Hill, 2006). However, it should be noted the mean imputation procedure has limitations, such as the underestimation of the standard error deviation. For this reason, and in order to assure more accurate comparisons, the responses of each father and mother were grouped in age ranges. Thus, mothers and fathers had different age ranges with mean responses for every item and responses of actual respondents were input on the missing cases.

Procedure

Data collection was carried out from June to August, 2009. The author of this study, her supervisor from McGill, and co-supervisor from University of Bio-Bio decided to work collaboratively. This permitted the main researcher, of Chilean nationality and a Spanish speaker, to fly, stay, and work in the Bio-Bio Region under university supervision. A group of student-assistants and their supervisor from the collaborating university helped the main researcher to collect the data. Participants were recruited from early childhood centers and specialized programs in the Bio-Bio Region after the project had been presented and approved by them. Once selected, parents were invited to participate in the research study, and the main researcher met with them to present the project and ask for their participation. Parents who wanted to participate were directed to an individual session carried out either by the main researcher or by her co-supervisor and a student assistant. Participants were asked to sign the consent form and fill out all questionnaires and surveys in only one session. Although

participation in the study was voluntary, a workshop was offered to those participants who wanted to know more about the project and its implications. There were two workshops; one for the group of young children with DD and other for the group without them. Both workshops were at the University of Bio-Bio Chillan main campus. Once back in Canada, the data were coded and entered into a database by the main researcher and a lab assistant. This database does not contain any identifiable information about the participants.

Results

Correlations

Intercorrelations between parenting styles (authoritative, authoritarian, and permissive), the amount of choices available, family quality of life, and factors associated including mental age, chronological age, parental education level, parental age, family income, and sex are presented in Table 5.

Two-tailed Person Product Moment Correlations were performed. Regarding parenting styles, there was a positive correlation between authoritative and authoritarian parenting styles and mental age but a negative correlation between the same variable and permissive parenting style. These findings, that children raised by parents who provide structured family environments have better developmental outcomes than those children raised in unstructured family environments, are consistent with the existing literature in this area (Grolnick, 2003). Authoritative parenting style was also positively related to family quality of life. Although there are not any studies directly linking parenting styles and family quality of life some studies have shown that authoritative parenting style is

the only known factor to impact on psychosocial aspects of quality of life of children with developmental disabilities (Aran et al., 2007) and that supportive positive parenting, and the resulting quality of life, are contributors to the development of a healthy adult identity (Dumas, Lawford, Tieu, & Prat, 2009). Authoritative parenting style was also positively correlated with the paternal level of education. This finding shows that demographic variables are also related to parenting practices.

The number of choices available was positively correlated with mental age. This finding shows that by developing higher levels of functionality provides access to higher levels of decision making and, therefore, experience more independence by children with and without disabilities.

Family quality of life was positively correlated with parental educational level and family income, but negatively correlated with paternal age. The positive relationship between income and family quality of life has been already addressed by Sipal et al.'s (2009) who stated that children's higher behavioural difficulties are associated to parents experiencing higher levels of parental stress derived from situational factors such as family income, health status, and job satisfaction. The negative correlation between family quality of life and paternal age may be due to older fathers having greater difficulties in evaluating family satisfaction due to being more traditional and inflexible, as well as having experienced greater hardships. There was significant positive correlation between mental and chronological ages. Maternal educational level was positively correlated with paternal educational level, family income, and sex. Paternal educational level was positively correlated with family income, while paternal age was positively

correlated with maternal age. Finally, family income was positively correlated with sex.

Disability group. Intercorrelations for the same measures were completed for each group. Results are presented in Table 6.

Regarding parenting styles in the disability group, authoritative parenting style was positively correlated with family quality of life. As above, this finding confirms the link between positive parenting and healthier developmental outcomes, the important role of the autonomy supportive parenting style for the general perception of the quality of life of children with DD (Aran et al., 2007; Dumas et al., 2009), and family quality of life as an extension of individual quality of life (Summers et al., 2005). Authoritative parenting style was also positively correlated with paternal educational level, paternal age, and family income. These positive correlations highlight the impact of the paternal figure on autonomy supportive parenting through related demographic factors. Permissive parenting style was negatively correlated with children's functional skills and family quality of life. Consistent with the literature in this area, these findings confirm that children in poorly-structured family environments achieve poorer developmental outcomes, subsequently affecting the perception of family life (Grolnick, 2003; Woolfson & Grant, 2005).

The number of decision-making opportunities provided was positively correlated with functional skills and maternal level of education. The positive correlation between decision-making opportunities and higher levels of functionality is supported by several studies (Wehmeyer & Palmer, 2000; Lee, Palmer, Turnbull, Wehmeyer, 2006). The positive correlation between maternal

educational level and functional skills highlights the importance of the maternal role in promoting such skills in children with severe disabilities. Mental age was positively correlated with chronological age. Maternal educational level was positively correlated with paternal educational level and sex, while both maternal and paternal educational levels were positively correlated with family income. Finally, maternal age was positively correlated with paternal age.

Non- disability group. Intercorrelations for the non disability group are presented in Table 7. In this group amount of choices available was positively correlated with chronological age and mental age and negatively correlated to family income. These findings confirm that in typically developing children, normal developmental paths assure more access to choices. Family quality of life was positively correlated with parental educational level and negatively correlated with paternal age. Mental age was positively correlated with chronological age. Maternal educational level was positively correlated with paternal educational level. Family income was positively correlated with both maternal and paternal educational levels. Paternal educational level was negatively correlated with paternal age. Finally, maternal age was positively correlated with paternal age. None of the parenting styles in the non-disability group were correlated with any other variables.

