

**NEEDS FOR INFORMATION AND CONCERNS OF
PARENTS OF GIFTED CHILDREN IN FOUR CANADIAN
PROVINCES**

by

Debbie Ann Clelland
B.A., University of Victoria 1988
M.A., University of Victoria 1995

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APPROVAL

Name: Debbie Ann Clelland
Degree: Doctor of Philosophy
Title of Thesis: Needs for Information and Concerns of Parents of Gifted Children in Four Canadian Provinces

Examining Committee:

Chair: Dr. Elizabeth Marshall

Dr. Lannie Kanevsky, Associate Professor
Senior Supervisor

Dr. John Nesbit, Associate Professor
Committee Member

Dr. Marion Porath, Professor, UBC
Committee Member

Dr. Margaret MacDonald, Assistant Professor
Internal/External Examiner

By video teleconference from Virginia, USA

Dr. Tracy Cross, Executive Director, Center for Gifted
Education, The College of William and Mary
External Examiner

Date Defended/Approved:

November 13, 2009



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ABSTRACT

The intention of this study was to understand the needs for information and concerns of parents of gifted children. Family systems theory provided the theoretical framework for the development of the *Needs of Parents of Gifted Children (NPGC)*, a survey designed for this purpose. Parents of gifted children (n = 525) from four Canadian provinces responded to the survey. Ten component subscales resulted from a principal components analysis (PCA): Understanding Gifted Children, Creating Educational Opportunities, Choosing Between Educational Programs, Post-graduate Decisions, Lack of Time and Programs for Gifted Students, Emotional Concerns, Social Concerns, Pressure on Parents, Child in Conflict, and Child Underachievement. The component subscale scores were compared by province. Participants from British Columbia and Ontario reported significantly higher levels of concern related to the lack of time and programs for gifted students, social concerns, and pressure on parents when compared to parents from Alberta. Participants from Newfoundland were not included in this analysis due to small numbers (n = 2).

Half (49.5%) of the parents commented on additional needs for information or concerns. A content analysis was performed using Ecological Systems Theory to structure the data. Thirteen themes were derived. From highest to lowest frequency, they were: evaluation of current school program, understanding my gifted child, teaching my gifted child life skills, dealing with my gifted child's issues, parent's role in the school, school program choices, how to be a good parent of a gifted child, peer relationships,

wanting support from the community, the effect of having a gifted child in our family, deciding to change school programs, and relationship with extended family.

When seeking information, participants indicated they were most likely to turn to print materials or people who have more knowledge about gifted children than they do. Parents were most likely to turn to their spouse for support, followed by books, friends and a parent support group. When asked what form of materials or programs they would like, participants were most interested in text-based materials, followed by one session with or a video produced by an expert.

Keywords: gifted, gifted children, parents, family, needs assessment, family systems theory, ecological systems theory, principle components analysis, content analysis

Subject Terms: Gifted, Needs Assessment, Parents, Parent Training

DEDICATION

To my amazing husband, James, who deserves many prizes for being there right beside me through this process – for his participation, patience, inspiration and transforming his life to give me time to do this work. To my wonderful children Duncan and Logan, who started all of us on this gifted roller coaster when we finally put the pieces together. They are unsure about whether they'd do a thesis after seeing me, but I am very grateful for their understanding, helping me with technology, giving me hugs and bringing me cups of tea as I slogged away at my writing.

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Chapter 1 Introduction

Parenting can be a challenging role to fulfill, and parents often have concerns related to how to best guide the development of their children. Parents most often have questions about parenting during two life phases of the child. Parents of young children are regularly concerned about understanding and dealing with sibling rivalry, communication between family members, and positive forms of discipline (Snowden & Conway, 1996). Parents of adolescents want to know how to parent a teenager through fostering independence and communication, as well as setting limits and maintaining a positive relationship (Strom, Strom, Collinsworth & Strom, 1998).

Research has demonstrated that there are valid reasons for parents to be concerned about the influence they have on their children. Croom and Procter (2005) outline the factors that increase a child's resilience, making it possible for the child to thrive even in difficult circumstances. These are a good parent-child relationship, demonstrated affection, authoritative discipline, supervision, a parent supporting the child's education, and a supportive marriage. Croom and Procter also outline family-based risks that could lead to a mild to moderate mental health issue, or a severe diagnosable disorder if not corrected. These factors are observable conflict between the parents; a breakdown in the family structure; discipline that is not consistent; hostile relationships; lack of adaptation as a child's needs change; abuse, mental illness or criminal behaviour in a parent; or a death or loss in the family. Clearly, parents fulfill a complex role, and have a great deal of influence on the development of their children.

Family systems theory (FST) explains the influence of parents and other related systems on children from a broader perspective. FST purports that there are many

systems that have a reciprocal influence on each other, and that affect the functioning of the family and the development of the children (Combrinck-Graham, 1985; Moon, 2003). Inside of the family these interactions exist between parents and children, siblings, and additional family members and significant others adopted into the family, such as step-parents (Carter & McGoldrick, 1999; Combrinck-Graham, 1985). FST also examines the external context with which the family interacts, including the school system, the peer group, and the community system. The components of FST and implications for the current research will be detailed in Chapter 2.

Hence, there are many influences internal and external to the family that affects the successful parenting of children in the general population. This parenting challenge can be even more complex if the children are gifted. Saying that a child is “gifted” indicates an inborn high intellectual or creative ability (Gagné, 2004). However, experts cannot agree on the definition of giftedness (Gagné; Gardner, 1994; Renzulli, 1986), the method of identification or prevalence of gifted students (Belanger & Gagné, 2006; Renzulli, 1982) or the best educational services for gifted students (Robinson, Reis, Neihart & Moon, 2002). It is not surprising that after conducting a review of the research available in 1983 on parents of gifted children, Colangelo and Dettmann (1983) stated, “Parents, in general, are confused about their own gifted children. This confusion results from being unprepared to raise an ‘exceptional’ child and from having insufficient knowledge of the nature of giftedness and creativity” (p. 26). This situation has changed little over the past 25 years.

One of the complexities of parenting a gifted child is determining whether or not the child is actually gifted. When a child is young, parents may have some idea that their

child is different from his or her peers, and may even suspect their child is gifted (Kaufman & Sexton, 1983). However, giftedness is not a clear cut concept, nor easy to determine, and often parents feel embarrassed about claiming their child may be gifted because the word “gifted” implies that their child is better than other children. Parents report that it is particularly unacceptable to say that their child is intellectually gifted (Silverman & Kearney, 1989). In our society, high intellectual performance is not to be boasted about, in contrast to the socially accepted celebration of high capacity for physical or musical talent that result in great athletic or musical performances. Despite the type of gift, parents are left to quietly attempt to understand and meet the needs of their gifted children, perhaps without using the term “gifted” or being able to find relevant resources or support groups which use this term.

How do parents determine if their child is gifted? The most commonly practiced selection process is for a school district to decide which definition of giftedness to use, then for a professional in the school district to give students one or multiple assessments to identify up to the top 5% of students on one or more scales (Belanger & Gagné, 2006). For the purpose of this research, Gagné’s (2004) Differentiated Model of Giftedness and Talent (DMGT) is used to define giftedness because it clearly indicates the role of parents in talent development. The terms gifted and talented are often used interchangeably when describing gifted children. However, Gagné defines gifted and talented as distinct terms. Giftedness is a natural intellectual, creative, socioaffective, or sensorimotor ability demonstrated by the top 10% of a child’s age peers. Talent is the mastery and demonstration of skills in a field of ability, again within the top 10% of the population. Gagné’s Developmental Model of Giftedness and Talent will be detailed in Chapter 2.

Research studies have consistently borne results that support Gagné's (2004) inclusion of parents' influence on the development of their gifted children. The research can be grouped into three broad categories. The first is retrospective accounts of what helped eminent persons in our society attain the level of skill that led to their notoriety (e.g., Albert, 1978, 1980; Bloom, 1985). In this literature, these talented individuals explain that the support and educational guidance they received from their parents were large contributing factors in the development of their gifts into talents and led to a place of distinction in their fields.

The second category of research evaluates the functioning of parents and families of gifted children. Family functioning is defined as the ability of a family to interact in a positive manner, and remain cohesive (Combrinck-Graham, 1985). Some of this research has examined family functioning exclusively in families of gifted children. For example, Sowa and May (1997) found that some families of gifted children are functional; some overemphasize social development; and some overemphasize emotional development with their gifted children. Schilling, Sparfeldt and Rost (2006) conducted a thorough review and criticized the research on family functioning for not having a sufficient number of comparisons to families with average-ability children. Therefore Schilling et al. conducted their own research by collecting information pertaining to family functioning from gifted and average-ability adolescents, and their mothers and fathers. They found that the mothers, fathers and gifted adolescents had similar levels of functioning to those in families with average ability children, as represented by family cohesion, democratic family style, organization, achievement orientation, communication and intellectual-cultural orientation.

The third and largest category of research pertains to the achievement levels of gifted students. This research consistently found that parents influenced achievement in gifted children through the atmosphere of the home and the support given to educational practices and programs (Albert, 1978; Olszewski, Kulieke, & Buescher, 1987; Terman, 1954). This research demonstrated that if the parents provided a stable and supportive atmosphere at home and contributed to a positive attitude towards learning, then gifted children tended to have higher achievement levels at school. If there was conflict between family members or instability in the home, or the parents neither advocated for school learning nor provided opportunities for the children to develop their gifts into talents, then gifted children exhibited lower achievement.

Despite the stated importance for parents to provide a supportive atmosphere and educational focus within a well-functioning family, parents often do not feel well equipped to parent gifted children. When reviewing education and counselling services for gifted children in Canada, Lupart et al. (2005) stated, “It can be very difficult to be a parent of a gifted child. Parents do not always know how to meet their child’s needs, and school administrators often patronize parents when they try to advocate for their gifted child” (p. 184). As these authors explained, parents feel pressure to provide just what gifted children need related to the family system, as well as the influences external to the family, such as the school.

These theoretical and research findings echo my personal experience as a parent of two gifted children. When I learned my children were gifted when they were 9 and 7 years old, I did not understand what being gifted meant for my children, nor how to best parent children who were gifted. Having had many years` experience as a Registered

Clinical Counsellor, I focused on the social and emotional experiences of my children as they interacted with their peers, the school and the community. My initial readings on psychological risks associated with giftedness led me to be even more concerned regarding successfully parenting my gifted children.

When encountering bewildered parents of gifted children, such as myself, psychological and educational professionals often recommend referring them to other professionals for guidance to help them understand and advise their gifted children (Dettmann & Colangelo, 1980; Devries & Webb, 2007; Kaufman, 1976; Silverman & Kearney, 1989; VanTassel-Baska, 1998; Zorman, 1982). Guidance is defined as an intervention designed to provide educational opportunities (Moon, 2003). In Canada, explanations about giftedness are sometimes provided by gifted education specialists in the school districts that identify gifted students, or at the only currently operating Centre for Gifted Education at the University of Calgary (Lupart et al., 2005). However, in most locations this recommended guidance is not available from professionals; instead parents are referred to volunteer organizations comprised of parents of gifted children.

With such an important role in providing guidance to parents of gifted children, how do professionals and volunteers know how to meet the needs of parents of gifted children? Collinsworth, Strom and Strom (1996) emphasized that it is very important to know the needs of the participants before designing a guidance or educational program, rather than basing the program “largely upon what program planners intuitively suppose is appropriate” (p. 505).

All of the research summarized to this point has focused on evaluating the effects of parents and families on their gifted children. FST also addresses the other direction of influence in that relationship: the impact gifted children have on parents' needs for information and concerns about guiding their gifted children. However, there is very little research to examine the effect gifted children have on the needs of parents. Four needs assessments were conducted to examine the general needs of parents of gifted children (Dangel & Walker, 1991; Hertzog & Bennett, 2004; Moon, Kelly & Feldhusen, 1997; Olivier, Kokot, Verryne & Jansen, 1995). Three of these studies directly asked parents of gifted children from the United States about their needs and concerns related to parenting gifted children; the fourth did the same with parents of gifted children in South Africa.

Summary

Psychological and educational professionals agree that parents of gifted children are in need of guidance to provide the best atmosphere and educational support to help their children develop their gifts into talents (Dettmann & Colangelo, 1980; Devries & Webb, 2007; Kaufman, 1976; Silverman & Kearney, 1989; VanTassel-Baska, 1998; Zorman, 1982). However, there is very little information available regarding the impact on parents of having one or more gifted children in the family. The goal of this research was to develop a survey to understand the needs of parents of gifted children in Canada who were seeking help related to having a gifted child in their family. This research examined parents' needs for information and concerns in order to address the development of materials and programs for parents of gifted children in an informed way.

Chapter 2 Literature Review

In 1981, Hackney concluded there was sparse literature available which addressed the influence of giftedness on children, their parents and families. For more than 25 years, there have been ongoing calls to conduct research on issues related to families of gifted children (Moon, 2003; Moon, Kelly & Feldhusen, 1997; Morawska & Sanders, 2008), but for the most part these calls have not been answered. As was mentioned in Chapter 1, the studies that have been done were conducted to examine the influence of home and school environments on gifted children (e.g., Belanger & Gagné, 2006; Bloom, 1985; Schilling, Sparfeldt & Rost, 2006; Sowa & May, 1997). Very few studies have investigated the complexity of the family dynamic in a less directional way (Bronfenbrenner, 1986). This chapter outlines the theoretical orientation that guided the current research, as well as literature related to the needs and concerns of parents or the influence of having gifted children in the family. The chapter concludes with the focus for the current research.

Gagné's Developmental Model of Giftedness and Talent

As mentioned in Chapter 1, the definition of giftedness used in the current research was proposed by François Gagné (2004). Gagné developed this definition in conjunction with his Developmental Model of Giftedness and Talent, which describes the process of development of children's innate gifts into talents. This model includes parents as important agents in children's lives, and in the development of children's gifts. A visual representation of Gagné's model can be found in Appendix A.

Gagné's model portrays six types of natural abilities as gifts. These natural abilities are grouped into mental and physical domains. If children have an extremely high level of natural ability that places them in the top 10% of the population compared to their age peers, Gagné considers them gifted. It is through the developmental (learning) process that children develop their natural gifts into systematically developed skills, or talents. The talented are those in the top 10% of the population, who exhibit highly developed skills in one of nine fields. These fields are academics; technical; science and technology; arts; social service; administration and sales; business operations; games; sports and athletics. However, not all children who are born with natural abilities develop these gifts into demonstrated talents. Whether or not the gifts are developed into talents through the processes of informal and formal learning is affected by two groups of catalysts and by chance. Chance affects four parts of Gagné's model: the likelihood that the children will have natural gifts to begin with, each of the two groups of catalysts and the developmental process itself. Catalysts are the influences which produce learning opportunities which allow gifted children to turn their gifts into talents. The catalysts are divided into two groups, called intrapersonal and environmental catalysts. The intrapersonal catalyst group contains physical and mental traits, as well as goal management mediated through awareness, motivation, and volition. The environmental group of catalysts consists of the milieu (surroundings), individuals (i.e., parents, family, peers, teachers, mentors, etc.), and provisions for education of gifted children.

The influences of parents are included in the environmental catalysts group in two sub-components. The first is "milieu," the environment in which gifted children are

growing up. In this sense, parents are a part of the family, related to the financial comfort the family experiences. Parents also make decisions about other aspects of the environment, such as where the family will live. The second sub-component includes parents as some of the people in the “individuals” category. Here, parents are seen as having a direct impact on the developmental process, exerting a positive or negative influence on the opportunities for gifts to develop into talents. Within Gagné’s model parents are clearly seen as having an influence on a gifted child’s development through the environment they provide for their family, as well as the way they interact with their gifted children.

Several authors have published responses to Gagné’s (2004) model. Gagné proposed this model as a method of distinguishing the terms gifted and talented, and to represent the process of talent development. This differentiation between giftedness and talent is lauded as a very useful division (Feldhusen, 2004), as educators often used the terms interchangeably. However, several authors have commented that despite including the word “developmental” in the title, Gagné’s model is not truly developmental. ‘Developmental’ commonly refers to change over time and development through life stages, which Gagné’s model does not (Porath, 2004). Other critiques are that Gagné’s model does not include reference to major developmental theorists (Feldhusen, 2004), and the inclusion of the various catalysts has been referred to as “a laundry list” (Robinson, 1999, p. 181). Despite these criticisms, Gagné’s model is one of the most well developed models in the field with respect to influences on talent development; therefore the model is used here to indicate the role of parents in talent development.

Theoretical Orientation

The purpose of the current research is to investigate the needs of parents of gifted children. In order to fully understand these needs, it is important to understand not only how parents affect their children's talent development, but also potential influences on parents as they are raising their gifted children. These influences include the gifted children and any average-ability siblings, the peers of the children, the schools the children attend, and the district and provincial policies and practices of gifted education. Parents' needs are also shaped by their support system, including their family, friends and other parents of gifted children, and the community they live in. To account for all of these influences, a comprehensive, dynamic, systems theory is needed. Family systems theory was used for this purpose.

Family systems theory. It is important to view the families of gifted children in their systemic contexts, and to understand the interactions between the families and systems external to the family, such as schools and community systems (Hackney, 1981; Moon, 2003; Moon, 2005; Zorman, 1982). In their 1998 chapter, Moon, Jurich and Feldhusen recommended Family systems theory (FST) to explain and understand the inter-relationships between gifted children, their parents and the other systems with which they interact.

Family systems theory is a specific application of general systems theory to the interactions internal to a family, as well as the external systems a family interacts with. A system is defined as a group of family members and the interactions between them (Nichols & Schwartz, 2001). The nuclear family is defined as the family you live with,

which can be birth, step or adoptive parents and children (Carter & McGoldrick, 1999). The nuclear family is connected to and influenced by the family each person was born into, called the family of origin. There is also an interactive relationship between the nuclear family and their environmental context such as their community and their school.

FST purports that there are systems and sub-systems internal and external to the family that influence family relationships. The family is seen as an interlinked system of people, so that when one person in the family is affected by another who is either internal or external to the family, the influence on that family member also affects the rest of the family (Alexander & Barton, 1995; Bengtson & Allen, 1993; Combrinck-Graham, 1985; Corsini & Wedding, 1989). FST does not focus on why influences occur between the systems, but rather on how an effect in one area influences another.

A family is comprised of the sub-system of the parents (which can include birth- and/or step-parents), and any children, who have sibling relationships with each other. The people within the family all affect one another. Characteristics or behaviours of the children towards one another or the parents can also affect how the parents interact between themselves. Systems external to the family, such as the school, peers and community, are influenced by and have an impact on the individual family members and the family as a whole. A diagram of the interaction between family and other systems using FST is provided in Figure 1.

An example will be provided to demonstrate the dynamics of FST. Imagine a situation where there is a child in grade 3 who has been complaining that the other children do not understand her jokes and she has no friends. A teacher of students with

special needs approaches two parents in one family after identifying their child as gifted, and the parents disagree about whether they should allow their child to join a separate class for only gifted students because they disagree whether this would reduce or increase the peer problems. FST would focus on the internal relationships between family members, examining the effects of the gifted child on each parent, and the subsequent interaction of the parents with each other. The teacher, as representative of the external school system, and the peer group would also comprise influences on the family.