Hierarchical Multiple Regressions

In accordance with previous research on parental stress and competence (Woolfson & Grant, 2005) and parenting styles and quality of life (Aran et al., 2007), hierarchical multiple regression was used to examine the relationship of parenting styles on two different variables, decision-making opportunities

provided and family quality of life, as measured in a sample of parents of young Chilean children with and without DD. Two sets of hierarchical multiple regressions were conducted to test the relationships between decision-making opportunities and family quality of life, factors typically associated with them, and two types of parenting styles. Hierarchical multiple regressions account for the intercorrelations among the predictors and index each predictor's unique contribution to the variability within the criterion (Cohen & Cohen, 1983).

An ordered series of predictors was regressed separately on to available number of decision-making opportunities and family quality of life. In accordance with Tabachnick and Fidell's (2007) recommendations for appropriate participant to variable ratio, approximately eight participants per variable were included. Predictors were entered in five steps, beginning with those with "fixed" levels (such as chronological age and disability status) and followed by predictors that are subject to environmental influences (such as parenting styles). For both indices, the model followed was chronological age (step 1), disability status (step 2), mental age (step 3), authoritative parenting style (step 4), and authoritarian parenting style (step 5). Steps 1 through 5 were used to test the main effects of each predictor on the criterion. The incremental change in the predicted variance that each predictor adds is denoted by the R Square change. The criterion for significance is $p < .05$.

Number of available decision-making opportunities. The results of the regressions on number of available decision-making opportunities are presented in Table 8. The entire regression model was significant and explained 28% of the variability within the amount of choices available and provided to children.

Disability status and mental age significantly predicted the index variable.

Disability status explained approximately 7% of the variability and mental age an additional 15%.

Family quality of life. The results of the regressions on family quality of life are presented in Table 9. The entire regression model was significant and explained 29% of the variability of parental perception about their family quality of life. Authoritative and authoritarian parenting styles, as well as mental age, significantly predicted the index variable. Mental age explained approximately 8% of the variability, authoritative parenting style explained an additional 11%, and authoritarian parenting style explained 9%.

Discussion

The particular historical moment Chile is living with regard to the recognition of disability rights, the supporting cultural values of this society associated to self-determination, and the lack of information of self-determination practices within the Latin American region frame the interest paid to how parents of pre-schoolers with developmental disabilities fostered choice making among their young children and perception of satisfaction with their family life. In consideration of the mandates to promote individuality, autonomy, and self-determination of the new National Disability Law (2010), this study explored the opportunities to exercise self-determined behaviour, family quality of life, their relationship with the parenting styles of Chilean parents, and other related factors in a group of families of young children with and without developmental disabilities in the Bio-Bio Region of Chile.

Self-determined behaviour was defined as the number of decision-making opportunities or choice-making opportunities provided by parents, while family quality of life was defined as parental perception of their level of satisfaction with family life.

The consideration of self-determination as a result of a developmental process where its precursors are built in early childhood (Abery & Zajac, 1996), the lack of consistent promotion and integrated practices between school and home environment leading to self-determination (Shogren & Turnbull, 2006; Turnbull & Turnbull, 2001), and the sparse information regarding parents' role in fostering these abilities (Zhang et al., 2005) all contribute to the interest in exploring these relationships in this paper. This study paid special attention to parenting styles and how they affect the development of self-determination among young children of preschool age. Little research has addressed both self-determination and parenting styles among young children with severe disabilities (Abery & Zajac, 1996). Further, the majority of research is focused on school-aged children in educational settings of North-America and Europe (Shogren & Turnbull, 2006). Taking into account that young children with disabilities depend greatly on their caregivers, are rarely included in the decision-making process (Erwin & Schreiber, 1999), the new Chilean policy focused on self-determination, and the need to determine whether Latino family practices are aligned with policies (Yaradola, 2010), the exploration of the variables involved in this study was vital. Thus, the primary aim of this study was to explore relationships among parenting styles, choices, and family quality of life in a society that traditionally

does not embrace values such as independence and autonomy even though their current policies champion the concept of self-determination.

Parenting Styles and Self-Determination

Self-determination involves the complex integration of a number of individual characteristics and elements. A self-determined person is someone who acts autonomously, self-regulates his/her behaviour and/or personal states, acts in a psychologically empowered manner, and uses his/her self-awareness to capitalize his/her identity (Wehmeyer, 1996). However, all of these characteristics are acquired and integrated throughout the life span. The person develops critical skills by constant interaction with the environment and the elements present on it. Among the several influences the person is exposed to interact, parents are one of the most influential ones. Although their influence is usually present all along the life span, it is more critical at earlier developmental stages because of the role model parents' exercise on their children. There are many different ways through parents influence their children; however, one of the most influential ones is the way in which parents regulate structure and affection, typically expressed by their parenting style. Thus, parenting styles or the way in which parents rear and adopt particular strategies with their children play a critical role on and it is a focal point on children's development (Lamb & Lewis, 2005). These parenting style(s) and model(s) also serve to shape many other relationships in children's lives, and have an impact on children's sense of self in relation to others (Woolfson & Grant, 2005). In recognition of this, this study is situated research done in the areas of self-determination and parenting to investigate relationships between parenting styles and the acquisition of particular skills aimed at developing higher levels of

autonomy and independence in young children with developmental disabilities. The acquisition of these abilities is crucial to human beings as they integrate major areas of human development such as cognitive, affective, and behavioural aspects. In typical populations, the evidence shows that parents that balance control, structure and affection, obtain the best outcomes in regards to the acquisition and development of self-determination (Abery & Zajac, 1996) and that better parenting practices are associated with children's higher levels of competency (Cunningham et al., 2009). However, within the disability area the evidence in this matter is not conclusive. In atypical populations, direct relationships between parenting styles and self-determination have not yet been established (Abery & Zajac, 1996; Shogren & Turnbull, 2006) and when thinking the association of these variables to individuals with significant disabilities research is scant. The aforementioned concerns along with the consideration of promotion of self-determination as culturally rooted (Turnbull & Turnbull, 1996, 2001) and that promotion of self-determination in Latin America has not yet been addressed (Yaradola, 2010) make the examination of relationships between parenting styles and self-determination a crucial topic of investigation.

Contrary to expectations, none of the measured parenting styles in this study played a significant and direct role in the opportunities parents gave their children to exercise their self-determined behaviour. Although not significantly, only authoritarian parenting style was positively correlated with the number of decision-making opportunities available to the disability group. The present finding can be explained by Woolfson and Grant's (2005) findings, which showed that the parenting styles of children with developmental disabilities changed over

time and are not consistent throughout childhood. Perhaps since the parenting practices and styles of the parents of children with disabilities are not consistent over time, they are also inconsistent in the promotion of their children's decision-making skills. Further, it seems that by exercising higher levels of control parents feel more secure and, therefore obtain better results when promoting specific skills such as choice-making among their young children.

The higher levels of stress of parents of young children with developmental disabilities are exposed to (Erwin & Schreiber, 1999; Hauser-Cram, Warfield, Shonkoff, & Krauss, 2001), combined with the multiple priorities they have to face with regard to their children's daily care and needs, may affect not only their ability to effectively help their children develop particular skills, but also their ability to balance control and affection successfully. This finding is especially crucial as it is known that individuals with severe disabilities take longer to master self-determination skills and if promotion is not effectively done from early in life and from all environments children relate to, precious time to promote autonomy among them is wasted. In consideration to the results of this study and recognizing the benefits of exercising authoritative parenting style, it would be interesting to create strategies to support parents to balance control and affection more and see if results positively change.

The lack of significant relationships between parenting styles and choice making may be also due to the consideration of the parenting styles and self-determination as culturally specific (Baumrind, 1972; Lamb & Lewis, 2005; Turnbull & Turnbull, 1996, 2001). Although the cross-cultural acceptance of the parenting styles model (Robinson et al., 1996), the fact that the parenting styles and

dimensions questionnaire had not been validated in societies with similar cultural values to Chile may be affected parents' parenting perception. Therefore, particular nuances of each parenting style due to cultural background may be not taken into account when measuring the styles. Parents may exercise their parenting skills and promote autonomy on their young children in accordance to this personal culturally determined belief. Strategies applied to this age group to promote self-determination should be in accordance to and consistent with Chilean culture. The role of the mother as a primary caregiver and her education level are crucial to the promotion of decision-making skills among young children with developmental disabilities. Likewise, the paternal figure and its situational characteristics such as its level of education and age play a significant role in promoting an autonomy supportive parenting.

Regardless, the results of the present study support a significant amount of research and practices indicating that parenting styles are important to young children with and without developmental disabilities in relation to general levels of competence. The findings support the notion that parents of young children who structure and provide clear guidance to children obtain better levels of competence. Parents with these characteristics are typically associated to authoritative parenting style. These findings are consistent with research done in the parenting area including normally developing children and suggest that although parenting may be culturally specific, competence is promoted similarly in Western and non-Western (Lamb & Lewis, 2005). It also supports the finding that decision-making in young children with developmental disabilities is associated with higher levels of functional skills which supports actual research,

policies, and practices in the disability area aimed at developing the adaptive skills of this population (Doll et al., 1996; Lee et al., 2006) and the need to include parents in self-determination promotion. Likewise, consistent with the literature children from permissive-unstructured parents obtain poorer adaptive outcomes (Abery & Zajac, 1996; Baumrind, 1991; Baumrind & Black, 1967) and this is shown in both groups but highly significant in the disability group. The negative but non-significant associations found between parenting styles and levels of competence among young children with developmental disabilities may be related to the inconsistent promotion practices and difficulties parents of these children encounter in showing stable patterns leading to promote competence.

Finally, the existent significant relationship between disability status and mental age and choices, and the consideration of both as predictors of choice-making, highlights the need to address interventions in early childhood in an age-appropriate manner and with great efforts to promote social competence. Likewise, the significance of disability status on predicting choice-making highlights the need to emphasize special educational practices.

Parenting Styles and Family Quality of Life

In consideration to that both individual and family quality of life have been identified as important outcomes derived from experiencing higher levels of independence and autonomy (Ward & Kohler, 1996; Turnbull & Turnbull, 2001; Wehmeyer, 2004) is that this study aimed to examine how this concept might be related to parenting styles. Despite the lack of research examining parenting styles and family quality of life directly, some studies have addressed parenting and individual quality of life in both children and parents (Aran et al., 2007; Lee et al.,

2009). The results of the present study are consistent with the literature in regard to parenting practices affecting family quality of life and children with developmental disabilities, who are at risk of a lower quality of life, particularly benefitting from parenting styles that allow and accept autonomy. Therefore, the authoritative parenting style, which balances structure, control, and affection fairly, has an important impact on the perception of family quality of life and children raised within this style obtain the best outcomes. The significant predictions of the authoritative and authoritarian on family quality of life lead to think that the commonalities of structure and control shared by these two styles play an important role in the perception of satisfaction parents have in regards to their family life. In contrast, the negative correlation between family quality of life and permissive parenting style in the group of children with developmental disabilities indicates that highly affective but unstructured styles are not good enough to provide parents with a good sense of satisfaction.

In contrast to the disability group, parenting styles were not correlated with the perception of family quality of life among parents of children without developmental disabilities. The results of this study suggest that children without disabilities may not be as directly affected by parenting styles and highlights the importance of considering parenting styles in interventions for young children with disabilities. The stability of parenting styles may also play a role in these findings as parents of typically developing children may have a more consistent parenting style. Since the parents of typically developing children may be exposed to fewer daily stressors the parenting styles may be more stable and more subtle

allowing children to cope with changes without having a significant impact on affecting family dynamics.

Factors associated to family quality of life are also related to parents' perception of satisfaction about their family life. Correlations show that parents' higher levels of education and better family income do have associations to parents' perceptions of satisfaction with family quality of life.