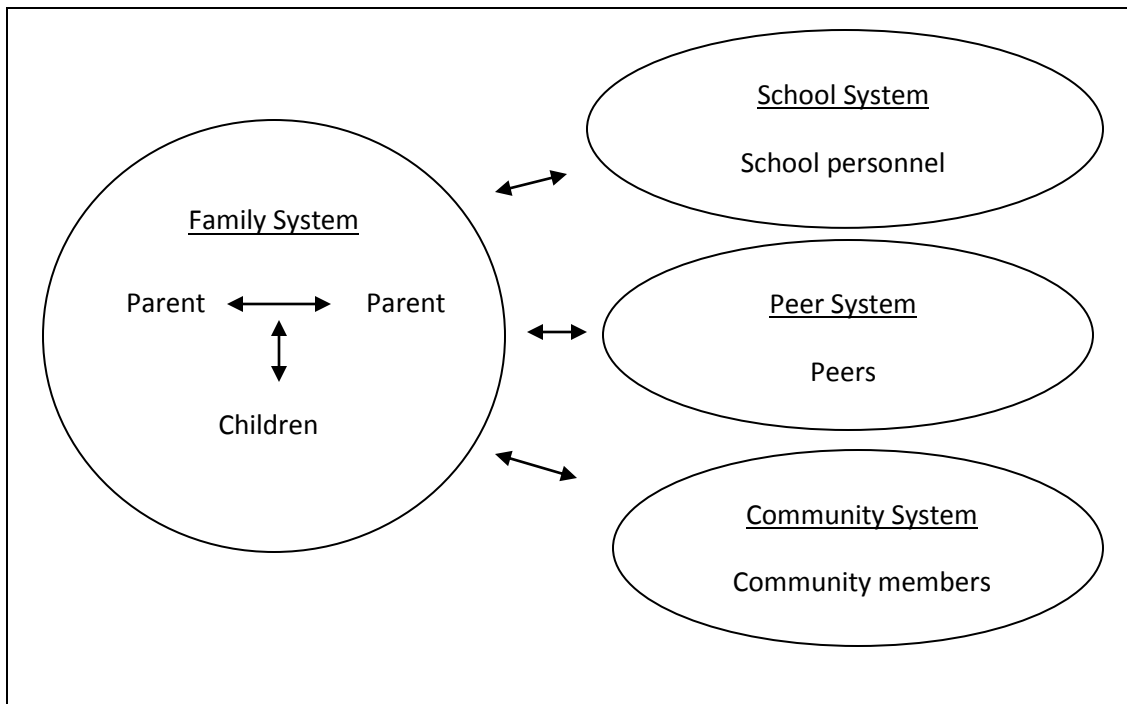


Figure 1. Relationship between systems using family systems theory

In this case, the parents may need more information on definitions of giftedness, the types of gifts their child has, schooling options, and the relationship between matching educational needs of their gifted child and that child’s success in life. These parents may have different concerns, which have led to their different beliefs about gifted

programming. One parent may be concerned that a class for only gifted students will mean their child does not learn how to relate to others of average ability that she may work with some day. The other parent may be concerned that without the separate class their child will not develop friendships at this age. FST focuses on the interactions between the people involved in the various systems, and how one person's influence can have implications within and beyond the family system. The different concerns displayed by the parents in this example would interact with the role each parent plays in decision making in the family, which will determine the outcome of whether the child will attend the separate class for gifted students.

Family systems theory provides a theoretical context within which to develop an understanding of the perceived needs of parents of gifted children. "Our problems are framed by the formative course of our family's past, the present tasks it is trying to master, and the future to which it aspires" (Carter & McGoldrick, 1999, p. 22). It is helpful to examine the families of gifted children in the context of their nuclear families, their extended families, and the school, peer and community systems in which the families interact. FST allows us to examine how families are affected by having to adapt to the emotional characteristics, social and educational experiences of gifted children, as well as how these families influence and are influenced by their school, peer and community systems.

FST offers the opportunity to see parents and family in context. Despite the majority of the literature focusing on the effect parents have on gifted children, there is some literature that provides information related to the concerns of the parents. A summary will be outlined here.

Overview of Literature on the Concerns of Parents of Gifted Children

Some of the literature that addresses issues related to parenting gifted children is based on accounts of parents attending small parent guidance groups or reflections of counselling practitioners (Hackney, 1981; Silverman & Kearney, 1989). In this literature, parents have been found to struggle with their roles, to have difficulty maintaining their position in the family as a parent, and letting their gifted child move into an adult-like role. Research conducted by Strom, Strom, Strom and Collinsworth (1994) found that parents struggled with their views of themselves, and felt pressure to provide the right environment and stimulation to help their gifted children actualize their potential. Other research has found that families struggled to provide educational adaptations, positive neighbourhood and community influences, and positive interactions with the school (Keirouz, 1990; Moon, 1997; Schilling, Sparfeldt & Rost, 2006).

Little research specifically addresses systemic influences on parents. As has been stated, the majority of research has examined the influence of parents on their gifted children. Two reviews of research literature involving parents of gifted children were conducted several years ago, and the research considered in these two reviews will be outlined to summarize the previous research. Colangelo and Dettmann (1983) conducted the first review. Overall these authors found the literature focused on the ways that families influence achievement and talent development, with many recommendations made about the ways to foster children's positive attitudes towards learning and provide learning opportunities in the home or community environments. However, Colangelo and Dettmann found that there was "a lack of experimental research providing specific direction for parental involvement" (p. 25). In other words, there was a great deal of

advice to parents, but little research or specific direction to support it. In general, the literature did support the idea that “characteristics of achievement and creativity seem to be related to specific characteristics of parents and the home environment” (p. 26).

Colangelo and Dettmann (1983) found evidence to support the inclusion of parents in the process of identifying gifted children, as well as their education and talent development. The authors found that parents of gifted children were an important component of the identification process because parents could see their children excelling at non-academic behaviours at home, and could see past other behaviours that may have masked their gifts. However, parents seldom knew what to look for as gifted behaviours, and needed to be educated about characteristics of gifted children before they could fully participate in the identification process. Despite not always knowing gifted characteristics, parents regularly participated in the education of their children outside of the school setting. Parental involvement in gifted children’s education took the form of parents conveying a positive attitude towards learning, as well as promoting enrichment in the home and seeking out other opportunities for talent development in the community.

Colangelo and Dettman (1983) found literature that suggested that parents were “confused about their own gifted children. This confusion results from being unprepared to raise an ‘exceptional’ child and from having insufficient knowledge on the nature of giftedness and creativity” (p. 26). Parents were unsure of what it meant to have gifted children or how to raise those children, and needed more information in order to feel prepared to raise gifted children. Parents were also unsure about their role in relationship to the school. They did not know what opportunities were available for educating their

children in the school system, or what was expected of them in relation to education in the home.

Colangelo and Dettmann (1983) also reported that there was evidence that families with gifted children have different issues to address than those with average-ability children. These differences involved parents' concerns for their gifted children's social and emotional development, particularly because this development does not proceed at the same rate as intellectual development in gifted children. Parents were concerned about differences between their gifted children and average-ability siblings. They had difficulty determining how both to support children's gifts and to provide a balanced amount of attention to each child. There were times when parents did not communicate their expectations with each other related to raising gifted children, and this produced challenging family dynamics between the parents.

In summary, Colangelo and Dettmann (1983) found evidence that parents of gifted children were confused about their roles as parents in the home and school settings. Parents were advised they needed to provide the right kind of environment and educational opportunities to fully develop their children's talents, but this advice did not give specific direction to provide sufficient information or reduce parents' concerns about the distinctive challenges they experienced as a result of having gifted children in their families.

Keirouz (1990) conducted the second review of literature related to parents of gifted children. Keirouz specifically examined works that addressed problems identified by parents of gifted children. In FST terms, the Colangelo and Dettmann (1983) review

focused on the multi-directional influences among parents and other systems, whereas the Keirouz review specifically addressed the influence of gifted children and other systems on the parents. Similar to Colangelo and Dettmann, Keirouz found that recent empirical examinations of parents' concerns were missing from the literature. Therefore, the research reported was a synthesis of older articles and more recent (to 1990) empirical evidence related to parents' concerns.

When examining family roles and adaptations, Keirouz (1990) found support for the idea that parents, siblings and gifted children were affected by the gifted label. Parents' reactions to the gifted label varied, from being proud of their children, to denying the label, to feeling it was a burden to raise an exceptional child. Contradictory results were found related to parents' relationship with their gifted and average ability children with more positive experiences in family relationships reported by both gifted children and siblings of average ability. However, there was consistent evidence that parents and siblings of average ability both perceived gifted children to receive more attention when they were selected to participate in a gifted program.

In the area of sibling relationships, research reported by Keirouz (1990) demonstrated that gifted children experienced negative affect in their sibling relationships. Siblings of average ability had challenges related to their emotional adjustment, self-esteem and competition when relating to their gifted siblings. The greatest amount of conflict arose in family configurations where a gifted child was the oldest sibling.

Keirouz (1990) found evidence that parents' self-esteem was affected in a variety of ways by having children who were labelled gifted. At times parents reacted negatively to their children being labelled gifted, and felt threatened, resentful, envious or felt they had to compete with their gifted children. At times parents were reported to be "over-involved" in their children's lives, and "bask[ed] in the reflected glory" (p. 62) or became overly focused on their children's achievements. Parents also reported feeling guilty because they did not believe they could meet their gifted children's needs for educational or intellectual stimulation.

Parents were reported to be concerned and confused about the social and emotional development of their children lagging behind the children's intellectual development. It was also confusing to parents that their children may not have had similar levels of ability in all skills. Some parents were concerned about their children's high level of energy, low need for sleep and untidiness.

Parents were also concerned about interactions between their family, peer, school and community systems. Keirouz (1990) found evidence that parents were concerned about peers or community members having negative stereotypes and teasing or rejecting gifted children. There were also some reports that parents pushed their child into professions that would bring higher status to the family in relation to others in the neighbourhood. In relation to the school system, parents were found to be overly critical of the schools' efforts to provide education to gifted children, and to be confused about both the programming options and standardized testing used in the schools.

These two literature reviews provide a good basis for research related to parents of gifted children, but they do not provide information about the depth of experience of parents. Silverman and Kearney (1998), two psychologists who worked with families of highly gifted children, provided a more recent report of their experiences conducting assessments with gifted children and support groups with parents. Despite the anecdotal nature of this article, the information is presented here due to the depth of description of the experiences of the parents.

Silverman and Kearney (1998) found that having gifted children in the family had several effects on parents. Parents had difficulty understanding and gaining information on the materials schools used to assess their gifted children, and adjusting to the gifted label ascribed to their children. Parents with whom the authors interacted were reported to have felt a great responsibility to provide their children with an appropriate education, often moving them to different schools or school systems, and finding there was an effect on the family if the educational experiences were poor. Each of the families, regardless of socio-economic status, felt financial stress related to providing educational opportunities. Parents experienced a lack of support and understanding from schools and communities. The authors also reported that when learning of their children's giftedness, parents retrospectively looked back on their own lives, and were forced to come to terms with their own giftedness as well.

Yoo and Moon (2006) undertook one of the most comprehensive recent investigations of the concerns of parents of gifted children. It involved parents who sought counselling at a university-based counselling centre for gifted children and youth. These authors examined 120 problem inventories completed by parents during their first

visit to the counselling centre, and found that the main reason parents accessed the counselling centre was to receive assistance with educational assessment and planning, as well as to learn about options for educational programming. Parents of gifted children of all ages also expressed concern regarding their children's boredom at school. The authors examined the reported problems of parents with children younger than six years old, between six and 12 years, and older than 12 years. Parents of children older than 6 years had concerns about their children's psychosocial development, with the greatest concerns related to their child's anger or frustration, pressure to meet expectations and perfectionism, as well as sense of being different. Parents of children older than 12 years were concerned about career planning, and were more concerned about family issues such as transition to adolescence than parents of preschoolers.

Morawska and Sanders (2008, 2009) were also interested in providing services to parents of gifted children. They conducted research in Australia with parents of gifted children to (a) determine the factors which contribute to emotional and behavioural problems in gifted children, (b) better understand and describe parents of gifted children, and (c) guide the development of a parent guidance group. Their first study (Morawska & Sanders, 2008) set out to determine if gifted children had behavioural and emotional adjustment similar to average ability children, as well as the environmental effect of parental discipline styles and parental confidence on these reports of child adjustment.

The authors sent surveys to parents of gifted children throughout Australia. Responses to the Strengths and Difficulties Questionnaire (SDQ; Goodman, 1997) were used to compare gifted to average ability children on behavioural and emotional adjustment. The survey was developed as a means of screening for mental health

problems, and results of the survey were determined to be either “normal” or “clinical.” Children in the sample who had been formally assessed as gifted ($n = 211$) were within the normative range on conduct problems, hyperactivity and prosocial behaviour. However, gifted children were more often outside the normative range than their average-ability peers on two scales: emotional symptoms and peer problems. Thirty four percent of parents reported issues with sadness, anxiety, anger or fear in the clinical range, and 45.8% of parents reported peer problems related to bullying, victimization or a lack of friends in the clinical range. Gifted boys ($M = 3.81$, $SD = 2.66$) were more likely than gifted girls ($M = 2.99$, $SD = 2.42$) to have peer problems.

Morawska and Sanders (2008) also asked parents of gifted children to complete five other questionnaires related to their own level of functioning, their parenting style, and their marital relationship. The authors used regression analysis to determine factors affecting the emotional symptoms and peer problems of gifted children. Parental confidence was found to account for 18% of the variance in child behaviour and emotional adjustment, maternal education 3.5%, and child gender 3.5%. Parental confidence was measured using the Parenting Tasks Checklist (Sanders & Woolley, 2005), which has 28 items asking parents how certain they are that they can manage child behaviours on a scale from 0 (certain cannot) to 100 (certain can). From this research Morawska and Sanders concluded that one of the most important parts of developing a guidance program for parents of gifted children was to increase parents’ confidence in managing their children.

In their 2009 article, Morawska and Sanders gathered information which led to an evidence-based parent guidance program tailored to parents of gifted children. They

reported additional results collected with the survey reported in their 2008 article. One open-ended question asked of all participants (n = 409): “What areas, strategies or ideas would you like to see covered in an evidence-based parenting program for parents of gifted and talented children?” Two themes reported were already addressed by the *Triple P-Positive Parenting Program* (Sanders, Markie-Dadds & Turner, 2003) Morawska and Sanders intended to adapt. These themes were promoting positive behaviour and relationships, and managing difficult behaviour in children. There were six additional themes which were not addressed by the regular *Triple P* program: (a) how to manage gifted children and help them cope with their difficulties, (b) parents determining how to manage their own emotions and adjustment related to parenting gifted children, (c) school issues, such as deciding on the best educational environment and keeping relationships with the school system, (d) helping their gifted children build social relationships, (e) motivating their gifted children to achieve, and (f) balancing the needs of the gifted children with other children and parents. Clearly, the parents of gifted children had needs which were not going to be addressed by a parenting program developed for parents of average ability children.

From the available research and reports, there are several concerns which parents of gifted children consistently raise in relation to parenting gifted children. These focus on parents’ concerns about their children’s social and emotional well being, confusion about their role, and feelings of responsibility for the proper talent development and educational planning for their children. However, these reports of concerns have been in conjunction with research focusing on summarizing and evaluating the functioning of parents in their parenting role. With the exception of the open-ended question asked by

Morawska and Sanders (2009) these research reports did not focus on asking the parents themselves about their needs, but rather used other instruments to evaluate parent performance. In the next section, I review the four needs assessments conducted with parents of gifted children.

Assessing the Needs of Parents of Gifted Children

Four general needs assessments involving parents of gifted children have been conducted. One asked parents in a Midwestern U.S. state about the learning needs of their gifted children and how these needs are met (Hertzog & Bennett, 2004); two surveyed stakeholders as local parent education groups or counselling centres were set up for this population in different U.S. states (Dangel & Walker, 1991; Moon, Kelly & Feldhusen, 1997); and one was a more general needs assessment which summarized conversations at two forums for parents of gifted children in South Africa (Olivier, Kokot, Verryne & Jansen, 1995). Each will be examined in detail.

Dangel and Walker (1991) conducted the first needs assessment with 159 parents on behalf of Georgia's State Advisory Panel for Special Education. Their survey assessed interest in a new parent education program being developed for parents of gifted children, as well as the desired method of delivery for the program. They developed a survey asking about preferred type of training delivery, preferred times for delivery, evaluation of any parent education programs parents had previously attended, and program scheduling that would enhance program attendance. A space for comments was provided. A great deal of information was missing from the report of this study relevant to their participants, research method and results. This missing information limited the

opportunity to understand the participants in their study, as well as evaluate their research methods.

Dangel and Walker (1991) reported the topics selected for parent education by over 25% of the sample. These topics were: using microcomputers with your exceptional child (48%), motivating your child (40%), having child take responsibility (40%), developing activities to encourage social growth (33%), living with your teenager (33%), planning for your child's financial future (31%), understanding test results used for placement (28%), developing learning activities to support school work (28%), and finding leisure-time activities for your child (28%). Another result addressed the preferred method of training delivery. Most parents were interested in printed material such as newsletters and pamphlets (52.2%), followed by presentations by an authority (49.6%), video or audio cassette presentations for home use (49.0%), programs on educational television (26.4%), and workshops conducted by other parents of gifted children (16.9%).

Although the article by Dangel and Walker (1991) omits a great deal of information, it has several points of merit. First, these authors were the first I could find who solicited information from the population they wanted to serve with their parent education program - the parents of gifted children themselves. Second, the data collected included the desired format for that parent education. It is also interesting to note that Dangel and Walker pointed out that parents were more interested in child-based needs than school-based needs. The authors state:

It is not surprising that so many parents selected items which dealt with social/behavioral development rather than school/academic concerns. Frequently, the uneven development between intellectual abilities and behavioral characteristics of gifted children pushes social-emotional needs to the forefront of parents' concerns. While schools concentrate on fostering academic abilities, parents are left to provide for lagging social/emotional development.... (¶ 10)

Dangel and Walker (1991) portray the influence of gifted children on the parents' concerns as the uneven or asynchronous development within the child. FST would consider this individual difference of asynchronous development of gifted children to affect the parents' concerns.

Olivier et al. (1995) conducted the second assessment of the needs of parents of gifted children in South Africa. These authors were in charge of gifted education courses at the University of South Africa, and were often contacted by parents of gifted children needing help to address a problem with their children. The authors invited local parents of gifted children to a forum in order to learn about the issues or concerns related to their experience in the parenting role in order to develop strategies to meet these needs. Olivier et al. held two separate forums with 60 and 76 parents of gifted children, respectively. The authors began each forum with a presentation on the origins and meaning of giftedness. The parents then split into five groups with a researcher present as a leader in each group. The goal set for these groups was to describe the experience of parenting a gifted child and identify the two most important issues or concerns discussed by the group. All forum participants then discussed the needs identified in the small groups, facilitated by the researchers to allow for open discussion. The authors report five

categories of needs, but they do not explain how they analyzed the data they had collected. The issues identified by Olivier et al. were: (a) managing the gifted child, (b) parents wanting training on “how to support, guide, discipline and cope with gifted children, through all phases of childhood, in the family” (p. 60), (c) emotional problems experienced by the children such as low self-esteem, depression, aggression or loneliness, (d) general dissatisfaction with school and the attitude of teachers, (e) children’s problems with too much or too little time for school work, and (f) children lacking social skills as well as skills in time management and relationship formation.

At the end of the session the parents were asked to fill out a questionnaire, which asked them to evaluate the forum and provide opinions about future forums. Two questions were of particular relevance to this research: the topics parents would like to have addressed, and the ways they would like the forum to be improved. In general, parents asked for forums on the educational, social and emotional needs of their gifted children in the home and school settings, suggestions for how to build a social network through staying in contact with other parents, and how to effectively parent their gifted children.

The Olivier et al. (1995) article could best be described as a summary of a group discussion, as there was no description of any analysis of the information collected. However, their research presents a valuable contribution to understanding parents of gifted children because the authors brought together a large number of parents of gifted children (N = 136) and asked them to describe their experience of parenting gifted children, as well as their unaddressed needs. This compilation of parents’ experiences adds to our understanding of the issues addressed by parents of gifted children.

Moon, Kelly and Feldhusen (1997) conducted the third needs assessment to collect the opinions of parents, school personnel and counselling professionals about the need for differentiated counselling services for gifted students and their families. These authors were proposing a new university-based counselling centre for this population. They surveyed stakeholders in the area adjacent to a large university: 64 parents of gifted children, 238 school personnel, 15 community counsellors and 18 counselling professors, with 335 participants in total. The process used for survey development was thorough, beginning with deriving items on the initial draft from the literature on the counselling needs of gifted and talented youth. Five adults then provided feedback regarding errors, omissions and clarity, and the survey was field tested on a small (number not specified) sample before it was sent to participants. The survey consisted of 41 Likert-type items grouped into 6 categories of core needs for counselling services, with a place for open-ended comments on the need for that service at the end of each core area. The scaled items were measured on a 5-point scale from definitely omit (1) to definitely include (5). The core areas were: general (6 items which asked participants to indicate whether they would recommend families or specific ages of students for counselling services), testing and assessment services (8 items), guidance services (5 items), training and education services (4 items), counselling concerns (12 items), and consultation (4 items assessed whether parents would consult with the centre if their child had emotional, behavioural, social or academic problems).

Moon, Kelly and Feldhusen (1997) reported extensive results; a selective overview of relevant results will be presented. In general, the responses by the parents, school personnel and counselling professionals to all 41 items on the survey were in favor

of including each of the topics presented in a differentiated counselling service for gifted students and their families, with the means near 4 on the 5-point scale, 5 representing “definitely include.” Composite means and standard deviations were calculated for all participants in each of the core areas: general needs assessment ($M = 4.12$, $SD = .84$), testing and assessment services ($M = 4.00$, $SD = .96$), guidance services ($M = 4.34$, $SD = .84$), training and education services ($M = 4.34$, $SD = .80$), counseling concerns ($M = 4.25$, $SD = .92$) and consultation ($M = 4.05$, $SD = .91$). These results indicated a high perceived need for all six of the core areas suggested for services in the multi-service counselling centre.

Moon et al. (1997) performed a content analysis on the open-ended comments at the end of each core area on the survey (n was not specified). This qualitative analysis indicated that parent and family counselling and education were much needed services ($n = 44$), as well as career assessment and guidance for gifted high school students ($n = 38$). In addition, certain populations needed special attention “such as underachieving ($n = 10$) and learning disabled ($n = 10$) gifted students. Comments about these special populations focused on the need for testing for students and support for parents and the importance of making gifted students who were at risk a priority emphasis” (p. 21).

In general Moon et al.’s (1997) research was very well conducted, and was the first needs assessment to provide a quantitative analysis of the concerns of parents of gifted children that would inspire them to seek out the guidance or counselling services at the centre. However, the majority of the participants in this survey were school personnel, with parents making up only 19.1% of the sample. It is curious that although the purpose of this research was to survey stakeholders, the people who were likely to use

the counselling centre, the families of gifted children, only comprised 19.1% of the sample. From the perspective of FST, the results of this needs assessment indicate that people in the family system (parents, 19.1%), school system (school personnel, 71%), and community system (9.9%) all agree that there is a need for guidance and counselling services for gifted youth and their families.

Hertzog and Bennett (2004) conducted the final needs assessment survey to examine parents' perspectives on the learning needs of their gifted children and how parents went about meeting those needs. The authors developed the survey, *Perspectives on Meeting Child and Family Needs* (1995). It consisted of four checklists, one rank-ordered item and five open-ended items asking parents what they perceived and how they addressed the learning needs of their gifted children. The response rate was 47.6%, with 280 parents from two school districts near a Midwestern U.S. university completing the survey.

“The majority of all respondents were White (89.5%), high SES (63.6%), had an annual income of \$55,000 or greater, and were highly educated” (Hertzog & Bennett, 2004, p. 98). The two school districts were compared because they utilized different philosophies of gifted programming. District 1 (69.9% of the responses) had a “total inclusion policy,” with gifted students placed in regular classrooms, and identified 20% of their population as gifted. District 2 (24.4% of the responses; missing 5.7% not explained) identified as gifted 5% of the students for segregated classes for the gifted in grades 2 – 5, and 10% of the students for pull out programs in middle school.

Unfortunately the majority of results were presented in bar graph format, and the actual percentages of responses were not included. I had to estimate these results in most cases. Parents perceived their gifted children needed the following in order to learn: to be challenged and stimulated (87.2%), opportunities to be creative (67.5%), higher level content (> 60%), in-depth learning (\approx 60%), opportunities to verbalize ideas (\approx 50%), a structured environment (< 40%), to be motivated (< 40%), allowed to move around while learning (< 40%), help to follow through on ideas (< 30%), opportunities to work with peers (< 30%), role models (31.7%), opportunities to work with adults (22.4%), and a special environment (20.0%). The responses of parents with children in elementary, middle school and high school were grouped and compared using a Chi-square analysis. Parents with children in high school more frequently indicated a need for the children to work with their peers; parents with children in elementary school more frequently perceived their children needed higher-level content, opportunities to explore new topics and creativity.

Parents were also asked to rank-order the resources they used to meet the learning needs of their gifted children. The best representation of these results was a bar graph presenting the percentage of resources parents ranked as 1st, 2nd or 3rd. Parents most often used the library (< 80%), followed by recreational activities (< 70%), religious affiliated resources (< 30%), other parents (< 20%), other (< 10%), school counsellor (< 10%), psychological services (< 10%), and mentoring programs (< 5%). When asked how other parents are a support to them, respondents indicated they most often used other parents to discuss problems (70.2% in District 1, 74.7% in District 2), for transportation to extra-curricular activities (47.8%, 51.76%), or to learn about community resources (58.5%,

43.5%). The only statistically significant group difference was that a higher percentage of parents in District 2 ranked as first “using other parents as a resource.” The authors’ explanation of this difference was that parents in District 2 knew other parents of gifted children because their children attended separate classes or programs. However, I question this explanation, because the item on the survey (included in the Appendix of the article) did not specify “other parents of gifted children.” The item only stated “other parents” and could have been interpreted in many ways by participants.

Hertzog and Bennett’s (2004) research added to our understanding of the perceptions of parents of gifted children in that parents indicated that they did not feel they had much control over their children’s education in the school, but felt responsible for providing extracurricular education outside of the school. They also indicated that they talked to people in several FST systems to relieve their concerns about their children. In the family system, parents talked to their children and spouses. In the school system, parents talked to teachers and other school personnel. In the community system, parents talked to other parents. These participants echoed the reports of parents’ experiences in the two literature reviews (Colangelo & Dettmann, 1983; Keirouz, 1990), the experiences of Silverman and Kearney (1998), and all four of the needs assessments: parents of gifted children influence and are influenced by all other systems in FST. The influences on parents are not unilateral or unidirectional. Instead, there are many influences co-occurring in the various systems, and parents have to interpret and manage these influences while parenting their gifted children.

These needs assessments give us some understanding of the concerns of parents of gifted children related to guiding the social and emotional development of their gifted

children in the home environment, as well as feeling responsible for the development of their children's talents at home and through extracurricular activities in the community. We have some indication of parents' perceptions of their children's learning needs, and how they meet those needs. It is becoming apparent that parents and other people in the lives of gifted children believe it is important to have guidance and counselling services available to these families. However, all of these needs assessments were conducted in the United States and South Africa, and it is uncertain whether parents in Canada would share similar concerns. Another component missing from all four of the needs assessments previously conducted with this population was a theoretical orientation to guide the development of the survey and interpretation of the results.

There is a need to conduct theoretically-based research with parents of gifted children in Canada to (a) understand their concerns and perceived needs for information, and (b) determine what kinds of materials or supports would most benefit parents who are looking for assistance. In summary, the rationale for doing this study is that there has been a consistent call to provide guidance programs for parents of gifted children and there are many parents of gifted children seeking support, but there are two important types of information missing which would strengthen the development of programs and materials. The first and most important is to understand parents' experiences of the systemic influences affecting them as they guide the development of their gifted children. The second is the development of an instrument that would collect information to direct volunteers or professionals trying to develop support programs or materials that are informed by the needs of these parents. Family systems theory was used as the theoretical context for this study as a guide for the development of the questions in the

survey instrument, and for interpreting the results. Using this framework, I developed the following research questions:

1. Parents' Needs for Information

- a) What questions do parents have related to parenting their gifted children (i.e. understanding and guiding their development)?
- b) Where do parents of gifted children turn when they need information?

2. Parents' Concerns and Need for Support

- a) What concerns do parents of gifted children have related to the well being of their gifted children and/or their family?
- b) Where do parents turn to receive support for these concerns?

3. What form of materials or programs to provide information or support would parents be most interested in?

Chapter 3 Methods

Participants

Five hundred and twenty-six English-speaking parents of gifted children (91.1% women and 8.9% men) participated in this study. They were between the ages of 30 and 65, with an average age of 43.3 years ($SD=5.3$). Participants lived in four Canadian provinces, with 52.4% from Alberta, 27.6% from British Columbia, 19.6% from Ontario, and .4% from Newfoundland. Participants self-identified as parents of gifted children, and 90.3 % reported that they had at least one child formally identified as gifted by the school or a psychologist. The remaining 9.7% had a child they believed was gifted who had not been formally identified.

Participants were asked to report all of the ethnicities represented in their family: 87.1% reported White/Caucasian, 14.3% Asian, 2.3% North American Aboriginal, .8% Black, and 4.9% "Other." Most of the participants were married (89.5%), and the remainder were divorced (5.3%), separated (2.9%), single (2.3%) or widowed (0.6%). Ninety-three percent reported that their children lived with them full time. The majority of participants indicated that they were gifted as children (60.3%), but only 16% were formally identified as gifted. Participants reported learning about giftedness for an average of approximately seven years ($M=6.9$, $SD=6.9$). All participants read and consented to participate in compliance with the Ethical Standards of Simon Fraser University (Consent Form contained within *Needs of Parents of Gifted Children*, Appendix G).

Instrument

This segment describes the sections in the final survey, *NPGC*, and the survey development process. This instrument consisted of a description of the study and consent form asking only one parent per family to participate, and five sections which were constant throughout the development process: Demographics (30 items), Type of Information Desired (24 items), Type of Concerns (50 items), Source for Information or Support (29 items), and Preferred Form of Materials or Programs (8 items). The Demographics section consisted of check box and fill-in-the-blank items requesting information about the parent participant and his or her children, as well as details about gifted identification and participation in gifted programming. The majority of the items in the “Information” and “Concerns” sections consisted of Likert-type items asking about the level of importance for the “Information” section and the level of concern for the “Concerns” section. Throughout the survey all Likert-type items used a five point scale, and the response options were very low, low, moderate, high or very high. At the end of each of the “Information” and “Concerns” sections there were two items in an open-ended format. The first item asked participants to name three topics from the previous section which they considered to be most important. The second item asked parents to describe any other types of information they wanted or concerns they had experienced. The final two sections of the survey, “Source for Information or Support” and “Preferred Form of Materials or Programs” sections consisted mostly of Likert-type items asking about the people or materials the participant currently turned to or would like to have available for information or for support.

Survey design. The *NPGC* was developed to assess the perceived concerns and needs for information of a large number of parents with one or more gifted children in their family. The development of the *NPGC* was guided by FST, and based on the process recommended in Anderson and Kanuka (2003), Berends (2006), and Dillman (2007): a) construct an initial draft survey based on previous research, b) conduct focus group sessions to learn of the perceptions of the population of interest and the clarity of the survey items, c) perform a member check with the focus group participants to ensure the survey revisions represented their feedback, and d) ask experts in the field of interest to evaluate the survey for clarity, bias and the order of the items. After this process was completed, the revised print survey was converted into an online web survey and piloted.

Family systems theory as a theoretical basis for survey development. This section expands on the way in which FST guided the development of the *NPGC*. FST includes three main tenets which guided the current research: a) that people's past experiences influence their current perceptions, b) that people generally turn to others inside and outside of the family for support, and c) that each system internal to and external to the family has an influence on and is influenced by the family.

FST indicates that previous life experiences affect a person's experience in the present (Combrinck-Graham, 1985). In particular, the experience a person had in their family of origin will affect how they relate to their own nuclear family. Therefore, it was important to include items related to participants' previous experience related to giftedness. If the participant had experience with giftedness when she or he was a child growing up in his or her family of origin, it may have affected the amount of information sought or concerns experienced in relation to her or his own gifted child and the amount

of support, information and understanding offered by grandparents. Five items in the demographics section were included to address this. These items asked if the participants had been formally identified themselves or believed they were gifted, if they knew of anyone else in their family or their partner's family who was a gifted child and the relationship of that relative, and how long the participants had been learning about giftedness.

FST also suggests that people will turn to others in their lives as a support system, and the level and nature of support garnered from others will affect the person within the family system. The "Source for Information or Support" section of the survey was designed specifically to investigate the support system available to, and accessed by, the participants.

The final aspect of FST reflected in the design of the survey was the inclusion of family, school, peer and community systems. FST indicates that there are influences between the various systems internal and external to the family (Carter & McGoldrick, 1999); therefore it was necessary to develop items that addressed the experience of the participants in home, school and community settings. The structure and organization of the survey items were designed in relation to the various systems that may have an influence on participants' needs for information and support. For example, in the "Concerns" section, items related to peers were grouped together, representing a systemic grouping.

Initial draft. Items included in initial draft were based on the review of prior needs assessment research focused on the concerns of parents of gifted children and FST.

The composition of the draft items relied heavily on the needs assessments by Dangel and Walker (1991) and Moon, Kelly and Feldhusen (1997). In particular, following Dangel and Walker, items in the “Preferred Form of Materials or Programs” section were based on items in Dangel and Walker’s survey. The “Concerns” section of the draft survey drew heavily upon the problem inventory form used at the Gifted Education Resource Institute Counselling Center at Purdue University which asked parents about the concerns which led them to seek counselling or guidance related to their children. After including all of the aforementioned components, the initial draft of the print survey contained 138 items.

Focus group. Two 60-minute focus groups were conducted based on recommendations in Berg (2007) and Stewart, Shamdasani and Rook (2007). These focus groups allowed for a discussion guided by the researcher in order to get the perceptions of the members that developed during the group discussion (Berg). The discussion topics were giftedness, the issues that the families faced and how the families got their needs addressed. Focus group discussions are well-suited to these topics. Focus groups are recommended as a way to learn about “conscious, semiconscious, and unconscious psychological and sociocultural characteristics and processes among various groups” (Berg, p. 144). Since the concept of giftedness, family issues and needs have been noted to be confusing for parents (Solow, 1995; Moon, 2003), it was particularly appropriate to discuss these topics in a focus group setting.

I followed Berg’s (2007) “moderator’s guide” as facilitator of the focus group. This drew upon many of the skills that I have developed over my years of work in group and individual counselling. The group had a warm up period in which the participants

got to know each other and me as the moderator. I explained the purpose of the group, how the information from the focus group would inform the research, and the format used to protect confidentiality. Group members asked a few questions and signed the informed consent letter (Appendix E). Following the focus group scripts (Appendices B and C) I then asked a series of questions and encouraged discussions between the participants. At this point, I took on a secondary role; letting the discussion between members of the group develop into a conversation about their beliefs, attitudes, feelings and perceptions (Gall et al., 1996), and probed for further information as necessary.

Focus group participants were recruited by sending an email to the members of a chapter of an organization for parents of gifted children to which I belong (see Focus Group Recruitment Email in Appendix D). Initially, five parents (1 male and 4 female) indicated their willingness to participate. Their role and responsibilities in the two focus groups were explained, and they signed a consent form agreeing to participate (see Focus Group Consent Form, Appendix E). However, due to scheduling conflicts, only four participants attended each focus group session - three consistent participants and one different participant each time.

Both focus group meetings were audio and video recorded. James Clelland acted as observer and note-taker. As a parent of gifted children, James was chosen as an observer due to his familiarity with the topics under discussion, and his well developed observational skills resulting from his work as a teacher. Multiple methods of recording were used to ensure that there was a backup in case of equipment failure, and to ensure there was a comprehensive record of the conversation.

Each of the focus group meetings had a different purpose. The purpose of the first meeting was to discuss personal experience with giftedness as a child, parent understanding giftedness in their children, cultural beliefs about giftedness, and differing levels of support within the family of origin, nuclear family and environment for the parent. I also facilitated a discussion about the information the parents had sought or would like, the concerns they had related to parenting their gifted child or children, as well as the ways in which they seek support.

Immediately following the first focus group session, the observer and I examined his field notes. We compared impressions of the overall concepts that were discussed by the focus group and specific issues relevant to the research questions that would be important to include in the survey. We noted that a large proportion of the issues raised by the participants addressed parents' relationships with the school system, and the majority of the information the participants wanted was related to schooling. I then listened to the audio recording of the focus group conversation, and made notes regarding the topics discussed, ensuring that the participants' phrasing was recorded verbatim. Following Berg's (2007) recommendations, a content analysis was then conducted on the observer's notes and my notes from the recording of the focus group session.

The content analysis indicated that the focus group members were concerned about many social and emotional issues related to their children, such as sensitivity, and a lack of peers who understood their children's intense focus on advanced topics. These parents were concerned about the changes they felt they needed to make in their lives in order to accommodate their gifted children's talent development, such as reducing and

modifying work hours to supervise their children completing distance education courses in the home.

The content analysis also revealed several types of information the parents sought related in particular to the school system. For example, the parents agreed they did not understand the educational needs of their gifted child, and sought information from classroom teachers and teachers who work with special needs students. They wanted to know how to educate and assist the classroom teachers each year, so that the teachers would know how to meet their child's educational needs. There was an emphasis on gaining information on alternative modes of education, such as distance education, homeschooling, private schools, and how to change to other schools in the district which provided better gifted programming.

The initial survey derived from the literature review and the problem inventory used at the Purdue Counseling Center was revised based on the first focus group meeting. Questions were added related to the research questions that were discussed by the participants, ensuring that the participants' phrasing was used. The majority of the revisions to the initial draft print survey involved adding items to the Information section, resulting in a total of 166 items.

The second focus group session had two purposes. Following Dillman's (2007) recommendation, the first purpose was to ensure the survey questions were clear and easily answered. To this end, during the second focus group meeting the participants completed the revised survey (see Focus Group 2 Script in Appendix C). Based on the recommendations of McMillan and Schumacher (2006) and Stewart et al. (2007),

participants were encouraged to discuss item clarity, format and any evident bias while they were filling out the survey. The second purpose of this focus group meeting was to perform a member check with participants to ensure all of the topics raised in the first focus group were included in the revised survey. After participants completed the second draft of the print survey, the group had a discussion and agreed that all of the topics considered at the first focus group were indeed included in the second draft.

Expert Feedback. Once the survey was revised based on the input from the focus group, the next step was to ask for feedback from three individuals with expertise in survey development, FST and gifted individuals. Dr. Marion Porath and Dr. Dona Matthews are professors in special education departments, and Dr. James Webb is a renowned psychologist and founder of the organization, Supporting the Emotional Needs of the Gifted (SENG). All three are respected scholars in the field of teaching gifted students as well as home-school relationships. These experts were asked to examine the survey for theoretical consistency, format, clarity and grouping of questions as well as response bias.

The expert reviewers made several suggestions that informed the final revision of the survey. They suggested ways to make the wording of the items consistent throughout the survey, and to clarify some of the items by including examples. Specifically, because I was interested in whether or not the children had been assigned a gifted label, I was advised to ask participants to report whether their child had been formally identified or if the participant only suspected the child was gifted. There was an item related to income in the original draft, which I was advised to remove from the survey as income did not relate directly to my research questions.

Finally, it was suggested that two response options be added to the “Source for Information or Support” section: a pediatrician or family doctor, and books or articles about gifted children. Although I had previously understood that parents turn to books or articles about gifted children for information, I had not included this item because it was not easily aligned with FST, which is focused on the people (rather than materials) who provide support to parents. However, I decided to include this item due to the experts’ recommendations despite not being directly related to FST.

Construction of the web survey. Online web surveys are becoming more commonplace as research tools. Sue and Ritter (2007) discuss the participant-related advantages of a web survey as speed of response and the anonymity of participants, leading to a higher response rate for sensitive questions. The researcher-related advantages to using a web survey are economy in reaching an audience, accurate data collection due to no need for data entry, the ability to add content such as video or audio, and the option of offering expanded question types. The disadvantages of using a web survey are determined by the format and capabilities of the software tool chosen, increased likelihood participants will abandon the survey before completion, and selection bias resulting from limiting the pool of potential participants to those with access to the internet.

The limitation of not being able to reach some parents of gifted children through a web survey was given careful consideration. In particular, Sue and Ritter (2007) explain that parents of low socioeconomic status or from certain ethnic groups would be less likely to have access to an internet-based survey, particularly since the invitation to complete the survey was distributed through email. However, research conducted by the

Pew Research Center in 2005 found that 71% of people surveyed in Canada go online to access the World Wide Web or send or receive email. For the current research I decided that the use of an online survey was particularly appropriate because most of the potential participants were likely already using email. Participants were invited to participate in the current research through organizations of parents of gifted children to which they belonged. Since the participating organizations communicated with their membership through email, by definition, the participant pool had access to the internet. Therefore it was determined that the advantages outweighed the disadvantages of using a web survey.

I chose Simon Fraser University's *Web Survey* software tool to construct and host my survey after considering other free online tools such as *Survey Monkey*, and an online survey tool developed for research conducted at Simon Fraser University, *Web Questionnaire*. Unlike *Survey Monkey*, *Web Survey* allowed my survey and the data collected to be hosted on a server in Canada, protecting the confidentiality of my participants. As part of the U.S. *Patriot Act* (2001), any company which hosts or stores its data in the U.S. is subject to review by employees of the U.S. government. Therefore the SFU Department of Research Ethics would not approve use of a survey tool which hosted or stored its data in the U.S.