Limitations

Certain limitations of this study necessitate caution in interpreting the findings. First, this study was limited to only one region in Chile. Chile is divided into fifteen regions, each with unique traditions, and thus there may be regional variations in the decision-making opportunities available to, and independence of, young children (Northern, Central, or Southern part of Chile). Second, in order to fulfill the objectives of the study, the sample was non-probabilistic, non-randomized and paired. All of these characteristics affect the validity and reliability of this study. However, carrying out a study with these characteristics, but with a randomized sample, would have been practically impossible. Likewise, the sample size of the study limited the statistical power of the results.

There are also limitations with some of the measures used in this study. First, only parent self-report measures were used. Potential problems with parents being the main source of information include social desirability. Second, although The Parenting Styles Questionnaire (Robinson et al., 1995) has high reliability and validity and has been tested cross-culturally, its reliability and validity was not tested in any Spanish-speaking countries. In order to minimize the effects of this, the translation of this questionnaire, done by this study's main researcher,

was corroborated by her Chilean co-supervisor and tested in a small pilot sample before the study began. There are also concerns associated with the reliability and validity of the 1963 version of the Vineland scale. In the English language a second version is available and widely used. However, in Chile only the first version has norms for the Chilean population and is available for use. Moreover, the Chilean Ministry of Education accepts and recommends use of the 1963 version of the Vineland scale for diagnosing special populations. For these reasons, this study's author, and her supervisor, decided to use the 1963 version of the Vineland scale, regardless of some of the aforementioned concerns with it.

Finally, no instruments were available for measuring parental ability to deal with young children's choices during early stages. Thus, the choice questionnaire used in this study was created specifically for this study. Therefore, its reliability and validity is unknown.

Implications and Conclusions

The results of this study highlight the need to support the parenting of parents of children with developmental disabilities, as there is evidence that they struggle to maintain consistent parenting practices leading to promote specific skills and social competence on children. This is consistent with Woolfson and Grant's (2005) study that showed that parents of children with developmental disabilities require additional emotional and social support. The non-significant findings of the relationship between parenting styles and decision-making indicates that indirect parenting pathways (i.e. parenting styles and practices) may promote a variety of abilities and competencies in children rather than specific ones. Moreover, the lack of consistency of the promotion of decision-making by

children with disabilities by the authoritative parenting style in this study, as well as the findings of Woolfson and Grant (2005) that the parenting styles of parents of children with developmental disabilities change over time, indicate that this may be a parenting adaptive strategy in response to the challenges of their child's disability. However, this study's findings, the recognition that people with disabilities struggle with transitions later in life (Aran et al., 2007), and the importance of early childhood in the acquisition and development of a variety of skills (Shogren & Turnbull, 2006), and the fact that children with disabilities take longer to master complex skills and for those with severe disabilities difficulties are greater, indicate that the implementation of better, more consistent parenting strategies, beginning in early life, may prepare children with developmental disabilities for more independent lives as adults.

Better parenting strategies do have a direct relationship with parental perception of satisfaction with family life. Although both authoritative and authoritarian parenting styles have similar structure and control and have an impact on family satisfaction, they differ in the level of affection and involvement. It seems that authoritative parents, characterized by "being in control" of family issues, feel more secure and satisfied about their family quality of life.

This study's findings highlight the need to work closely with the parents of children with developmental disabilities in regard to their parenting abilities. Since it is known that parents of children with disabilities experience higher levels of stress and feel less competent about their parenting (Haldy & Hanzlik, 1990; Woolfson & Grant, 2005), practitioners and professionals working in the area

should be specially trained in managing parental stress to support balanced parenting practices. Parents need support in developing personal as well as educative strategies that foster the development of self-determination skills in their children and can be implemented within the home environment. This study accentuates the need to create collaborative partnerships (Turnbull & Turnbull, 1996, 2001) between educational and family practices in order to obtain better self-determination skills outcomes within the family environments of young children with disabilities. It also shows that unique approaches should be developed that are responsive to the particular needs of people from different cultures and societies. However, it also indicates that Chilean parents of young children with disabilities struggle in a similar manner than their counterparts with other cultural backgrounds.

Future research should focus on identifying particular strategies that promote self-determination skills in young children of particular cultural environments; and the integration of family and home practices into the educational system. As well, the research outcomes of unicultural societies may be applicable for creating strategies for people from similar cultural backgrounds living in multicultural societies.

Finally, considering the cultural context of this study and the historical moment Chile is living in regards to the recognition and legislation of the rights of people with disabilities, the exploration of variables was vital for the inclusion of new, better, and effective self-determination practices. The results are not only critical for young children but also for all Chilean people with disabilities and even more critical for the understanding of the cultural aspect of the self-

determination promotion. Through exposure to decision-making opportunities, people with disabilities are able to participate meaningfully in the ultimate purpose of self-determination: to intentionally create experiences in people's lives that are consistent their own and personal world of unique beliefs, needs, and preferences (Brown & Cohen, 1996; Field et al., 1998).

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Table 1

Mean and Standard Deviations by Group of Age (in Months)

| | Mean | SD |
|--|-------|-------|
| Sample | 41.69 | 10.34 |
| Group of Young Children with Disabilities | 41.97 | 10.37 |
| Group of Young Children without Disabilities | 41.41 | 10.47 |

Table 2

Monthly Family Income by Group (in Chilean pesos)

| | Pre-schoolers with disabilities | Pre-schoolers without disabilities |
|--------------------------------------|------------------------------------|---------------------------------------|
| Less than \$245.000 | 18 | 17 |
| Between \$245.000 and \$440.000 | 8 | 10 |
| Between \$440.000 and \$670.000 | 6 | 4 |
| Between \$670.000 and \$1.800.000 | 0 | 1 |