The *Web Survey* software tool also offered features recommended in web survey design literature including being visually attractive (Smyth, Dillman, Christian & Stern, 2006), and requiring participants to carefully consider item content before responding (Simsek & Veiga, 2001). I used a page format rather than a scroll-down format so each concept or set of questions was visible in one page (Couper et al., 2004) and in quick-to-answer forms such as check boxes (Couper et al., 2006). Single response items (e.g.

Likert type questions) were easy to read because they were formatted in grids with rows having alternating background colours and radio buttons for responses. *Web Survey* was chosen over *Web Questionnaire* because *Web Survey* included the university name plus a survey number in the URL. Anderson and Kanuka (2003) emphasized that the inclusion of an institution's name in the URL is important because it makes an unknown researcher and the instrument seem more credible and trustworthy, and this trustworthiness leads to an increased response rate.

Pilot of the web survey. After a rigorous development process, the survey was ready to be pilot tested for functionality, ease of use and time of completion. Fifteen parents known to me were recruited through email, and they completed the online version of the survey. These parents were asked to report if there were any technical problems and how long it took them to complete the survey. The participants reported no technical problems, and that it took approximately 20 – 30 minutes to complete the survey. This range was included in the information provided to potential participants later in the recruitment email (see Appendix F) and within the consent form contained in the final draft of the survey. The consent form was imbedded in the first page of the web survey.

Modifications to the survey before the second phase of recruitment. After participants in the data collection from British Columbia completed the survey, some participants sent me unsolicited feedback about challenges they had with the survey. There were three types of changes based on participant feedback made between the “BC” survey filled out by parents in British Columbia (BC phase), and the “Beyond BC” survey completed later in the data collection process by parents in Alberta, Ontario and Newfoundland (Beyond BC phase; see *Needs of Parents of Gifted Children* in Appendix

G). Details of the differences between the two forms are provided in Table 1. The first change was to the ethnicity item in the demographics section. Feedback received by email from parents responding to the BC version of the survey indicated that there were several participants who were unsure how to select between the categories derived from Statistics Canada of “West Asian”, “South Asian”, and “Southeast Asian”. In the “Beyond BC” version of the survey these categories were combined with “Japanese” and “Chinese” into one category: “Asian.” The second change clarified the instructions in several sections, asking participants to enter their responses in a numerical or date format for ease of data entry. The third change was related to notifying participants about an upcoming question. Some participants sent feedback by email that they found it difficult to answer the question asking for their top three needs for information or concerns at the end of the respective sections of the survey because they were not prepared to answer this question, and had to go back and reexamine their responses throughout the section. A direction that mentioned the upcoming item was added at the beginning of the “Information” and “Concerns” sections of the survey to prepare participants for the question asking them to itemize their top three needs at the end of each section.

Table 1

Revisions between the “BC” and “Beyond BC” version of Needs of Parents of Gifted Children

<i>Wording in “BC” version of the survey</i>	<i>Wording in “Beyond BC” version of the survey</i>
Changed to include response example	
Instructions: What percentage of the time do your children live with you?	Instructions: What percentage of the time do your children live with you? For example, if your children live with you 100 percent of the time, enter 100 below.
Instructions: To which ethnic group(s) do you and your partner belong? Please select all that apply.	Instructions: To which ethnic group(s) do you and your partner belong? Please select all that apply. If these groups do not include your ethnicity, please select N/A and enter your ethnic group in the next question.
How old are you?	How old are you? For example, if you are 40 years old, enter 40 below.
What is the date of birth of your oldest child? (e.g. March 10, 2001).	What is the date of birth of your oldest child? Please enter the date Month, Day, Year (e.g. March 10, 2001).
Notification of response request at section end of the Information and “Concerns” sections	
	At the end of this section on information you will be asked which three topics you would most like information on. You may want to either make a mental note of the highest priority topics as you complete Questions 28 - 31, or use the “Previous” button to go back and “copy and paste” the top three into the comment box.
Family Cluster Part I: Separate out Likert items which are <u>not</u> intended to have an “N/A” response	
Note: All items contained in Family Cluster Part I and Part II were grouped on one page of the “BC” survey, with an “N/A” response available for each item.	<ul style="list-style-type: none"> • Major family decisions are made based on my gifted child's educational needs • My gifted child is noncompliant or behaves in an oppositional manner resulting in discipline issues • My child hides his/her gifts at home • My family is experiencing financial strain due to money spent on my gifted child's needs
Family Cluster Part II: Separate Likert items which <u>are</u> intended to have an “N/A” response	
	<p>Please rate your level of concern about having a gifted child in your family. If you have only one child or do not have a partner, please select N/A for the appropriate question.</p> <ul style="list-style-type: none"> • There is sibling conflict amongst my gifted children because some children have been identified as gifted and some have not • I am watching for giftedness in my other child • We are experiencing marital stress related to disagreement about our child's giftedness or what is necessary for our child's development

The final change was to divide a cluster of items in the “Concerns” section related to family concerns into two clusters. The family concerns cluster was the only one within the “Information” or “Concerns” sections of the survey that contained a “Not Applicable” (“N/A”) response option. This provided an appropriate response option for families with only one child, or parents who were single, separated or divorced. There were four items that were not related to number of children or marital status, and I did not expect any parents to select “N/A” response. However, several respondents did select the “N/A” response option for these four items. Therefore, the family concerns cluster was separated into two new groupings. The first grouping contained the three items related to number of siblings or marital status and offered an “N/A” option. The second new grouping contained the remaining four items unrelated to siblings and marital status, and did not offer an “N/A” response option. The items themselves did not change, only the elimination of the “N/A” response option from the items that did not pertain to multiple children or marital status.

Procedure

The procedure for implementing the survey follows Dillman’s (2007) Tailored Design method. This produces a higher response rate by adapting survey implementation to the method and population to which the survey is given. It also increases trust and rewards for the respondent, as well as reducing perceived costs, such as time out of one’s day. The invitation email and consent form were written to include inviting personal and professional information about me, to increase the level of trust in me by the participants. Having the sponsorship of SFU demonstrated in the link to the survey was also an important factor to increase trust. The rewards offered to the participants were to

demonstrate positive regard, thank them for participating, and ask for their advice, as well as making the survey interesting. The social costs for responding to the survey were reduced through minimizing requests for personal information and using language that demonstrated an equal rather than subordinate relationship between me and the participants. Dillman recommends one other method of reducing costs: to make the survey short and easy. The survey was easy for participants to locate because of the link to the survey provided in the recruitment email. However, with 141 items, the *NPGC* is not a short survey. However, through the process of construction of the survey, I decided that it was important to ask all of these questions of participants, despite the length of the survey.

I attempted to contact representatives from all English-speaking organizations for parents of gifted children across Canada. The president or board of directors from seven parent-led English-language organizations across four Canadian provinces agreed to distribute the research materials. One organization was in British Columbia, four in Alberta, one in Ontario, and one in Newfoundland. In British Columbia, Ontario and Newfoundland there was only one organization per province, usually with several chapters. In Alberta, there were several different kinds of organizations through which parents of gifted children agreed to participate: regional organizations for parents in two major cities, a Centre for Gifted Education, as well as a congregated school for gifted students. For the organizations in Alberta and Newfoundland, I was in direct contact with the chairpersons or presidents of the organizations. For the British Columbia organization I had contact with the leaders of each of the seven chapters, and in Ontario I was in contact with the president and one of the provincial chapter leaders (see Table 2).

Table 2

Dates and Methods for Distribution, 2008: Needs of Parents of Gifted Children

<i>Organization</i>	<i>Method of contact</i>	<i>Date survey launched</i>	<i>Follow up 1</i>	<i>Follow up 2</i>	<i>Date survey closed</i>
Gifted Children's Association of BC	email	Began March 10	Various to different chapters	Various	July 7
Edmonton Association for Bright Children	email	June 3	June 10	June 24	July 17
Westmount Charter School (AB)	email	May 26	June 10 with school newsletter	June 24 my survey only	July 17
Gifted And Talented Education parent group (AB)	email, announce at organization's meeting	May 27	None – sent 2 emails on invitation day (accident)	June 11	July 17
University of Calgary Centre for Gifted Ed	email + website link	May 23	June 2	June 16	July 17
Association for Bright Children Ontario	newsletter mailed out, email to chapter contacts, website link	July 11	Various	Various	Oct 16
Newfoundland Labrador Association for Gifted Children	email	May 26	May 31	June 22	July 15

Parents were invited to complete the survey via several methods (see Table 2).

The majority of recruitment was conducted through email. However, some organizations also made announcements in their meetings, or placed advertisements in their newsletters or on their website (see Appendix H). Parents who were members of one of these organizations received one initial and two follow up emails inviting them to participate in the web survey, *NPGC* (see recruitment and follow up emails in Appendices F, I and J).

The link to the web survey was different for each province, allowing me to track the

province of residence for each participant. The follow up email schedule was adapted from Dillman's (2007) and Crawford et al.'s (2001) research which found the best web survey response rates used four follow up email notices with less time between them than traditional mail surveys. The actual number of follow up notices used for this survey was two because SFU's Department of Research Ethics did not allow more than two additional contacts with potential participants.

The first email to parents described the research and asked them to participate. The first follow up email was sent out three to five days after the initial email. It requested that parents who had been considering completing the survey do so at that time. The second follow up email was sent out one week after the first follow up; again it requested parents' participation, and told them the deadline for responses.

A link to the URL for the research materials was embedded in all three emails. This link took parents directly to the survey page hosted on the *SFU Web Survey* servers, and was distinct for each province. Once arriving at the survey web page, parents read the consent form which stated the purpose of the research and the average amount of time to complete the survey (20 to 30 minutes). This initial page also asked only one parent per family to participate. If a parent decided to participate in the survey, they clicked on the "Continue" button on the bottom of the consent form, and proceeded through the survey. In order to have their responses counted in the survey data, parents were asked to complete the entire survey and click on the final "Submit" button. Parents were encouraged to send me an email if they were interested in receiving a summary of the results of the survey, or if they had difficulties with the survey. Eighty-one of the participants requested survey results. Some parents sent emails offering feedback about

the survey, the research and/or details about their family's experiences. This unsolicited information was not included in any analysis.

Survey participants were recruited in two phases. This allowed for any necessary corrections to the survey based on feedback from participants in the first phase, as well as for a practical reason. I had not yet received written approval from all of the participating organizations. I had approval from the organization in my home province, British Columbia (BC), so proceeded with my ethics application for data collection in BC. The process of making contact and receiving approval from the other six organizations across three provinces took an additional two months due to the time spent searching for and making contact with persons in positions of authority. The data collection in Alberta, Ontario and Newfoundland became the second phase of my research. The BC version of the web survey was open to participants from March to July, 2008, and the "Beyond BC" version was available from May to October, 2008. The details of the survey distribution dates and methods can be found in Table 2.

Response Rate

A conservative estimate of the response rate for all four provinces was 18.8%. See Table 3 for details on the number of participants in the survey, the number of potential participants in the provinces that took part and the estimated provincial response rates. Calculating an exact response rate was not possible because a) the organizations did not pass on their email lists to me, and b) of overlap in the email lists of several participating organizations. A more likely response rate would approach 30%.

Table 3

Provincial Response Rates

<i>Province</i>	<i>n</i>	<i>Estimated number of members in provincial organizations</i>	<i>Response Rate</i>
BC	145	731	19.8%
Alberta	276	1560	17.7%
Newfoundland	2	5	40.0%
Ontario	103	630	16.3%
Grand Total	526	2797	18.8%

The number of members on each organization's email list determined the sampling frame. However, there were at least two provinces that had several members on more than one email list, thereby inflating the number of members in those provinces and, as a result, reducing the estimated response rate. To meet the confidentiality mandates of participating organizations, I was not given direct access to any of the email lists of current members in those organizations. Therefore, I relied on the organizations' presidents or chapter chairpersons to count the number of people on their email lists to provide information.

As previously mentioned, there were overlaps of people on the email lists in BC and Alberta. In BC, the Vancouver chapter is responsible for registration of members in the provincial organization. Therefore, the Vancouver email list contains all people who have a current membership in the provincial organization, and all people who have attended chapter meetings in Vancouver. This means that the Vancouver email list

duplicates any current members who are on the email lists of the six other chapters throughout the province. Unfortunately, there is not one comprehensive email list for the membership versus the meeting attendees, and these email lists are inseparable. The same problem of duplication occurred in Calgary, Alberta, where people could have been on the email lists of all three participating organizations: a school for gifted students, the Gifted and Talented Education parent group, and the University of Calgary Centre for Gifted Education.

Chapter 4 Results

The purpose of this study was to assess parents' perceived concerns and needs for information while raising a gifted child or children in the home, school and community environments. This chapter will describe the process of preparation of the data for analysis, then the analyses as they addressed the properties of the instrument and each research question. The research questions asked a) what information parents sought and where they turned for information, b) what concerns parents had and where they turned for support and c) the preferred format in which they wanted to receive support and information materials or programs.

Data Analysis and Preparation

Several forms of data analysis were used to address the research questions. The first set of analyses was conducted in relation to the participants' perceived need for information and concerns. The "Information" section of the survey consisted of Likert-type items rated for level of interest parents had in each type of information. The scales were converted to 1 to 5, with 1 representing very low level of interest, and 5 representing very high. The "Concerns" section used the same Likert-type scale, with 1 representing very low level of concern, and 5 very high. Principal components analysis was used to summarize the data related to the concerns of, and information sought by, parents. In addition, a frequency count was done on the items parents reported were their top three needs for information and concerns, and content analysis was used to examine responses to the open-ended items that asked participants to describe any additional concerns or information they were seeking.

The next set of analyses addressed the sources parents turned to for information or support. Means and standard deviations were calculated for the Likert data related to the people or materials participants turned to as a “Source for Information or Support”. The final research question was addressed by calculating percentages of frequencies for the responses to the level of interest in the materials or programs using a scale of 1 to 5 on the Likert-type items. The details of the data screening and results are presented in the next five sections related to the research questions. Throughout, the terms variables and items are used interchangeably. In each section, the research question, the specific data analysis used and the results are described.

Data screening. Before conducting any analyses, the data were screened using the process recommended by Pallant (2007) and Tabachnick and Fidell (2007). First the data were examined for missing values and to determine whether they were normally distributed. One case was missing 66% of the data; therefore, this case was removed, bringing the number of participants to 525. A missing value analysis was conducted on the remaining cases using SPSS 17. More than 5% of the data was missing from the 7 items mentioned in Chapter 3 as the items in the family cluster of the “Concerns” section. These items were removed both because of this missing data and the inconsistencies resulting from the removal of the “N/A” response from four of the items between the BC and the Beyond BC versions of the survey. Less than 5% of the data was missing from any of the other items, indicating the remaining items were viable for further analysis.

When the variables were examined for normality of distribution, the only variable with extreme skewness and kurtosis was “My child is suicidal” with a skewness level of 2.45 and kurtosis of 6.14. A normal distribution would have skewness and kurtosis values

of 0, and levels above 1 are considered large. Tabachnick and Fidell (2007) recommend that with large samples it is better to examine the skewness and kurtosis values than to use formal inference tests, and distributions that appear skewed against a normal curve are considered non-normal. It was decided that this variable was too skewed to be included in the principal components analysis; therefore it was removed. It may have been possible to transform this variable, but I decided not to do a transformation as Field (2005) advises it is very difficult to interpret the results of the principal components analysis unless all of the variables used in the research are transformed.

The next step in the data screening process was to examine the data for univariate outliers via boxplots and z scores generated by SPSS Explore. Outliers have a disproportionately high influence on the mean. There were six variables that had visible outliers. These outliers were addressed as recommended by Pallant (2007), that is, outlier values were adjusted by adding or subtracting one from the nearest observation. For example, participants responding with 1 or 2 to the variable “Emotional development” were outliers, as all but 2.7% of participants chose 3, 4 or 5. The nearest non-outlier observation was 3, so the outliers were subtracted from nearest case of 3 ($3 - 1 = 2$). The new value of 2 was then substituted for the participants who responded with a 1 using the SPSS Recode function. The variables “Educational needs of the child”, “Talk to the teacher” and “Ensure child is challenged at school” also had outliers at 1 and 2 values, and were recoded in the same manner. The variables “Child refuses to go to school” and “Child has undesirable friends” had outliers at the values of 4 and 5, so they were recoded by replacing the responses of 5 with 4. The boxplots were re-examined using SPSS Explore; no outliers were evident after these adjustments.

The final steps in the data screening process were to look for multivariate outliers, multicollinearity and singularity. The data were examined for multivariate outliers because these would cause violations to the statistical assumption for a normal distribution. Mahalanobis distance was not significant for any of the variables, indicating no multivariate outliers. If variables have multicollinearity or singularity, they are too highly correlated, indicating that they are not independently measuring different concepts. Correlations run to examine multicollinearity revealed two variables in the “Information” section which were correlated at .889. These variables were “Post secondary selection” and “Career and life planning.” The way in which the issue of multicollinearity of these variables was addressed appears in more detail in the section on exploratory principal components analysis.

There was one additional issue unrelated to data screening to address, regarding the survey items that were modified. As mentioned in Chapter 3, there were differences between items on the BC and Beyond BC versions of the instrument. The “N/A” response option was removed from four items in the family cluster in the “Concerns” section. This meant that those four items were not consistent across the two versions of the survey. Therefore the responses to these items were not equivalent, and these items were removed from the exploratory component analysis, leaving a total of 22 items in the “Information” section, and 44 items in the “Concerns” section. At this point the data were deemed ready to be analyzed as normality of the distribution, and independence of the response categories had been addressed.

Information Sought by Parents of Gifted Children

One research question addressed parents' need to understand and guide the development of their gifted children. The "Information" section of the survey was designed to determine how important it was to parents to receive information on a range of topics related to their gifted child at home, at school and in the community. This question was answered using several different analyses. First, an exploratory principal components analysis was used to summarize the data by determining the underlying component structure of the 22 Likert items in the "Information" section. The second analysis used MANOVA to compare component scores between the participants from three provinces.

Framing the analysis using Ecological Systems Theory (EST). As outlined in Chapter 2, FST provided the theoretical frame for the development of the *NPGC*. However, there were two reasons FST was not sufficient to guide this research. First, as mentioned in Chapter 3, FST refers only to people and does not include written materials, which was a problem because the experts who reviewed the *NPGC* recommended the inclusion of written materials as a means of information or support. Second, when examining my results, it became apparent that FST did not have enough scope to sufficiently explain these results. Therefore, I turned to Bronfenbrenner's (1979, 1986, 1995) Ecological Systems Theory to add the complexity of the focus external to the family as well as influences from symbols and objects in addition to people. A brief description of EST will be provided here, and a more detailed description appears in Chapter 5.

EST is a derivation of general systems theory, but the focus of EST is more concerned with the direct and indirect interactions between the individual under investigation and her or his environment, including people, symbols and objects. The term “ecological” is used as a way of understanding the systems involved within a “nested arrangement of concentric structures, each contained within the next” (Bronfenbrenner, 1979, p. 22). The four ecological systems are represented in Figure 2. These systems are the microsystem, which represents the location where the person under investigation interacts with others; the mesosystem, which represents the interaction between settings; the exosystem, which is the external context in which the settings find themselves; and the macrosystem, which includes the overarching ideologies contributing to all of the other systems. The settings referred to here are the places where people interact face-to-face with one another, such as home, school or work. Other terms used regularly by Bronfenbrenner are “culture” and “subculture” which are representations of the social contexts and belief systems influencing various settings.

The use of EST rather than FST has two implications for the analysis. The first is a different placement of the “peer” system. In FST peers would be considered a system of their own (see Figure 2). In EST, peers are grouped into the mesosystem, thereby changing the configuration of comparisons. The second is its ability to include books and print materials as symbols and objects, which allowed for the placement of text materials within the nested systems.

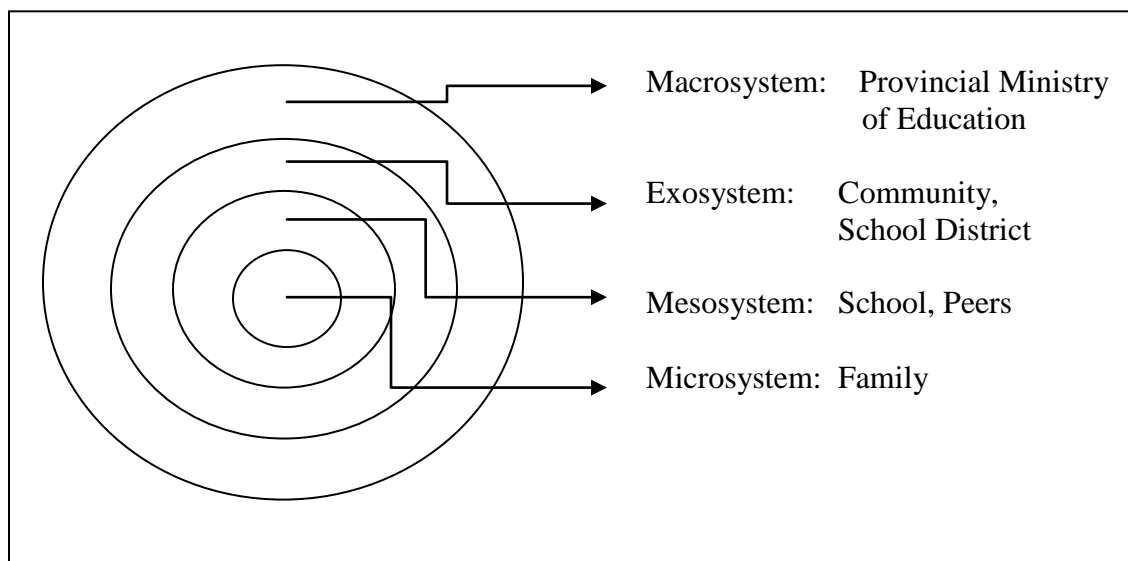


Figure 2. Systems represented by Ecological Systems Theory

The EST macrosystem (Bronfenbrenner, 1979, 1986, 1995), where the provincial school system is situated, is expected to influence people in all of the other nested ecological systems. This created the opportunity to compare provinces which did not exist with FST. Because the provincial education systems have different gifted educational policies and practices, it is expected that people in the different provinces will have different experiences. Therefore, a MANOVA was conducted comparing the component scores from the “Information” and “Concerns” sections by province.

Principal components analysis (PCA) of the “Information” section. The purpose of this analysis was twofold: to summarize the data in a meaningful way which would inform the development of materials and programs, and to generate component scores to be used for theory-based comparisons of the data. Two statistical methods were considered: principle components analysis and factor analysis. Due to the exploratory nature of this study, PCA was chosen as the more appropriate statistical

method to examine the ways in which the information sought and concerns of participants grouped together. Principle components analysis includes all of the variance in observed variables and groups the item responses from the present sample into subscales (Tabachnick & Fidell, 2007; Thompson, 2004). In contrast, factor analysis is usually used in conjunction with a theory which predetermines the expected factors, and the factors are projected to cause the variables (Tabachnick & Fidell, 2007; Thompson, 2004). There was no expectation of underlying factors causing the variables in this study; hence PCA was the more appropriate method. The process recommended by Tabachnick and Fidell (2007) and Pallant (2007) was followed to conduct the exploratory PCA and determine the number and composition of subscales in the “Information” section.

The data were initially examined to determine if they were suitable for a PCA. The data were deemed appropriate, for three reasons. First, the Bartlett’s test for sphericity was significant at the .000 level. Second, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) score was above .6 (.887). Third, a correlation matrix had many coefficients above .3, indicating relationships between the variables.

A principal components analysis was conducted using SPSS 17. A component solution was sought which was the simplest and easiest to interpret (Thompson, 2004), and had the greatest scientific utility and consistency (Tabachnick & Fidell, 2007). The best solution (see Table 4) used PCA with a varimax rotation, with the component loadings above .5. Rotating the component solution does not change the data, but rather the fit of the data with the best solution (Thompson, 2004). Varimax is an orthogonal rotation, normally meaning that the components are uncorrelated. By contrast, an oblique

Table 4

Principal Components Analysis with Varimax Rotation for Information Section of NPGC

	Component			h^2
	1 ^a	2	3	
Normal physical and social development different rate	.801	.146	.118	.664
Asynchronous development	.761	.270	.060	.668
Emotional development	.689	.343	-.053	.682
Definitions and characteristics of giftedness	.678	-.141	.444	.517
Common issues which arise in families with gifted children	.624	.360	.062	.657
Methods of identifying gifted children	.607	-.120	.542	.520
Intellectual development in gifted children	.584	.370	.187	.400
Possible positive/negative aspects of the "gifted label"	.558	.180	.241	.593
Child's strengths and challenges associated with giftedness	.529	.414	.113	.471
Recommended extracurricular activities	.176	.701	.131	.522
Enrichment activities	.193	.660	.244	.600
Teaching my child to advocate for own educational needs	.181	.600	.251	.652
Educational needs of my gifted child	.421	.541	.178	.692
How to talk to my child's teacher about giftedness	.225	.592	.323	.498
Ensure child challenged at school	.187	.565	.399	.448
Changing schools for more gifted programming options	.093	.338	.751	.493
Parent participation requirements in district gifted program	.095	.278	.753	.487
Advantage/disadvantage public, private, homeschooling	.165	.179	.681	.542
How to gain access to gifted programming options	.120	.405	.659	.547
Advocating for gifted programming in my school district	.166	.473	.510	.527
Eigenvalues	7.98	2.05	1.35	
% of variance	37.98	9.74	6.44	
Component Correlations				
Component 1	--			
Component 2	.50	--		
Component 3	.59	.65	--	
Provisional Subscale Post-graduation	.28	.30	.35	--

^a Component 1 = Understanding Gifted Children, Component 2 = Creating Educational Opportunities, Component 3 = Choosing Between Educational Programs, Subscale Post-graduation includes post-secondary and career choices

Note. Boldface indicates highest Component loadings

rotation does produce components that correlate with each other. The varimax orthogonal rotation is recommended by Thompson as it usually produces the most parsimonious solution and simplest interpretation of the component scores. Based on recommendations in Tabachnick and Fidell and Thompson, I tested the data using varimax orthogonal rotation and promax and direct oblimin oblique rotations. I found that Thompson's prediction was true for my data, and chose the PCA with orthogonal Varimax rotation due to the clear meaning presented by this solution.

The chosen component solution was determined through a process considering three criteria. The first was to examine the eigenvalues above the value of one. Because there were five eigenvalues above one, there could be up to five components. The second was to examine the scree plot, and inspect the plot for a sharp turn (see Appendix K). This inspection indicated a likelihood of three or four components. The third criterion was to perform a parallel analysis using the software *MonteCarlo PCA* (Watkins, 2000). *MonteCarlo PCA* conducts an analysis to compare "the size of the eigenvalues with those obtained from a randomly generated data set of the same size. Only those eigenvalues that exceed the corresponding values from the random data set are retained" (Pallant, 2007, p. 183). This parallel analysis is becoming the expected method for determining the number of components to retain, due to being seen as the most accurate criterion (Pallant; Thompson, 2004). Results of the *MonteCarlo PCA* analysis are presented in Table 5.

Table 5

Parallel Analysis of Information Section Using MonteCarloPA

Component	Eigenvalue from PCA Results	Criterion value from MonteCarloPA Results	Decision
1	7.975	1.3710	Accept
2	2.046	1.3058	Accept
3	1.351	1.2584	Accept
4	1.162	1.2154	Reject
5	1.061	1.1812	Reject

Using the criterion of rejecting any components with PCA Eigenvalues lower than the values generated by MonteCarlo PCA, three components were retained. One item, “Identifying giftedness” loaded onto both component 1 and component 3. The decision was to include this item in component 1, related to understanding gifted children, rather than component 3, related to educational decisions both because of the higher loading on component 1, and the clearer meaning when associated with this component. As mentioned previously, there was a problem with multicollinearity of the variables “Post secondary selection” and “Career and life planning”. To resolve this problem, only “Post secondary selection” was retained due to the higher component scores in trial analyses while looking for the best model for the component solution. “Post-secondary selection” loaded weakly on all three of the components (component 1 = .07, component 2 = .37, component 3 = .24). The criteria used for inclusion was a loading above .5 on one component, so “Post secondary selection” was excluded from the component solution.

From examining the items in the final component solution, the first component was named “Understanding Gifted Children” and had a scale reliability of .875. The

second component was named “Creating Educational Opportunities” and had a scale reliability of .809. The third component was named “Choosing Between Educational Programs” and had a scale reliability of .837. Although they were removed from the principal components analysis, the two variables which were not included in the component solution, “Post secondary selection” and “Career and life planning” were combined into a provisional subscale named “Post-graduation Decisions” for the purpose of analysis of groups within the dataset; the Cronbach’s alpha for this subscale was .940. This subscale was included partly to comprehensively include as many variables as possible in the final analysis, and because career planning (n = 70) and post-secondary selection (n = 56) were reported by many parents to be one of their highest needs for information.

Next, the scores were calculated for each component. The most common method for calculating component scores is the regression method (Thompson, 2004). However, I did not use the regression method for determining my component scores, but instead totaled the raw scores and created subscales. This procedure was followed because it allowed a simpler interpretation because there were no error margins in the regression component scores. In other words, it was easier to interpret the total for each participant on a subscale than it was to interpret partial scores provided by a regression analysis. For this reason, although the orthogonal rotation was used, the raw scores that were summed into subscales do produce subscale scores that correlate with one another, and this correlation matrix is included with Table 5.

Using the subscale component scores, the participants were grouped by province to compare whether the different educational policies and practices (macrosystems). This

resulted in different component subscale scores. The two participants from Newfoundland were not included in this analysis due to the small number of participants from that province. A MANOVA was conducted using the component subscale scores to compare the provinces on the “Information” components plus the post-graduation decisions subscale. This did not produce a significant result, indicating that there were no significant differences between the information needs of the participants living in different provinces.

Information parents consider most important. At the end of the “Information” section, an open-ended item asked participants to identify the three topics on which they would most like information. Many parents listed only their top three needs for information related to the items in the “Information” section; however, some parents mentioned topics unrelated to those in the items. These unrelated responses were moved from the frequency count of the “Information” section items and instead were included in the content analysis of responses to the item: “Do parents have any questions or concerns not addressed by the survey items?”

Figure 3 presents the numbers of participants who identified each survey topic as one of their top three priorities. The need most often identified by participants as important was “how to ask the teacher for breadth or depth extensions for a gifted child” (n=157), followed by “emotional development in gifted children” (n=130) and “how to tell the teacher about a child’s giftedness” (n=115). All 22 of the items in the “Information” section were mentioned by at least three participants. The item least often identified was “parent participation requirements in gifted programming” (n=3). Three

participants responded “all” rather than with three specific needs and two parents indicated they had no need for information.

The frequency with which parents identified one of the 22 items in the “Information” indicated participants’ priorities for information. More than 20% of the parents indicated they wanted more information on (a) how to ask their children’s teachers for extensions for learning by adapting projects for breadth or depth of learning, (b) the emotional development in gifted children, (c) how to tell their children’s teachers about giftedness, and (d) how to teach their children to advocate for themselves. From an FST or EST perspective, this prioritizing of the “Information” items demonstrates that the participants were more focused on their children in the school setting. Parents were most frequently interested in learning more about how to help their child to have deep learning experiences while at school. When parents were trying to understand their children at home, they most often wanted to learn about their children’s emotional development.

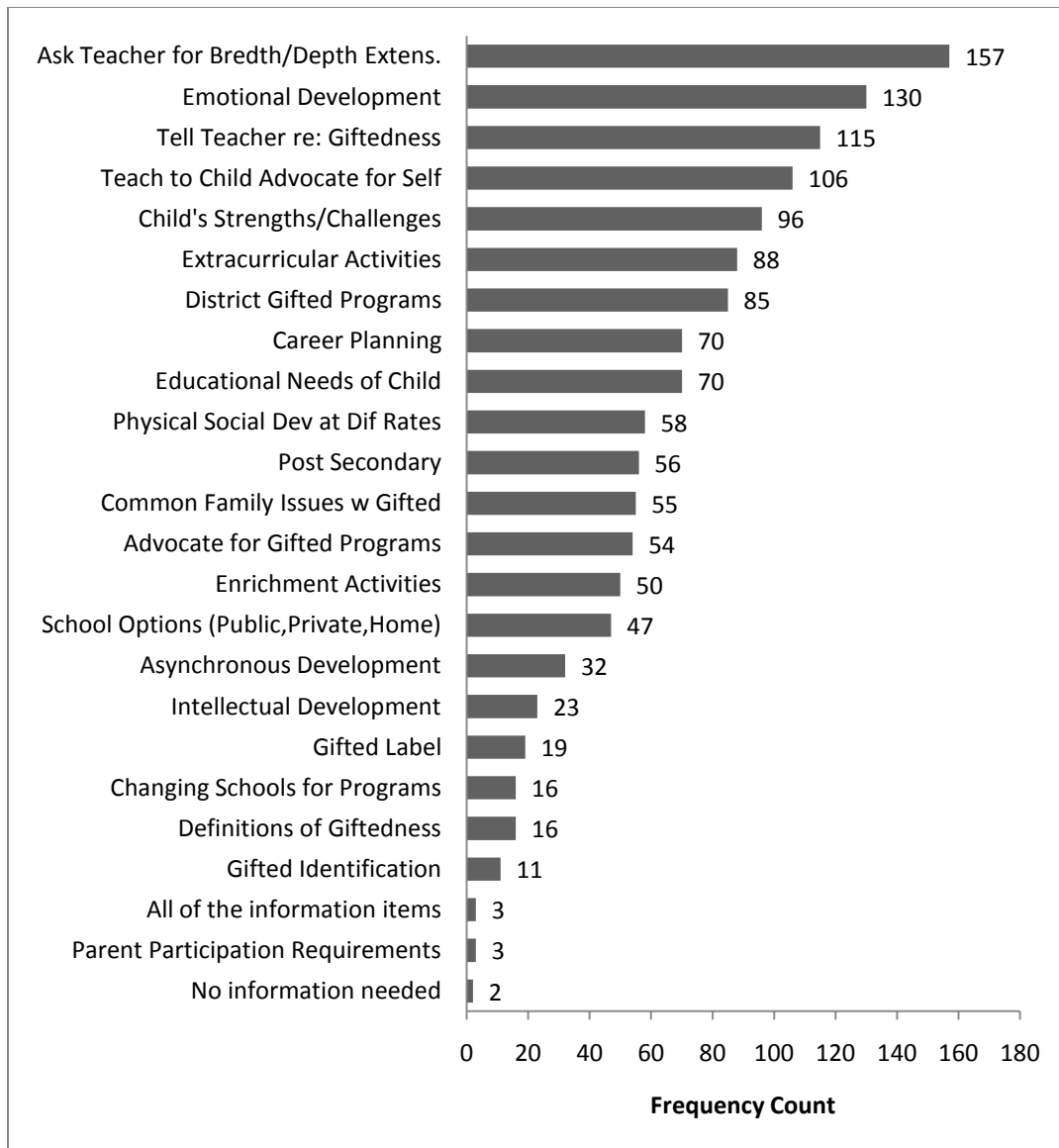


Figure 3. Frequency count of participants' top three choices of needs for "Information" items

Concerns of Parents of Gifted Children

Principal components analysis of the concerns section. The "Concerns" section of the survey asked parents to indicate their level of concern related to their gifted children and family in the home, school and community environments on a scale of 1

(very low) to 5 (very high). A PCA was conducted using parents' responses to items in the "Concerns" section of the survey to determine the best summary of the data, and to allow for comparisons between participants from different provinces. The data were initially examined to determine if they were suitable for a PCA. They were deemed appropriate due to significant results (.000) for Bartlett's test for sphericity, the KMO score above .6 (.930), and 332 out of 780 correlation coefficients above .3.

Six components were retained after examining the eigenvalues above 1, the scree plot, and the Monte Carlo PCA parallel analysis (Table 6). After going through a similar process to that used with the items in the "Information" section, the best component solution resulted in six components using PCA with varimax rotation. These components are presented in Table 7.

Table 6

Parallel analysis of the Concerns section using Monte Carlo PCA

Component	Eigenvalue from PCA	Criterion value from MonteCarlo PCA	Decision
1	12.593	1.563	Accept
2	3.741	1.502	Accept
3	2.256	1.453	Accept
4	1.970	1.409	Accept
5	1.528	1.373	Accept
6	1.361	1.341	Accept
7	1.195	1.307	Reject
8	.965	1.277	Reject

Table 7
Principal Components Analysis with Varimax Rotation for Concerns Section of Needs of Parents of Gifted Children

	Component						h ²
	1 ^a	2	3	4	5	6	
Teacher no time to adapt curriculum for gifted education	.871	.061	.097	.128	.102	.071	.803
Support teacher no time to work with gifted students	.818	.037	.132	.097	.039	.031	.699
School does not support parent-led gifted programs	.781	.110	.162	.162	.107	.017	.686
Lack of gifted programming for my child	.780	.062	.084	.095	.025	.099	.638
Child lacks academic challenge or is bored in the classroom	.768	.051	.119	.107	.063	.206	.665
I have to train the teacher about my child's educational needs	.736	.106	.093	.282	.105	.152	.675
Teacher doesn't think my child is gifted	.557	.036	.109	.138	.316	.131	.459
Child often feels intensely anxious or fearful	.018	.734	.221	.014	.001	.179	.621
Child is "high strung"	.025	.707	.054	.180	.208	-.006	.579
Child is hypersensitive	.059	.704	.145	.105	.071	.103	.546
Child is perfectionistic	.124	.681	-.100	.161	.014	-.353	.639
Child feels pressure to meet expectations of others	.011	.589	-.005	.218	-.060	-.058	.402
Child often feels intensely angry or frustrated	.029	.586	.333	.091	.355	.159	.614
Child often feels intensely sad or depressed	.172	.578	.427	-.016	.118	.236	.617
Child has difficulty with transitions due to intense focus	.084	.574	.166	.253	.211	.204	.514
Child has low self-esteem	.109	.577	.379	-.007	.119	.266	.574
Child has physical problems with no known medical cause	.100	.480	.124	-.032	.185	.167	.319
Child is isolated/rejected by peers and feels lonely	.165	.243	.806	.153	.060	.055	.766
Child is being bullied by peers	.180	.215	.717	.110	.137	.122	.638
Child feels different from his/her peers	.278	.233	.678	.327	.000	.020	.698
Child has poor social skills	.016	.206	.677	.095	.187	.137	.564
Child argues or fights with friends or peers	.070	.178	.585	.110	.504	.020	.645
Child has undesirable friends	.106	.025	.565	.146	.200	.162	.419
Child has friends that are older or younger than him/her	.140	.052	.509	.354	.175	.010	.437
Pressure to support my gifted child's talent development	.179	.148	.130	.682	-.050	.104	.549
Hard to find other parents who understand	.351	.143	.299	.596	.037	-.003	.589
Hard to keep balance on academics and other development	.110	.190	.209	.561	.273	.154	.504
Hard to understand my child with non-academic gifts	.162	.048	.240	.550	.206	.260	.499
Hard to stay in role of parent when my child is adult-like	.032	.180	.100	.547	.472	-.118	.580
Worry that my gifted child may have a bad school experience	.290	.158	.151	.518	.071	.166	.433
Child's success depends on me as good advocate	.403	.203	.100	.505	-.080	.293	.561
Child is not following the school rules	.145	.091	.243	.056	.761	.255	.735
Child is in conflict with his/her teachers or administrators	.242	.103	.183	.052	.747	.188	.699
Child is noncompliant or behaves in an oppositional manner	.022	.350	.173	.149	.628	.193	.607
Child refuses to go to school	.305	.236	.173	.132	.452	.203	.442
Child is disorganized, forgetful, or loses things	.135	.185	.120	.150	.169	.722	.639
Child fails to work up to his/her potential	.392	.030	.092	.163	.208	.703	.728
Child lacks motivation for school learning	.406	.039	.140	.178	.261	.660	.722
Child is overly inattentive or daydreams	.031	.337	.183	.163	.167	.630	.600
Child feels he/she must act "dumb" to be accepted by peers	.342	-.018	.381	.317	.072	.096	.377

^a Component 1 = Lack of Time and Programs for Gifted Students, Component 2 = Emotional Concerns, Component 3 = Social Concerns, Component 4 = Pressure on Parents, Component 5 = Child in Conflict, Component 6 = Child Underachievement
Note. Boldface indicates highest component loadings

The item “Child feels he/she must act ‘dumb’ to be accepted by peers” did not load on any components above .45; therefore it was removed from the component solution (Ford, MacCallum & Tait, 1986). Two items, “Child argues or fights with friends or peers” and “Hard to stay in the role of parent when my child is adult-like” loaded onto more than one component above .45, and were assigned to the component with the higher loading. These assignments to the higher loading components also retained more cohesiveness within the components. Based on the variables loading onto the first component, it was named “Lack of Time or Programs for Gifted Students” and had a Cronbach’s alpha of .914. Component 2 was named “Emotional Concerns” and had an alpha of .872. Component 3 was named “Social Concerns” and had an alpha of .863. Component 4 was named “Pressure on Parents” and had an alpha of .807. Component 5 was named “Child in Conflict” and had an alpha of .800. The sixth and final component was named “Child Underachievement” and had an alpha of .827. The Cronbach’s alphas for all of the components demonstrated strong scale reliability scores (Tabachnick & Fidell, 2007).