Table 3

Parents Level of Education by Group

| | Pre-schoolers with disabilities | | Pre-schoolers without disabilities | |
|----------------------|------------------------------------|--------|---------------------------------------|--------|
| | Mother | Father | Mother | Father |
| Primary School | 5 | 6 | 6 | 5 |
| High School | 13 | 19 | 15 | 17 |
| Vocational-Technical | 10 | 2 | 4 | 5 |
| University | 4 | 5 | 7 | 5 |

Table 4

Frequency of Pre-schoolers by Disability Type

| Disability | n |
|----------------------------------|----|
| Down syndrome | 11 |
| autism spectrum disorders (ASD) | 9 |
| severe language impairment (SLI) | 2 |
| genetics | 4 |
| cerebral palsy | 3 |
| Other | 3 |

n = number of cases

Table 5
Intercorrelations Among Measures of the Sample

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----------------------------------|-------|------|-------|-------|--------|-------|------|-------|-------|-------|------|------|------|
| 1. Authoritative Parenting Style | 1.00 | | | | | | | | | | | | |
| 2. Authoritarian Parenting Style | .24 | 1.00 | | | | | | | | | | | |
| 3. Permissive Parenting Style | -.18 | .20 | 1.00 | | | | | | | | | | |
| 4. Choices | .09 | .16 | -.17 | 1.00 | | | | | | | | | |
| 5. Family Quality of Life | .37** | -.21 | -.19 | .03 | 1.00 | | | | | | | | |
| 6. Vineland Mental Age | .29* | .25* | -.26* | .45** | .11 | 1.00 | | | | | | | |
| 7. Chronological Age (in months) | -.10 | .00 | -.14 | .24 | -.07 | .33** | 1.00 | | | | | | |
| 8. Mother's Level of Education | .19 | -.14 | -.09 | .14 | .35** | .06 | -.06 | 1.00 | | | | | |
| 9. Father's Level of Education | .31* | -.06 | -.20 | .02 | .47** | .08 | -.15 | .63** | 1.00 | | | | |
| 10. Mother's Age | .07 | -.17 | .09 | -.15 | -.18 | -.12 | .24 | .02 | -.12 | 1.00 | | | |
| 11. Father's Age | .19 | .13 | .13 | -.13 | -.33** | -.11 | .03 | -.15 | -.13 | .59** | 1.00 | | |
| 12. Family Income | .16 | -.21 | -.18 | -.09 | .32* | .04 | .09 | .57** | .46** | .23 | .01 | 1.00 | |
| 13. Sex | .12 | -.11 | .01 | .07 | .08 | .05 | .04 | .37** | .19 | .23 | .14 | .31* | 1.00 |

Note: * $p < .05$, ** $p < .01$

Table 6
Intercorrelations Among Measures of the Disability Group

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----------------------------------|-------|------|-------|-------|------|-------|------|-------|-------|-------|------|------|------|
| 1. Authoritative Parenting Style | 1.00 | | | | | | | | | | | | |
| 2. Authoritarian Parenting Style | .20 | 1.00 | | | | | | | | | | | |
| 3. Permissive Parenting Style | -.09 | .27 | 1.00 | | | | | | | | | | |
| 4. Choices | -.03 | .07 | -.20 | 1.00 | | | | | | | | | |
| 5. Family Quality of Life | .53** | -.10 | -.37* | -.02 | 1.00 | | | | | | | | |
| 6. Vineland Mental Age | -.06 | -.09 | -.42* | .49** | .23 | 1.00 | | | | | | | |
| 7. Chronological Age | -.17 | -.26 | -.07 | .10 | .05 | .64** | 1.00 | | | | | | |
| 8. Mother's Level of Education | .23 | -.07 | -.24 | .39* | .27 | .33 | .17 | 1.00 | | | | | |
| 9. Father's Level of Education | .36* | .01 | -.32 | .11 | .32 | .08 | -.07 | .63** | 1.00 | | | | |
| 10. Mother's Age | .24 | -.29 | .21 | -.22 | -.17 | -.11 | .15 | .13 | -.04 | 1.00 | | | |
| 11. Father's Age | .40* | .15 | .23 | -.22 | -.14 | -.17 | -.26 | -.03 | .13 | .50** | 1.00 | | |
| 12. Family Income | .38* | -.09 | -.11 | .14 | .33 | .21 | .22 | .66** | .58** | .19 | .01 | 1.00 | |
| 13. Sex | .11 | -.17 | .07 | .20 | -.08 | .09 | .02 | .41* | .08 | .20 | .15 | .29 | 1.00 |

Note: * $p < .05$, ** $p < .01$

Table 7

Intercorrelations Among Measures of the Non Disability Group

| | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 |
|----------------------------------|------|------|------|-------|--------|-------|------|-------|-------|-------|------|------|------|
| 1. Authoritative Parenting Style | 1.00 | | | | | | | | | | | | |
| 2. Authoritarian Parenting Style | .16 | 1.00 | | | | | | | | | | | |
| 3. Permissive Parenting Style | -.28 | .23 | 1.00 | | | | | | | | | | |
| 4. Choices | .07 | .03 | -.08 | 1.00 | | | | | | | | | |
| 5. Family Quality of Life | .24 | .13 | .06 | .05 | 1.00 | | | | | | | | |
| 6. Vineland Mental Age | .26 | .19 | -.08 | .43* | .10 | 1.00 | | | | | | | |
| 7. Chronological Age | .00 | .24 | -.28 | .44* | -.15 | .74** | 1.00 | | | | | | |
| 8. Mother's Level of Education | .18 | -.20 | .11 | -.08 | .42* | -.10 | -.25 | 1.00 | | | | | |
| 9. Father's Level of Education | .24 | -.16 | -.01 | -.12 | .60** | .01 | -.23 | .64** | 1.00 | | | | |
| 10. Mother's Age | -.07 | -.01 | -.17 | .00 | -.20 | .06 | .33 | -.09 | -.18 | 1.00 | | | |
| 11. Father's Age | .05 | .18 | -.04 | .01 | -.48** | .12 | .30 | -.27 | -.37* | .68** | 1.00 | | |
| 12. Family Income | -.08 | -.34 | -.30 | -.35* | .31 | -.20 | -.04 | .49** | .35* | .30 | .01 | 1.00 | |
| 13. Sex | .13 | -.06 | -.09 | -.07 | .21 | .10 | .07 | .33 | .30 | .26 | .13 | .32 | 1.00 |