As in the “Information” section, the component subscale scores were calculated by adding the raw scores of each item rather than using an estimated score. The correlations of the component scores are presented in Table 8.

In order to examine the macrosystem influences of the provincial education system on parents’ concerns, comparisons of participants from different provinces (except Newfoundland) were run. A one-way between groups MANOVA was used to compare the component scores from the six components in the “Concerns” section for the

parents from BC, Alberta and Ontario. The data did not present any violations of normality, linearity, outliers or multicollinearity.

Table 8

Component Correlations for the Six Component Solution of the “Concerns” Items

	Component Correlations					
Component 1	--					
Component 2	.28	--				
Component 3	.42	.53	--			
Component 4	.55	.48	.57	--		
Component 5	.40	.51	.54	.49	--	
Component 6	.49	.42	.43	.51	.57	--

There was a significant difference between the component scores by province, $F(12, 920) = 5.72, p = .000$; Wilk’s Lambda = .87, partial eta squared = .07. Due to the significance of Wilk’s Lambda, the between-subjects effects were examined. Three components produced significant differences, with two medium effect sizes and one small effect size: “Lack of Time and Programs for Gifted Students”, $F(2,465) = 24.37, p = .000$, partial eta squared = .095; “Social Concerns”, $F(2, 465) = 5.56, p = .004$, partial eta squared = .023; and “Pressure on Parents”, $F(2, 465) = 13.72, p = .000$, partial eta squared = .056. Next, the mean scores were examined to determine the direction of the differences between the provinces.

According to Cohen’s (1988) criteria, the difference on the “Lack of Time and Programs for Gifted Students” subscale produced a medium effect size, and accounted for 9.5% of the variance in the component. Participants from BC ($M = 21.61, SD = 7.33$)

and Ontario ($M = 20.39$, $SD = 7.69$) had higher means than those from Alberta ($M = 16.15$, $SD = 7.97$). Results were similar on the “Social Concerns” subscale, where participants from Ontario ($M=17.07$, $SD = 6.59$) and BC ($M=16.24$, $SD = 6.45$) scored higher than Alberta ($M = 14.74$, $SD = 6.07$), and the “Pressure on parents” subscale, where participants from Ontario ($M=20.91$, $SD = 5.78$) and BC ($M=19.75$, $SD = 6.38$) scored higher than Alberta ($M = 17.40$, $SD = 6.08$). These results indicate that parents in BC and Ontario have a consistently higher level of concern about a lack of school time and programs for gifted children than parents in Alberta. Ontario and BC parents are also more concerned about the social experiences of their gifted children, and report a greater amount of pressure to understand, parent and provide a proper educational environment for their gifted children.

Concerns parents consider most important. An open-ended item at the end of the “Concerns” section asked parents to identify their top three concerns from those listed in that section of the survey. A frequency count determined the number of parents who listed each concern as a top priority. Responses not related to the Concern section items were added to the textual data addressed by content analysis under the heading “Do parents have any questions or concerns not addressed by the survey items?”

As shown in Figure 4, more than 10% of the participants indicated that they were most concerned about (a) their children’s success depending on their advocacy, (b) feeling pressure to support their children’s talent development, (c) their children lacking academic challenge or being bored, and (d) their children underachieving. These four concerns indicate participants felt pressure to provide the “right” kind of learning environment for their gifted children, whether through acting as an advocate for their

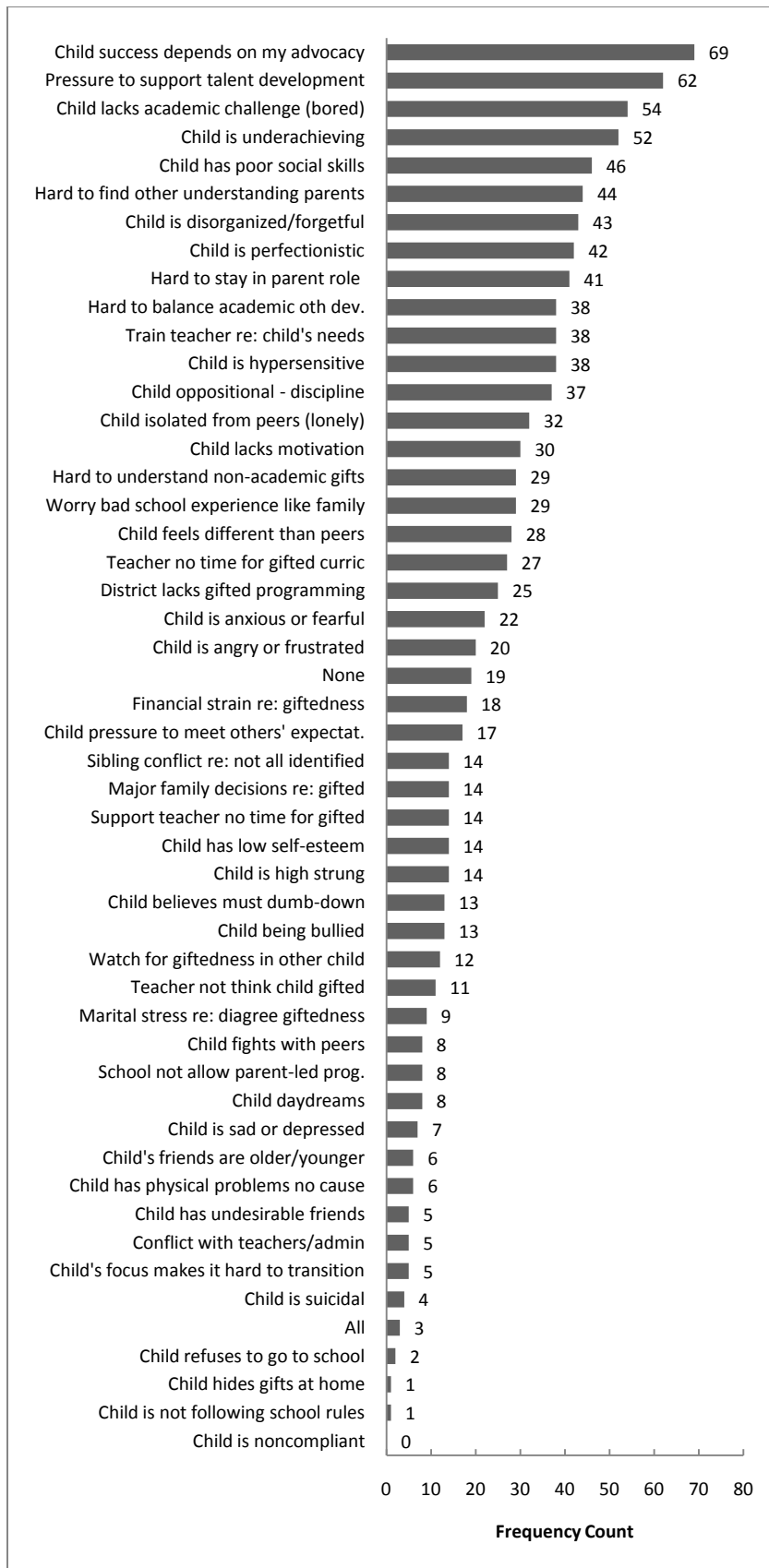


Figure 4. Frequency count of participants' top three choices of Concerns items

child in the school or creating opportunities for their children's talent development. The next two suggest parents did not feel their children were getting as much out of school as they wanted them to, either because the children were bored, or because they were underachieving. Therefore, the home-school interaction presented a high level of concern for these parents.

"My child is suicidal." The item stating "my child is suicidal" was removed from the analysis of the "Concerns" section because of the non-normal distribution of responses. The non-normal distribution occurred because only 1.3% of the participants ($n = 7$) indicated a high or very high level of concern on this item. A one-way between groups MANOVA was conducted to determine if there were any differences in levels of concern or needs for information for participants choosing low and high responses on this item. The MANOVA investigated the difference between a median split of responses to this item. This median split divided the responses into those who responded with a very low level of concern (responding 1; $n = 329$) in one group, and the remainder of the responses from low to very high in the other group (responding 2 – 5; $n = 99$). For ease of reference, these median split groups will be called "Very Low" and "Higher." The nine components and one provisional subscale from the "Information" and "Concerns" sections were used as dependent variables.

Preliminary testing was conducted to ensure there were no violations of statistical assumptions for normality, linearity, outliers, and multicollinearity. No violations were found. There was a violation of Levine's test for homogeneity of variance, with the components "Emotional Concerns" "Child in Conflict" and "Child Underachievement" having significance levels below .05. The expected alpha level was adjusted to .025 for

these components in consideration of this violation. The MANOVA produced a significant difference between the “Very Low” and “Higher” groups when compared on the ten “Information” and “Concerns” components, $F(10, 417) = 13.54, p = .000$; Wilk’s Lambda = .76; partial eta squared = .25.

When examining the results of the dependent components separately, all six of the components in the “Concerns” section were statistically significant at the .000 level. This low p value allowed for a significant result even after the significance adjustments based on Levine’s test and the Bonferroni adjustment for multiple tests on the same data. The results of the between-subjects tests are as follows: “Lack of Time and Programs for Gifted Students” $F(1, 426) = 25.93$, partial eta squared = .06; “Emotional Concerns” $F(1, 426) = 86.08$, partial eta squared = .17; “Social Concerns” $F(1, 426) = 61.60$, partial eta squared = .13; “Pressure on Parents” $F(1, 426) = 34.78$, partial eta squared = .08; “Child in Conflict” $F(1, 426) = 47.32$, partial eta squared = .10; and “Child Underachievement” $F(1, 426) = 24.86$, partial eta squared = .06. These significant results led to examination of the means to be able to interpret the differences between the groups on these components.

The mean scores for the 99 participants in the “Higher” group were above the “Very Low” group on all six of the “Concerns” components: “Lack of Time and Programs for Gifted Students,” Higher ($M = 21.96, SD = 7.73$), Very Low ($M = 17.33, SD = 7.99$), “Emotional Concerns” Higher ($M = 35.04, SD = 6.61$), Very Low ($M = 26.75, SD = 8.12$), “Social Concerns” Higher ($M = 19.71, SD = 6.03$), Very Low ($M = 14.34, SD = 5.94$), “Pressure on Parents” Higher ($M = 21.79, SD = 6.23$), Very Low ($M = 17.69, SD = 6.02$), “Child in Conflict” Higher ($M = 9.35, SD = 3.59$), Very Low ($M =$

6.83, SD = 3.08), and “Child Underachievement” Higher (M = 14.13, SD = 3.79), Very Low (M = 11.60, SD = 4.61).

These results indicate that the “Higher” group had consistently higher scores on all six of the “Concerns” components than the “Low” group; however, there were no significant differences on the “Information” components. Using Cohen’s (1988) criteria for interpreting the effect sizes from the partial eta squared scores, four of the results indicated a medium, and two indicated a large effect size. The two largest effects were the “Emotional Concerns” component, where 16.8% of the variance of scores in that component was explained by the median split of the “my child is suicidal” variable, and “Social Concerns” had 13.6% of the variance explained by the Higher/Very Low split. The remainder of the components had medium effect sizes, with “Lack of Time and Programs for Gifted Students” at 5.7%, “Pressure on Parents” at 7.5%, “Child in Conflict” at 10.0%, and “Child Underachievement” at 5.5%. From these effect sizes we see that parents who have anything but a very low concern for their children potentially having suicidal ideation are likely, to a medium or large degree, to have higher scores on the remainder of the “Concerns” components as well, with the greatest degree of concern being related to their children’s emotional and social issues. Said another way, having anything above a very low degree of concern for their children being suicidal related to a high level of all other concerns for their children.

Two participants commented on concerns related to suicide in the open-ended responses which were analyzed for content. While the comments made by these parents cannot be seen to represent more than the experiences of those two participants, the comments are included here as examples of elaborations on the topic of concern about

suicide. One participant wrote, “We have had worries about depression and suicide because of comments from our (9 year old) son. ‘I am so unhappy at school that I want to die.’ etc. He is sometimes very aggressive physically to us and to his younger sister. It can be frightening for all of us.” The other participant wrote, “I have one child who is a perfectionist who was suicidal at age 5. He is the type we read about when we learned about gifted children.”

Clearly these parents have serious concerns related to their children’s behaviour and reports that they feel suicidal at a very young age. However, these more serious concerns were not shared by the overwhelming majority of the respondents, as only 1.3% of the participants had a high or very high level of concern. The majority of respondents (76.9%) of the participants were not concerned about suicidal ideation in their children. However, for those participants who had any concern at all related to suicide, they had elevated concerns about all other issues as well.

Parents Questions or Concerns Not Addressed by the Survey Items

Two open-ended questions were asked to determine if parents had any needs for information or concerns that were not addressed by the Likert-type items in the survey. At the end of the “Information” section was the question, “Is there any additional information you would like?” and at the end of the “Concerns” section, “Do you have any further concerns?” As mentioned, the responses written in the section for the top three needs for information or support that were not related to the Likert-type items were included with the open-ended responses for analysis.

Process of conducting content analysis. The content of parents’ (49.5%) responses to the open-ended items was analyzed to determine the content and frequency.

Responses were pooled and considered together in one analysis because participants did not specify whether they were seeking information about a topic or were concerned about a topic. Rather, they told the story of their own experiences related to raising a gifted child in their family. Therefore it was decided that dividing the responses into “information” and “concerns” would be arbitrary, so all of the textual data from the open-ended responses was combined.

The content analysis was conducted based on the methodology suggested by Franzosi (2004) and Mason (1996). The first step in the content analysis was to develop categories based on the research questions under examination, theory, and a comprehensive understanding of the content of the combined open-ended responses (hereafter referred to as “the text”). First, using FST and EST as bases for categorization, the categories were partitioned into the systems of “family”, “school/peer” and “community.” These systems theories examine the interaction between the systems. By developing categories that were systems-based, this theoretical relationship could be examined. Second, keeping in mind the research questions, the focus throughout the development of the categories was to ensure that the categories illuminated topics that were related to participants’ needs for information or support, to whom they turn, or their preferred format for that support. Finally, my focus turned to the content of the open-ended responses, and the categories were created based on the text.

Mason’s (1996) recommendations guided the process of category development and reduction. Mason explains that the purposes of indexing and categorizing data in qualitative research methodologies are to (a) provide a systematic overview of the scope and coverage of the data, so as not to be left only with the researcher’s impressions and

surprises, (b) locate and retrieve issues, topics, information and examples, (c) help with conceptual, analytical and theoretical thinking, (d) determine how well the data addresses research and theoretical questions, and (e) decide what in the data is relevant and not relevant in order to develop explanations.

Categories were developed for my data by examining the literal text written by the participants, and interpreting what the participants wrote. The categories focused on an interpretation of what the participants meant by expressing their attitudes or experiences, rather than itemizing the direct components of speech. In order to develop categories, I read the entire text and made notes regarding potential FST and EST categories using the family, school/peer and community systems. Mason's (1996) criteria for developing well-constructed categories are that they have face validity, are comprehensive and include all of the information presented in the text, and are discriminatory so that the categories do not overlap. Mason also recommends that a hierarchical or "tree" structure be developed along with the categories, to aid in determining relationships between the categories.

Parents comments were easily divided into family, school/peers and community systems. In general, they were closely related to the initial set of categories developed. The exception were those related to the school system. Participants (n = 131) often provided detail about their particular struggles or those their children had with the school. However I decided that the content of parents' experiences with the school system was not relevant to the goal of the current research, to understand parents' needs. Instead, I grouped school-related experiences into categories of positive and negative evaluations of existing programs, or a category for concerns regarding a lack of programs. Contained

within the negative experiences were comments that teachers needed further training to know how to recognize and educate gifted children, a lack of classroom adaptations for giftedness, and ineffective gifted programs.

Following this procedure, 65 categories were initially developed. Sixty-five is clearly a large number of categories compared to the 12 recommended by Mason (1996). This number was chosen to be very comprehensive to begin with, with the idea that they would be further organized and reduced after examining the data within the categories. The intention was that the categories would represent the systems involved, the topics for information or concerns, and parents' attitudes. For example, within the school system the category "Positive Evaluation of School" was used when participants felt positively towards the school system, and "Negative Evaluation of School" conveyed a negative experience and attitude. To ensure consistency, a further three categories were added during the coding process to capture positive supportive experiences with extended family ("Extended family do support me"), parenting ("Parenting experience is positive") and peers ("Positive experience with peers"). Another category was added related to average-ability siblings ("Sibling not related to giftedness), for a total of 69 categories. See Table 9 for the full list of initial categories.

Once the categories were established, the text was coded using AnSWR software downloaded from the US Centre for Disease Control website. This software was chosen for three reasons. First, it meets the confidentiality requirements because it is independently run on a computer and the content of the data is protected and not subject to examination through the *US Patriot Act* (2001). Second, AnSWR has elements recommended by Barry (1998), Lee and Fielding (2004) and Mason (1996). These

Table 9
The Initial 69 Categories

I. Family Microsystem

- Appropriate Enrichment
- Parents Need
- Parent Experience Positive
- Effect On Family
 - Sibling not re gifted*
 - Sibling re gifted
- Extended Family
 - Lack support
 - Do support
- How To Parent my Gifted Child or Children
 - Parent set rules boundaries
 - Parent teen
 - Parent's expectations re gifted child
 - *How To Teach my Gifted Child To...*
 - Parent to overcome perfectionism
 - Parent to balance work & life
 - Parent to be assertive
 - Parent to be happy
 - Parent to cope with difference
 - Parent to fit socially
 - Parent to persevere
 - Parent to succeed at school
 - Parent to understand own giftedness
 - Parent to value self & not insult others
 - *How to Direct my Gifted Child**
 - Parent re: behaviour discipline
 - Parent re: chronic illness
 - Parent re: disorganized
 - Parent re: emotionality
 - Parent re: isolation
 - Parent re: lack of focus
 - Parent re: mental health
 - Parent re: motivation
 - Parent re: multipotentiality
 - Parent re: sleep problems
 - Parent re: strengths & weaknesses
 - Parent re: stress
 - Parent re: underachievement
- How to Understand my Gifted Child or Children
 - Understand 2e (twice exceptional)
 - Understand brain development
 - Understand characteristics definitions gifted
 - Understand gifted girls
 - Understand how child learns best
 - Understand mental health in gifted
 - Understand normal age development in gifted
 - Understand relationship between education and life success
 - Understand sensitivity
 - Understand sensory issues
 - Understand type of giftedness

II. School and Peers Mesosystem

- School Program Choices
 - School which gifted programs offered
 - School which gifted programs work
 - School best program fit for child
 - School advance to next level
- School Parent Role
 - School advocate for child access
 - School partnership with home
 - School train the teacher
 - School re: assessments
- School Evaluate Current Program
 - School evaluate positive
 - School evaluate negative
 - School evaluate lack of program
- School Decide Change Programs
 - School decide to home school
- Peers
 - Community peers finding
 - Community peers troubles
 - Community peers positive

III. Community Exosystem

- Community Understand
- Community Support
 - Community support from a psychologist
 - Community support from a Counsellor
 - Community support from other parents

* "Sibling not re: gifted" was removed due to no text related to that category, leaving 68 categories

elements are capacity to categorize and index the text, and to build trees demonstrating the hierarchy of the codes used. Third, AnSWR is cost free.