Note: *p<.05, **p<.01

Table 8

Results of Hierarchical Multiple Regression Analyses: Predicting Children's Choice- Making

| Step and Predictor | Multiple R | F | Rsquared | R Square Change |
|----------------------------------|------------|---------|----------|-----------------|
| 1. Chronological Age | 0.24 | 3.91 | 0.06 | 0.059 |
| 2. Disability Status | 0.35 | 4.38* | 0.13 | 0.066* |
| 3. Vineland Mental Age | 0.52 | 7.43*** | 0.27 | 0.145** |
| 4. Authoritative Parenting Style | 0.52 | 5.50** | 0.27 | 0.001 |
| 5. Authoritarian Parenting Style | 0.53 | 4.49* | 0.28 | 0.007 |

Note: * $p < .05$, ** $p < .01$ *** $p < .001$

Table 9

Results of Hierarchical Multiple Regression Analyses: Predicting Family Quality of Life

| Step and Predictor | Multiple R | F | Rsquared | R Squared Change |
|-------------------------------------|------------|--------|----------|---------------------|
| 1. Chronological Age | 0.07 | 0.29 | 0.01 | 0.005 |
| 2. Disability Status | 0.07 | 0.17 | 0.01 | 0.001 |
| 3. Vineland Mental Age | 0.30 | 1.93 | 0.09 | 0.083* |
| 4. Authoritative Parenting Style | 0.45 | 3.66* | 0.20 | 0.111** |
| 5. Authoritarian Parenting Style | 0.54 | 4.71** | 0.29 | 0.090** |