Of the 525 participants, 260 (49.5%) detailed additional needs for information or additional concerns. Participants' responses varied greatly in length, from one or two key words to several partial or complete sentences. The majority of the responses covered several topics. In these cases, following Mason's (1996) recommendation, several codes were assigned to the appropriate text segment. At the end of the coding process the category "Sibling not related to giftedness" was removed, as there were no responses assigned to this category. The final number of codes assigned to text segments was 68.

Reduction of text categories. A further reduction of the categories assigned to the textual data was completed in order to further summarize and interpret the data by distilling the initial 68 categories into 13 reduced categories, which are presented in Table 10 with their contents. The reduction of the 68 categories into the final 13 was based on the hierarchies created during the category development. Aside from following the hierarchical groups, there were two additional changes that facilitated the reduction to the final 13 categories.

Table 10

Thirteen Reduced Categories and Their Topics

<u>Family Microsystem</u>	<u>School and Peer Mesosystem</u>
<p>1. Understanding my Gifted Children</p> <ul style="list-style-type: none"> ○ General understanding of gifted children ○ 2e (twice exceptional)* ○ Brain development ○ Characteristics and definitions of giftedness* ○ Gifted girls ○ How my child learns best ○ Mental health in gifted children ○ Normal age development in gifted children ○ Relationship between education and life success ○ Sensitivity ○ Sensory issues ○ Types of giftedness <p>2. Teaching my Gifted Children Life Skills</p> <ul style="list-style-type: none"> ○ Overcome perfectionism ○ Balance work & life ○ Be assertive ○ Be happy ○ Cope with difference ○ Fit socially* ○ Persevere ○ Succeed at school* ○ Value self & not insult others ○ Help children to understand own giftedness <p>3. Managing my Gifted Children's Issues</p> <ul style="list-style-type: none"> ○ Behaviour or discipline problems ○ Chronic illness ○ Disorganization ○ Emotionality* ○ Isolation ○ Lack of focus ○ Mental health ○ Motivation* ○ Multipotentiality ○ Sleep problems ○ Particular set of strengths and weaknesses ○ Stress ○ Underachievement <p>4. Understanding How to be a Good Parent to my Gifted Child</p> <ul style="list-style-type: none"> ○ How to parent gifted children* ○ Positive experience parenting my gifted children ○ How to provide appropriate enrichment* ○ How to set rules and boundaries ○ How to parent teens ○ Set realistic expectations about child's gift <p>5. Effect of Having a Gifted Child in our Family</p> <ul style="list-style-type: none"> ○ General effect on the family* ○ Sibling issues related to giftedness <p>6. Relationship with Extended Family</p> <ul style="list-style-type: none"> ○ Lack support from family* ○ Family do support me 	<p>7. Evaluate Current School Program</p> <ul style="list-style-type: none"> ○ How to evaluate programs ○ Positive evaluation of school ○ Negative evaluation of school* ○ Lack of programs <p>8. Parent's Role in School</p> <ul style="list-style-type: none"> ○ General role of parents in the school ○ Advocate for child success* ○ Partnership with home ○ Train the teacher about my gifted child* ○ Understanding and obtaining assessments <p>9. School Program Choices</p> <ul style="list-style-type: none"> ○ Which gifted programs are offered* ○ Which gifted programs work ○ Which is the best program fit for my children* ○ Advance to next level of school <p>10. Peer Relationships</p> <ul style="list-style-type: none"> ○ Finding peers* ○ Troubles with peers ○ Positive experience with peers <p>11. Decide to Change School Programs</p> <ul style="list-style-type: none"> ○ Decide to move child to a different program or school ○ Decide to home school* <p style="text-align: center;"><u>Community Exosystem</u></p> <p>12. Want Community Support</p> <ul style="list-style-type: none"> ○ General community support ○ From a psychologist ○ From a Counsellor ○ From other parents of gifted children* <p>13. Want Community to Understand</p> <ul style="list-style-type: none"> ○ Understanding from media and other people in community

* Topics which have a higher frequency of responses

First, two of the hierarchical groups were renamed after a closer examination of their contents. The hierarchical group “How to teach my gifted child to...” was renamed “Teaching my gifted child life skills” in order to reflect the focus of the parent teaching the gifted children. The group initially called “How to direct my gifted child” was renamed “Managing my gifted children’s issues” to reflect the management focus of this reduced category. Next, it was decided that the three categories in the family microsystem which had previously not been assigned to a hierarchical group would be combined with the “How to parent my gifted children” group, and the name would be changed to “Understanding how to be a good parent of gifted children”. This new reduced category encompassed the experience of the respondents in their role as parent. These changes completed the modifications needed to reduce the 68 original categories into 13 reduced categories.

A description of the reduced categories and high frequency responses are presented next. Within the family microsystem there were 6 reduced categories. The first was “Understanding my gifted children”, which had more codes assigned to the topics of understanding twice exceptional children who had an additional label or diagnosis ($n = 57$), and understanding characteristics and definitions of giftedness ($n = 31$) than the other 10 topics in this category. The second category was “Teaching my gifted children life skills”, which had more codes related to helping gifted children fit in socially ($n = 42$), and succeed at school ($n = 24$) than the remaining eight topics. The third category was “Managing my gifted children’s issues,” which had more codes assigned to dealing with emotionality ($n = 42$) and motivation problems ($n = 27$) than the remaining 11 topics. The fourth category was “Understanding how to be a good parent to

my gifted children”. The two topics which had the most codes assigned within this category were a general question about how to parent gifted children (n = 20), and knowing how to access or develop appropriate enrichment for gifted children (n = 27). The fifth category was “Effect of having gifted children in our family”, had more codes assigned to a general effect on the family (n = 24) than dealing with issues related to gifted siblings (n = 23). The final category in the family microsystem was “Relationship with extended family”, to which more participants responded that their extended family was not supportive (n = 5) than was supportive (n = 1).

There were five reduced categories related to the school and peer groups contained in the mesosystem. Category 7, “Evaluate current school program,” contained the topic with the highest response of any of the original 68 categories, with 131 parents (11.48% of the total responses) indicating they had a negative perception of the school. Category 8, “Parent’s role in the school,” had more codes assigned to parents feeling the need to advocate for their child in order for their child to be successful (n = 33), and the need to educate, or “train” the children’s teachers about giftedness (n = 31) than the remaining three topics. Category 9, “School program choices,” contained more codes assigned to participants wanting to learn about which gifted programs were offered in their area (n = 29) and determining the best fit for their child, to meet their child’s needs (n = 30) than knowing about evaluations of gifted programs and moving into the next level of school. Category 10, “Peer relationships,” had more codes were assigned to comments about finding peers for their gifted children (n = 34) than having either troubles or positive experiences with peers. Category 11, the final reduced category in the mesosystem, was “Decide to change school programs.” This category had more codes

assigned to parents who described their decision to home school their children (n = 21) than parents who were deciding to move their children to a different school.

The last system in the nested layers, the exosystem, contained two categories related to the community. Category 12, “Want community support,” with more codes assigned to comments about wanting support from other parents of gifted children (n = 35) than support in general from the community, a psychologist or a counsellor. The 13th category was “Want community to understand,” and had 31 comments about how parents wanted the media and other people to understand that gifted children are considered special needs children.

The percentage of responses attributed to each of the 13 reduced categories can be found in Figure 5. The majority of respondents (16.91% of coded responses) focused on evaluating school programs, whether those were positive or negative evaluations, or comments about the lack of programming. Overall respondents had negative opinions of the schools their gifted children had attended, due to negative experiences with the school. There were three reduced categories related to parenting which contained close to 13% of the coded responses each: “Understanding my gifted children” (13.55%), “Teaching my gifted children life skills” (13.48%), and “Dealing with my gifted children’s issues” (13.04%). Parents felt they had a great deal to learn about their gifted children, and then they needed to pass on life management skills to their gifted children. Their gifted children also presented several issues that needed to be managed and overcome. Relationship with their extended family was discussed least by respondents (.52%); extended family did not play a large role in the respondents’ lives.

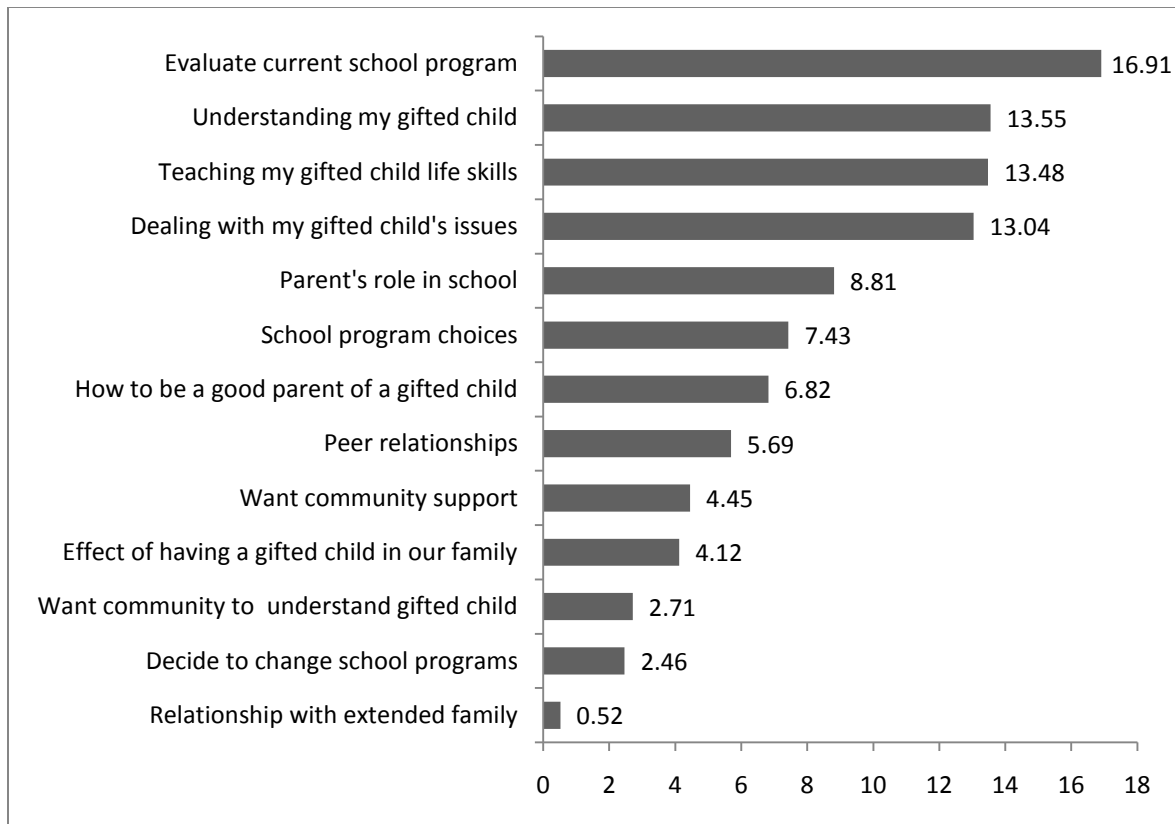


Figure 5. Percentage of codes from open-ended responses in each of the 13 reduced categories

Two additional methods were used to summarize the data. The first was the calculation of the percentage of coded responses related to the EST systems under examination. The results indicated 51.53% of the responses were connected to the microsystem related to the family, 41.30% to the mesosystem consisting of school and peer interactions, and 7.16% to the exosystem at the community level.

Second, the original 68 categories were examined to determine which represented topics that were of importance to parents, and were not already represented within the Likert-type survey items. This was done to better understand the experience of respondents, and to determine if there were topics not included in the survey items that

would inform the development of materials or programs. Eighteen (15.81% of coded responses) of the original 68 categories addressed topics that were either absent from the survey items, or added a new level of detail to the survey questions. These 18 topics and details of participant responses can be found in Appendix M. Topics that were novel and had over 10 responses are presented in order of frequency of responses. Most coded responses (n = 31, 2.71%) commented on parents wanting community members such as doctors and swimming instructors to understand them and their gifted children. The next most frequent response (n = 28, 2.53%) were parents' descriptions of uncertainties related to obtaining, affording or interpreting assessments for giftedness. Fewer responses described parents' decision to home school their children (n = 21, 1.84%), the need to teach their gifted children to balance school work and other parts of life (n = 19, 1.66%), their positive experience of parenting their gifted children (n = 12, 1.05%), the need to teach their children to be proud of their gifts and at the same time not to devalue others (n = 11, 0.96%), and the desire to learn how important it is for their gifted children to have a good school experience in order to succeed in life.

In summary, the analysis of the open-ended responses yielded a clearer understanding that the majority of the concerns and information sought by parents related to family issues (n = 588, 51.53%), followed by school/peer issues (n = 471, 41.30%) and lastly relationships within the community (51, 7.16%). Parents frequently described that they were unsatisfied with the school system, and commented that they needed to advocate for their gifted children to have educational opportunities in school, and to provide enrichment opportunities outside of school. In the home setting, parents commented on some topics common to all children, such as parenting teens, wanting

children to be happy and succeed at school, and advancing to the next level of schooling. However, the majority of topics raised by respondents were related to distinctions associated with having gifted children. Respondents frequently reported being concerned about how to understand and parent their gifted children, as well as how giftedness affected their children's emotionality and ability to fit in socially.

Sources of Information and Support

Parents were asked about the likelihood they would turn to materials or people for information or support by rating their interest on a scale from 1 ("Very Low") to 5 ("Very High"). Participants also had the option in this set of items to reply "Not Applicable" ("N/A"). These sources of information or support were included for two reasons. First, FST and EST explain that people tend to rely on a variety of systems for information and support, and that the amount of support received in systems external to the family can influence the experience of the family members (Bronfenbrenner, 1986). Second, when conducting a needs assessment it is important to assess the level of need not only based on the desire for information or support, but also existing support systems. If someone has a need and that need is already fulfilled, then the level of urgency for additional information and support is reduced. For ease of understanding, responses were divided into two sections: source of information and source of support. Data were summarized in means and standard deviations. Calculations for all but one of these 28 items produced standard deviations over 1, which indicated a large degree of variability in responses, and that the means need to be interpreted cautiously.

Source for Information. The results of the source of information (see Table 11) demonstrate that on average the participants were highly likely to turn to books or articles

Table 11

Descriptive Statistics for Sources of Information

Items	Mean	SD	n
Books/Articles	4.07	1.02	512
Counsellor/Psychologist	3.24	1.35	467
Parent Support Group	3.25	1.34	447
Child's Teacher	2.94	1.27	491
Online Parent Community	2.96	1.43	440
Friends	2.64	1.25	487
Support Teacher	2.57	1.41	358
Partner	2.29	1.28	471
Family Dr.	2.15	1.25	470
Parents	1.85	1.14	410
Librarian	1.68	1.12	405
Partners' Parents	1.39	0.80	348
Minister	1.35	0.83	226
Ex-partner	1.48	0.99	54

Note. "Not Applicable" responses were not counted

for information ($M = 4.07$, $SD = 1.02$). Parents indicated they were moderately likely to turn to a counsellor or psychologist ($M = 3.24$, $SD = 1.35$), a parent support group ($M = 3.25$, $SD = 1.34$), their child's teacher ($M = 2.94$, $SD = 1.27$), or an online parent community ($M = 2.96$, $SD = 1.43$) for information. Parents were less likely to turn to their friends ($M = 2.64$, $SD = 1.25$), the school support teacher ($M = 2.57$, $SD = 1.41$) or their partner ($M = 2.29$, $SD = 1.25$).

Parents were least likely to turn to their minister or equivalent ($M = 1.35$, $SD = .83$, "N/A" responses = 57.0%) and their ex-partner ($M = 1.48$, $SD = .99$, "N/A"

responses = 89.7%). Most participants (89.5%) were married, so it is not surprising that very few people turned to their ex-partner. The majority of the sample responded “N/A” to their minister or equivalent, indicating that most participants may not have a relationship with formal religious institutions, or a religious leader.

Source for support. On average, parents indicated that they were most likely to turn to their partner for support ($M = 3.70$, $SD = 1.20$; see Table 12). Participants were moderately likely to turn to books or articles ($M = 3.56$, $SD = 1.32$), friends ($M = 3.06$, $SD = 1.22$) or parent support groups ($M = 3.06$, $SD = 1.39$) for support. Parents were less likely to turn to a helping professional ($M = 2.87$, $SD = 1.38$), their child’s teacher ($M = 2.70$, $SD = 1.28$), an online parent community ($M = 2.48$, $SD = 1.38$), their parents ($M = 2.47$, $SD = 1.33$), or the school support teacher ($M = 2.36$, $SD = 1.39$) for support.

Not surprisingly, with only 8.2% of participants separated or divorced, the respondents were least likely to turn to their ex-partner for support ($M = 1.72$, $SD = 1.89$). The 42.9% of the participants who responded to the item about their minister or equivalent indicated that they were not likely to turn to their minister for support ($M = 1.50$, $SD = 1.00$). Participants were also unlikely to seek support from their librarian ($M = 1.35$, $SD = .82$), indicating that these individuals were not seen as a source of support to participants.

Table 12

Descriptive Statistics for Sources of Support

Items	Mean	SD	n
Partner	3.70	1.20	474
Books/Articles	3.56	1.32	495
Friends	3.06	1.22	496
Parent Support Group	3.06	1.39	444
Counsellor/Psychologist	2.87	1.38	464
Child's Teacher	2.70	1.28	488
Online Parent Community	2.48	1.38	431
Parents	2.47	1.33	419
Support Teacher	2.36	1.39	357
Family Dr.	1.85	1.14	465
Partners' Parents	1.67	1.03	355
Minister	1.50	1.00	225
Librarian	1.35	0.82	400
Ex-partner	1.72	1.19	54

Note. “Not Applicable” responses were not counted

Materials or Programs Preferred by Parents

Contained within the survey were seven Likert items asking participants about their level of interest in various formats for receiving information or support, with response options from 1 (“Very Low”) to 5 (“Very High”). These questions were asked in order to determine the most preferred formats. To this end, the data analysis was descriptive. Percentages of participants choosing each response option were calculated in order to understand the distribution of responses and to compare the data across format

options. Percentages of participants choosing each response option and the proportions of these options are presented in Table 13.

Percentages of participants indicating High or Very High levels of interest in receiving the various formats were calculated as a way to rank order their popularity. Participants most frequently reported High or Very High interest in print or internet text materials (78.6% of responses), followed by one seminar led by an expert (66.7%), an expert-led parent education group (51.8%), a video or audio presentation by an expert to view at home (44.2%), a social support and advocacy group (44.0%), one session led by a parent of a gifted child (41.8%), and finally a parent-led parent education group (31%).

Parents' interest in text materials is consistent with the sources parents indicated they sought in the previous section, with the parents being most likely to turn to books for information, and the second most likely to turn to books for support. After print materials, the parents would most like to receive materials or programs involving an expert. Results consistently demonstrate that as participants were learning about how to support and guide their gifted children, they would most like to learn from others who have expertise in the field.

Table 13

Percentages of Responses to Preferred Format for Materials or Programs

Item	n	Very low	Low	Medium	High	Very high	High + Very High
Print or internet text materials	519	2.7	3.6	13.9	35.0	43.6	78.6
One session led by expert	521	5.0	6.9	20.6	36.2	30.5	66.7
Expert-led parent education group	521	9.5	13.9	23.8	26.5	25.3	51.8
Expert video to take home	521	10.3	17.7	26.9	24.8	19.4	44.2
Social support advocacy group	519	8.8	17.9	28.2	19.8	24.2	44
One session by another parent	518	8.8	15.4	32.8	26.9	14.9	41.8
Parent-led parent education group	518	13.9	23.8	29.9	19.0	12.0	31.0

Summary

Participants consistently indicated they had a high level of concern and need for information. When looking for information, parents placed a high priority on learning how to ensure that teachers had a proper understanding of the characteristics and educational needs of their gifted children, and how their children could advocate for themselves in the school setting. In the home setting, parents were most interested in receiving information on the emotional development of their gifted children. Parents were most concerned about supporting the educational needs of their children and feeling that they were instrumental in having their children's needs met.

The level of concern was not the same for parents living in different provinces. Parents in Ontario and BC reported a higher level of concern about the lack of time and programs for gifted students, social concerns, and the pressure they felt they were under as a parent than parents in Alberta. This result suggests parents in Alberta perceive a different level of concern in these areas, which could imply a difference based on the provincial education systems.