Note: * $p < .05$, ** $p < .01$, *** $p < .001$

Figure 1

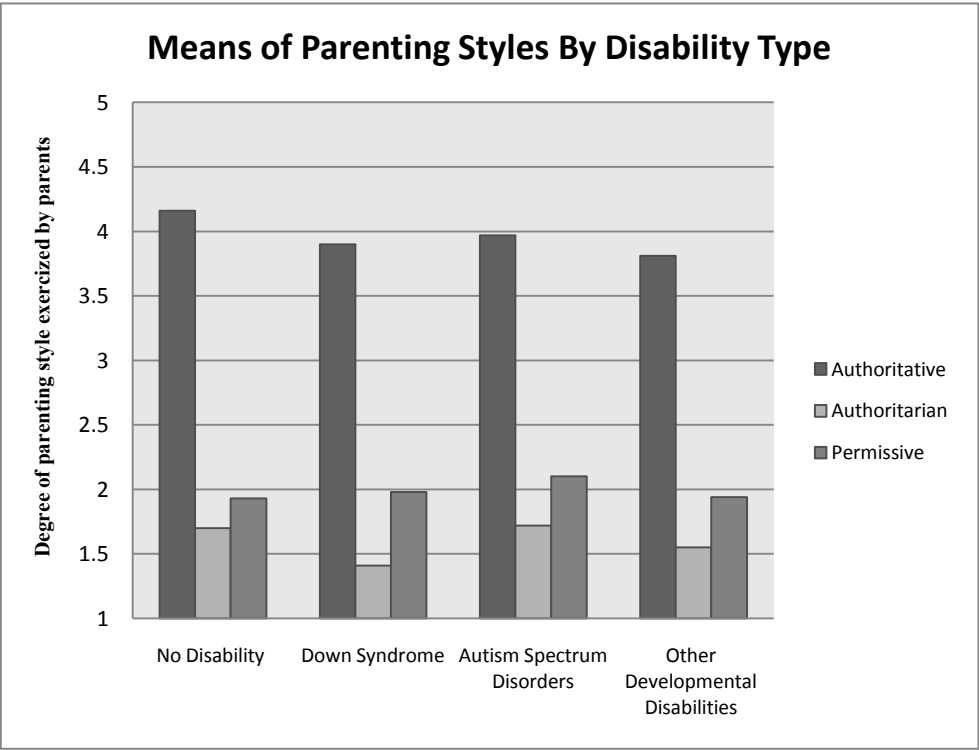


Figure 2

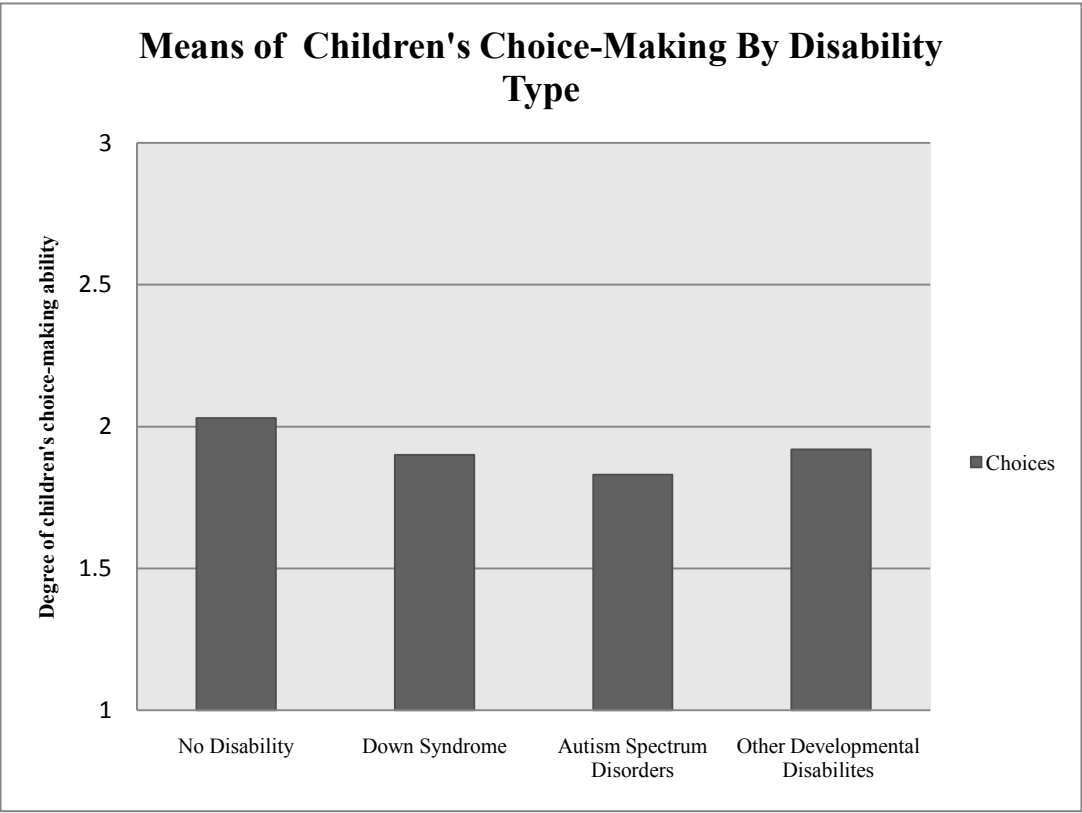
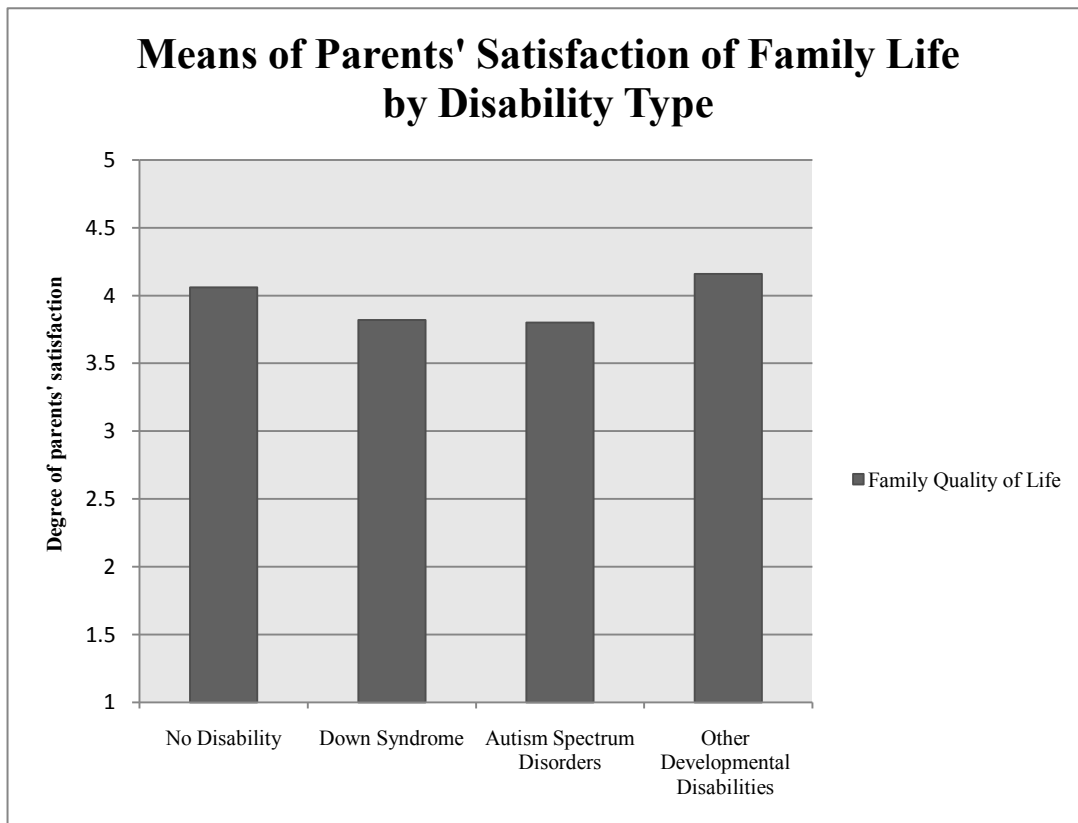


Figure 3



Appendix A: Measures (English Version)

Demographics

Name of the child: _____

Name of the mother: _____ Mother's age: _____

Name of the father: _____ Father's age: _____

Age of the child (in years and months): _____

Sex: Male Female

Who lives at home? _____

Parents' level of education

- | | | |
|-------------------------------|--------|--------|
| • Primary School | Father | Mother |
| • High School | Father | Mother |
| • Vocational Technical School | Father | Mother |
| • University Level | Father | Mother |

Family income (monthly average)

- Over \$1.800.000 Chilean pesos
- Between \$670.000 and \$1.800.000 Chilean pesos
- Between \$440.000 and \$670.000 Chilean pesos
- Between \$245.000 and \$440.000 Chilean pesos
- Less than \$245.000 Chilean pesos

Have your child any type of disability? Yes / No**Type of disability**

- Down Syndrome
- Autism Spectrum Disorder/ Asperger
- Severe language impairment/
Intellectual disability
- Other/ Which one?

Who diagnosed the disability? _____**Is the child a part of any specialized program?** Yes No

THE ADAPTION OF THE CHOICE QUESTIONNAIRE

Instructions:

In the following pages you will find a list of questions involving you everyday life with your child(ren). Please, check the most appealing alternative to you.

All information is confidential. It is important that you try to answer the majority of them; however, if you feel uncomfortable with one, please skip it.

Thanks for sharing your opinion with us!

Questions:

| | | | |
|-----|---|--|--|
| 1.- | Most mornings do you pick and choose what clothes your child has to wear? | | |
| | Yes | Sometimes | No |
| 2.- | Who decides at what time does your child go to bed? | | |
| | Without interfering the house rules, he/she usually decides at what time he/she goes to bed | I usually decide but sometimes he/she may set his/her own rule | My child has a strict set bedtime. Not only me but others may tell my child at what time he/she must go to bed |
| 3.- | Who decides how your child spends their playtime or recreation? | | |
| | He/she decides | He/she usually chooses what to play with help from people around | I or family around choose what he/she has to play |
| 4.- | At dinner time... who decides what your child has to eat? | | |
| | Between 2 options, | Between 2 options | I or family around |

| | | | |
|-----|--|--|--|
| | he/she always decides | he/she usually chooses what to eat | decides what he/she has to eat |
| 5.- | If your child wants to have a pet (like a dog, a cat, a bird or goldfish) who decides whether if he/she can have it? | | |
| | He/she can have one with no restrictions | I decide but there are some restrictions that we have to look at first | There is no permission to have pets. This point is out of question |
| 6.- | When it is time to buy clothes for your child... who chooses them? | | |
| | He/she decides with no help | He/she usually can say or express his/her taste and then, we decide together | I or family around decides what colors must wear my child |
| 7.- | Does anyone stay with your child while he/she is making new friends? | | |
| | He/she can go but someone watches from the back | He/she can go but someone stays most of the times next to my child | I or family around stays all the time next to my child |
| 8.- | Who decides what sport does your child have to play? | | |
| | He/she decides with no help | He/she usually can say or express what he/she wants to play | I or family around decides what sport is more convenient for him/her |
| 9.- | Who decides what your child has to do in his/her spare time? (when he/she is not doing his/her daily activities) | | |
| | He/she can decide | he/she usually decides | Others mostly decide |

| | by himself/herself | with help | |
|-------------|---|---|--|
| 10.- | Can your child leave his/her daily activity for the next day if he/she wants to and do not work? | | |
| | Yes, he/she can if he/she wants to | Yes, he/she can but must ask me first and we talk about it | No, he/she must work and finish his/her daily activity |
| 11.- | When your child is playing.. who leads the activities that take place in his/her imaginary play? | | |
| | He/she leads the activities with no help and determines who plays which role | He/she leads the activities with a little bit of help | I or others lead the activities mostly |
| 12.- | In family vacation... Can your child express his/her preferences where to go? | | |
| | Yes, he/she can and his/her opinion is strongly taken into account | Yes, he/she can but his/her opinion doesn't count much on the last decision | Not really |
| 13.- | When your child spills his/her milk... who cleans it up? | | |
| | He/she does it with little help | he/she usually do it but someone must help him/her | I or others must do it |
| 14.- | When your child has to go to the childcare or stay at someone else's place on the next day... who decides what he/she is going to eat as a snack? | | |

| | | | |
|---|--|--|------------------------|
| | He/she decides with little help | He/she usually decide with help | I or others decide |
| 15.- | When your child has his/her toys all over the place... who organizes them? | | |
| | He/she does it with little help once I say he/she has to do it | he/she usually do it but someone must help him/her | I or others must do it |
| Thank you for answering the questionnaire. | | | |

Appendix B: Sample Consent Form (English Version)

Research Description

Marisol Marfull, a Master's student at McGill University supervised by Dr. Tara Flanagan from McGill and co-supervised by Carlos Ossa, a Teacher Assistant at University of Bio-Bio, is conducting a study to determine the links between different parenting styles and child development. This research entails having parents of children with and without developmental disabilities to fill out questionnaires that ask their parenting styles, decision making they allow to, communication, socialization, independence skills, and family quality of life. These questionnaires will take a maximum of two hours to complete with the McGill research assistant, Spanish-speaking and will be given once with the aim of evaluating these links.

For parents who are interested in participate, we are also implementing a workshop especially designed for them. This workshop will provide an opportunity to reflect on and work on their own parenting styles and their child's development, the importance of self-determination, ways to enhance it, tips and activities they may implement in their everyday lives, and links with the community.

This research will inform us about which parenting styles and practices best support child development. The information could be later be used to create parental strategies to foster strategies within the family context.

We greatly appreciate your participation in this study. If you agree to participate in this project, please fill out the attached consent form. Please be advised that the information collected in this study will be held in the strictest

confidence and will be only used for research purposes. The results will be presented as group averages and the results will not affect you in any way.

If you have any questions do not hesitate to contact Marisol Marfull and/or Carlos Ossa at 253555 or 09-92844075 and/or on the email addresses which are down below.

Looking forward to hearing from you soon.

Marisol Marfull
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Informed Consent:

This consent form specifies the purpose, procedures and conditions required for participation in the study of implication of parenting styles on the development, acquisition and promotion of self-determination in young children that is being conducted by a research assistant of McGill University.

1. Purpose

I have been informed that the purpose of this research is to study the implications of parenting styles on the development, acquisition and promotion of self-determination in young children.

2. Procedures

I understand that I will be asked to fill out some forms and questionnaires about everyday experiences related to my relationship with my child. I understand that the tasks present no known risk and have been used before with similar persons. I understand that I may decide to discontinue participation at any point.

3. Conditions of Participation

I understand the purpose of this study and know the benefits and inconvenience that this research entails. I understand that my identity will remain anonymous and all information about will be kept confidential. I understand that all of the information I provide will be stored in a locked cabinet.

I have been advised that the data will be used for research purposes only. I consent to the published reporting of this study so long as the results are reported

as group averages and I and my personal information will never be used in these reports.

I HAVE CAREFULLY STUDIED THE ABOVE AND UNDERSTAND THE
TERMS OF MY PARTICIPATION IN THIS AGREEMENT. I VOLUNTARILY
AGREE AND FREELY CONSENT TO PARTICIPATE IN THIS STUDY.

Name: _____ **Date:** _____