Forty nine percent of the participants responded to the open-ended questions asking about additional needs for information and support. The majority of parents' comments were about their experiences in their family microsystem, followed by school mesosystem, and lastly the community exosystem. The comments illustrate the multiple influences on parents, and their concern for optimizing their child's experiences with the other systems.

When they want to turn to others for information or support, the participants indicated they were most likely to turn to print materials or people who know more about gifted children than they do for information, such as a counsellor or psychologist, parent support groups or their children's teachers. Parents were most likely to turn to their spouse for support, followed by books, friends and a parent support group. This result of the kind of support they already seek out matches with the indication that parents would like to receive print materials or expert-led programs for additional support and information. These results suggest that the majority of parents seek the guidance of experts rather than counselling related to parenting their gifted children. Guidance has a focus on psycho-education, helping parents to understand the best way to understand and guide their children. Parents also indicated that they were already turning to books for

information and support, and that print materials were their most preferred form of support or information. This suggests that parents were most interested in independent learning about the topic of giftedness, rather than looking to others to inform them.

Chapter 5 Discussion

Initially, the goal of this study was to determine the needs and concerns of parents of gifted children. As the work progressed, it became apparent that in order to fulfill this goal, extensive effort had to be invested in the development of an instrument to collect essential data. Hence, the development of a survey tool became the means to understand the needs of this population. The data was submitted to rigorous analysis to determine if the survey had the psychometric properties expected of a tool for this task. Once this was established, the data were further analyzed to see what they could tell us about the needs and concerns of the participants. This chapter will discuss the theoretical implications of this research, recommend modifications to the *Needs of Parents of Gifted Children (NPGC)*, compare the results with previous research, suggest an example framework for designing programs for the parents who participated in this study, summarize the limitations to this study, and explain the contribution of *NPGC*.

Theory and Implications

Family systems theory (FST: Carter & McGoldrick, 1999; Combrinck-Graham, 1985) and Bronfenbrenner's Ecological Systems Theory (EST; 1979, 1986, 1995) provided the theoretical framework used for this investigation. Both purport that it is important to understand the multiple influences between people and their larger context. EST was introduced to expand on FST's primary focus on people within the family. This permitted the analysis and findings to include not just people but objects and symbols in a person's larger environment. As promised in Chapter 4, the shift to Ecological Systems Theory (EST) will be further described.

Ecological systems theory (EST). EST was developed by Urie Bronfenbrenner, a developmental psychologist, in the 1970s (Bronfenbrenner, 1979, 1986, 1995). In the 1990s Bronfenbrenner (1995) made two changes to update his theory. The first change related to the biopsychological differences of the developing individual. These biopsychological differences acknowledge that developing individuals have different influences on, and are differently influenced by, the ecological systems. Due to this emphasis on individual biopsychological differences, in 1995 Bronfenbrenner referred to his theory as the “Bioecological Model.” This version of EST continues to use nested ecological systems as a way of understanding the interactions between the developing person and his or her environment. The second change was to re-emphasize individual development and change in settings over time that had been part of the theory since its inception (Bronfenbrenner, 1979), but had not been a major component of the theory or the resulting research. Despite Bronfenbrenner’s suggestion of a name change to the Bioecological Model, the term Ecological Systems Theory is still commonly used in research today, and is used throughout this document.

In the example given in Chapter 2 of a child having problems with her peers where the parents disagree about whether or not the child should attend a separate class for gifted students, EST explains this interaction more comprehensively, considering the people, objects and symbols that are involved in the systemic interactions. The macrosystem includes the ideology of giftedness as a cultural concept that is interpreted and translated into a policy by the provincial education system. The exosystem contains the school district, which has developed practices for identifying and serving gifted students based on provincial policies. The mesosystem includes the peers, the school and

the support teacher who implemented the practice of identifying the gifted student. The microsystem contains the family that has been told or feels the child is gifted, and interactions between the family members when hearing this news.

As can be seen through this example, relative to FST, EST introduces two additional concepts. The first is that EST includes more systems outside of the family, as well as including the family in the ecological systemic network. The second is that EST focuses not only on the people in these systems, but also on the objects and symbols contained within those systems, such as the ideology and definitions of giftedness, as well as their translations into educational practice.

Bronfenbrenner (1979, 1986, 1995) closely linked his theoretical writings to research designs in order to clarify and apply the theory. Research using EST can become confusing because, depending on the individual under investigation (e.g. child or parent), the people, objects and symbols that fall into the nested systems beyond that individual change. To ensure that the settings considered in the current study were placed into the correct ecological system, I followed Bronfenbrenner's (1986) example. In this article Bronfenbrenner described research related to the family in the microsystem. Research related to other settings where children spent their time, such as the school and with peers, were placed in the mesosystem. Research related to settings where parents would spend their time, such as the community, was placed in the exosystem. This article also discussed the system external to the nested ecological systems: the chronosystem, which examines development over time.

Theoretical implications. The current research relied on FST in the development of *NPGC*, and used both theories as a framework to interpret the results. Because neither FST nor EST predict directionality, the focus is still not on causation but on understanding the relationships between the various systems. Throughout the analyses, the responses and interpretations were framed by the microsystem, consisting of the family, the mesosystem, consisting of the school and peer groups, and the exosystem, consisting of the community. The chronosystem was not relevant because there was no consideration of development over time.

One additional analysis was conducted. For EST, the largest of the systems in the nested structure is the macrosystem, which consists of socio-political influences on people, objects and symbols. The provincial Ministries of Education belong in the macrosystem as socio-political structures that influence districts, schools and ultimately families. For this reason, an analysis was run which grouped the responses of the participants from three provinces (excluding Newfoundland due to the small n) and using MANOVA to compare their scores on the nine components and one provisional subscale in the “Information” and “Concerns” sections. When examining the means of the provinces on the three components which produced significant results, a pattern emerged which indicated the parents in BC and Ontario were significantly more concerned than parents in Alberta about “Lack of Time or Programs for Gifted Children”, “Social Concerns” and “Pressure on Parents”. When interpreting this result through EST, we can see the influence of the different provincial policies and practices with regards to gifted education. To my knowledge, Alberta is the only province in Canada that has charter Elementary schools within the public school system that are solely for gifted children.

Alberta is also the only province in Canada that currently has a Centre for Gifted Education, located at the University of Calgary. EST would view this as the influence of the provincial education system at the macrosystem level on the experience of the parent participants at the microsystem level. The structures in Alberta which are designed to support the education of gifted children and guidance of their parents may have reduced the level of concern about time and programs for gifted children and their socialization, as well as the degree of pressure parents are under to support talent development in their gifted children.

However, there are also several similarities between these provincial macrosystems. Each of the three provinces has one or several organizations that are designed to support or communicate with parents of gifted children. Each province also has an association of teachers of the gifted, and Ontario (Consortium of Ontario Gifted) and Alberta (Society for the Advancement of the Gifted) have organizations that bring together teachers, parents and others who jointly advocate for gifted education. It is unknown how much of the difference between the provincial results is accounted for by the education systems, and since NPGC is still under development, it is important to be cautious about these theoretical implications.

In summary, FST and EST provide guidance for interpretation of the influence the provincial macrosystem had in the current study on some of the parents' concerns, with parents in Ontario and BC having a higher level of concern than parents in Alberta about time and programs for gifted children, pressure on parents and social concerns. This difference in levels of concern between parents living in different provinces supports the EST concept that different macrosystems have differential influences on the other nested

layers of systems, including the family microsystem. However, there were no significant differences by province on any “Information” components or the remaining three “Concerns” components, “Emotional Concerns”, “Child in Conflict” and “Child Underachievement”. This result indicates a similarity between the parents in BC, Ontario and Alberta on their level of need for information, and concerns about these three topics. A suggestion for future research is to explore the relationship between levels of concern and needs for information among parents from other provinces, to determine if this or other macrosystem effects are evident.

The NPGC Instrument

The NPGC instrument followed a rigorous development process, involving a theoretical framework, a literature review, the use of focus groups of parents of gifted children, and recommendations of experts in the field of gifted education. This instrument surpasses instruments previously developed to assess the needs of this population (e.g. Moon, Kelly & Feldhusen, 1997) because it is the first instrument developed specifically for this population which was guided by a theoretical framework. FST and EST provide for the inclusion and interpretation of the systemic complexities involved in parenting gifted children. The development of *NPGC* also included many forms of feedback to ensure its face validity.

The development of *NPGC* to date has the potential to support two future purposes. The first is to validate the survey instrument for future research with this population. In order for *NPGC* to be considered psychometrically sound, another study is needed to conduct a confirmatory factor analysis (CFA; Tabachnick & Fidell, 2007). This

would test the structure of the components found in this research, thereby affirming or disaffirming the items and subscales contained within the instrument. After the psychometric composition of the survey has been confirmed, the results from future participants could be generalized to a more general population of parents of gifted children.

The second potential purpose is to use this instrument, with the revisions suggested in the next section, to gather feedback from local parents of gifted children. This use of *NPGC* could allow for informed development of materials and programs for a local population, and would not require the same level of psychometric rigor, as the purpose for local development does not include generalizing beyond the participants. This section will summarize the changes recommended to *NPGC* for further development for both of these purposes.

Recommended revisions to NPGC. For the purpose of using *NPGC* for future research, revisions are recommended that would improve clarity, add or remove specific items, and improve item structure to ensure they are comparable. There are several changes that would improve the clarity of the demographic section. The first is to include a more comprehensive description of which children in the family are gifted and which are of average or as-yet-to-be-determined ability. In the present research, limitations to web survey software prevented the option to fan out to a set of questions which specifically addressed the age (rather than date of birth, which involved the calculation of age), grade, number of years in a gifted program, current type of gifted program attending, and whether the child had been formally identified as gifted. Adding this capacity would allow for comparisons between parents' perceived concerns and needs for

information on these variables specifically related to their gifted children. Clarity could also be improved on the ethnicity question by asking participants to indicate their own ethnicity, rather than that of themselves and their partner.

The instrument would be improved by adjusting some of the items in the survey. First, I would recommend the removal of the item from the “Concerns” section that did not group with a component subscale, thereby indicating that the items were not necessary for indicating the participants’ scores on the components. This item was “Child feels he/she must act ‘dumb’ to be accepted by peers.” Second, the provisional “Post-graduate” subscale in the “Information” section consists of two items related to post-secondary selection and career planning. A third item would need to be added to this subscale to maintain the psychometric integrity, as subscales are recommended to contain at least three items (J.C. Nesbit, personal communication, August 27, 2009). This item may include a variable related to other future plans, such as planning for future work-life balance.

It is also recommended that the topics reported by participants in the open-ended questions be examined to determine if adding some of these subjects to *NPGC* would improve the instrument. Select topics could be added to more comprehensively address all of the concerns and needs for information made by participants in the present sample. This would include developing items which asked parents how important it would be for them to receive information about how to a) help their children balance school work and life, b) be assertive, c) persevere, d) value themselves without insulting others, e) address multipotentiality, f) parent a gifted girl, g) parent a gifted teen, h) teach their children to focus, i) teach their children to manage stress, j) understand sleep problems, k)

understand the relationship between meeting children's educational needs and life success, l) understand brain development, m) understand assessments of giftedness, and n) set realistic expectations related to their children. Additions to the "Concerns" section could include items which would ask parents their level of concern about a) feeling misunderstood by community members, and b) feeling their gifted children are misunderstood by community members.

Another revision that would improve the instrument is removing the "Not Applicable" response from the items related to family. In the current version of the survey, the items related to family were included a "Not Applicable" response option for participants who had an only child to select "N/A" in the item related to siblings. A better way to address this would be for participants to be directed to skip items that were not relevant in their current family configuration. The final recommended revision to the development of a research instrument is to remove the questions that ask participants to choose the items which are of most importance to them in the "Information" and "Concerns" sections. These questions do not permit a statistical comparison, as it is difficult to determine the subjective value of the choice of the items versus the ones that were not chosen (J.C. Nesbit, personal communication, August 27, 2009).

As mentioned, if the purpose is to collect information about the concerns and needs for information of a local group of parents, the revisions would not need to be as extensive. For this purpose, *NPGC* would be improved by making the changes listed above to increase the clarity of items and adding the revised family cluster without the "N/A" response option. From an EST perspective, local groups might also benefit from modifying the instrument to suit their needs based on their school, district or province.

Select items referred to in the open-ended questions could be added to address local issues. Finally, the local groups may wish to retain the questions related to the items of highest importance in order to determine priority for programming or materials developed for their group.

A Framework to Support the Development of Materials and Programs

Due to the consultation with parents of gifted children during the development of *NPGC*, the present research is a step closer to the parent self-reports recommended as further research by Morawska and Sanders (2009). This recommendation to gather perceptions of parents is beneficial, as Morawska and Sanders' research to date has paralleled the common focus in gifted literature on examining only one direction of systemic influence, that of parents on their gifted children.

The main goal of the present research became the development of a survey that could be used to better understand the needs for information and the concerns of parents of gifted children. With this understanding, relevant materials and programs could be developed to meet parents' needs. As Collinsworth, Strom and Strom (1996) state, "The educational needs of parents must become known before they can be met. Yet the training most parents receive is based largely upon what program planners intuitively suppose is appropriate" (p. 505).

However, Morawska and Sanders (2009) claim that their research with parent guidance groups in Australia was the first research to evaluate education programs for parents of gifted children. This research is valuable for determining the effectiveness of parent guidance groups. Nevertheless, Morawska and Sanders' (2008) research to date is

another example of research exploring the influence of parents on their children, rather than examining the influence of gifted children and other ecological systems on the parents. There is very little information available which aids in the understanding of parents' experiences in their parental role. This is particularly true when looking for information about the experience of parents of gifted children in Canada.

Sample framework. Data collected with the *NPGC* can be used to develop a framework for addressing the needs for information and the concerns of local parents of gifted children. A framework is suggested here as an outline of the concerns and information of interest to parents of gifted children who participated in this study. This framework (see Table 14) was developed from the results of two portions of the survey *NPGC*: the component subscales of the Likert-type items, and the open-ended responses in which respondents indicated desired information or support beyond what the items had addressed. These component subscales and additional sub-topics were combined into a framework which addresses three main topics: (a) the role and experience of being a parent of a gifted child, (b) the gifted child at home, and (c) the gifted child at school.

Table 14

Example framework for addressing the needs of the parents in this study

Role and experience of being a parent of a gifted child

- Parent's experience
 - Positives and challenges of family life with a gifted child in the family
 - *Pressure on parents*
 - Lack of understanding from the media and other community members
- Parent's role at home
 - Setting realistic expectations related to child's giftedness
 - Developing a support network of family, friends and other parents of gifted children
- Parent's role in the education system
 - *Lack of time or programs for gifted children*
 - *Creating educational opportunities*
 - *Choosing between educational programs*

Gifted children at home

- *Understanding gifted children*
 - Brain development
 - Teens
 - Gifted girls
 - Relationship between education and life success
- Teaching gifted children life skills
 - Being assertive
 - Being confident without insulting others
 - Balancing school work and other activities
 - Managing stress
- Dealing with gifted children's issues
 - *Social concerns*
 - *Emotional concerns*

Gifted children at school

- Experience at school
 - *Child in conflict*
 - *Child underachievement*
 - Teaching child to persevere through challenges
- *Post-graduation decisions*
 - Dealing with multipotentiality (strengths in many areas)
- Obtaining and understanding assessments

Note. Topics in italics relate to the ten component subscales. Other topics were recommended in open-ended questions.

Materials and Programs Desired by Parents

Another important element when aiming to meet the needs of parents is to ensure that the materials and programs are delivered in a format attractive to parents. Despite the assumption in a great deal of research that parental concerns should be addressed through counselling and guidance groups for families of gifted children (e.g. Morawska & Sanders, 2008; Morawska & Sanders, 2009; Moon, 2003; Moon, 2007; Moon, Kelly & Feldhusen, 1997), over three quarters of parents in this study indicated they were highly interested in learning about their gifted children through text materials. Parents consistently indicated that they were more interested in books, articles or other text-based materials. The majority of parents currently turned to books or articles for information and for support. Parents also reported that they would prefer text-based materials to meet any unaddressed needs for information and support. These results are consistent with Dangel and Walker's (1991) findings that most parents in the state of Georgia preferred printed material, such as newsletters and pamphlets, as the format for a parent education program.

These findings may support the publication of the many books that are available about parenting gifted children. However, from an EST perspective, "how-to parent gifted children" manuals written for the population tend not to address the other layers of the ecological systems. These would include the schools, including district programs and provincial education policies, as well as the lack of community understanding which affect the lives of gifted children and their families.

Beyond books, experts also played an important role for parents. On average parents reported they were moderately likely to turn to helping professionals for information or support. When rating their preferred form of future assistance, parents wanted to interact with experts by attending one session with an expert, attend a parent education group led by an expert, or watch a video produced by an expert. Again results were similar to Dangel and Walker's (1991) research, where parents chose presentations by an authority as the second most preferred format, video or audiocassette presentations for home use as third, and programs on educational television as fourth.

Participants also expressed an interest in having other parents as resources. When reporting their current sources of support, many parents indicated they currently gained information and support by belonging to a parent support group (fourth highest mean), and more than 40% reported they would be interested in joining a parent-led social support and advocacy group as a program. Almost one-third of the parents also indicated they would like to attend a single session presentation led by a parent of gifted children. The interest of this sample of participants in parent-led support groups contrasts with Dangel and Walker (1991), who found that only 16.9% of their parent participants in Georgia were interested in workshops conducted by other parents of gifted children.

Within the sample of parents who participated in the current research, it is evident that books and other text-based materials are the most sought-after sources of information and support, followed by interactions with people who have expert-level knowledge about giftedness. Next, participants already turned to or wanted to seek out other parents of gifted children to receive information and support as they were working on puzzling out and raising their gifted children.

Limitations

The generalizability of these findings is limited by several factors. First, despite gathering responses from a large number of parents ($n = 526$) in four Canadian provinces, the data collected for this study was considered in a conservative manner, and the results were not expected to generalize beyond the sample of parent participants. This was due to the nature of the research, and the development process of the *NPGC*. As stated earlier, survey development requires an exploratory and then confirmatory factor or principle components analysis, and only the former was conducted as part of this research. A confirmatory factor analysis would need to be completed before generalizing beyond the sample.

The second limitation is related to the sample of parents of gifted children. This sample is not representative of all parents of gifted children. The sample of participants was quite homogeneous, as the participants were predominantly women who were married and identified “White” as their ethnicity. All participants were members of an organization for parents of gifted children. Therefore, the findings of this study represent only this sample. A suggestion for future research would be to examine a more diverse population of parents of gifted children. To this end, it is possible that modifying the survey language to be more readable for parents with a lower education level would make *NPGC* more accessible to a larger population.

Third, the results cannot be generalized because the sample of interest was parents of gifted children who seek support programs or materials. There are an unknown number of parents of gifted children who do not elect or have the option to join the

mailing list of provincial support organizations. It is also important to note that there were only four provinces that had active organizations of English-speaking parents of gifted children in Canada, leaving six provinces and three territories without representation in the current sample. Further research with parents of gifted children in other provinces and territories is recommended to develop a more comprehensive understanding of the needs of parents across the country.

Fourth, generalizability to other parents of gifted children is also restricted by the methodology of an internet-based survey. The present methodology required participants to have access to email and the internet; however, a number of parents of gifted children who seek support do not have access to email or the internet. Therefore, it is not possible to generalize the results of the current research to the population that does not have email or internet access.

The fifth limitation relates to the removal of several of the items from the survey, leaving gaps in our knowledge about responses. Seven items in the family cluster of the “Concerns” section were excluded from the component analysis due to problems with a “Not Applicable” response option for this cluster of items. Since an “N/A” response is considered missing data, none of the seven items in the family cluster met the criteria for component analysis. It is recommended that future research include items related to family concerns.

Conclusion

Participants in this study were clearly confronted with a lack of information and a level of concern that warrants the development of resources and programs. Indeed,

several experts and authors in the field of gifted education (e.g. Albert, 1978; Bloom, 1985; Gagné, 2004) have recommended that parents need to provide a positive family atmosphere and educational support in order to ensure that their gifted children thrive emotionally, socially, intellectually and creatively. Colangelo and Dettmann (1983) summarize experts' recommendations: parents have an influence on or should be responsible for proper identification of their children's giftedness, the atmosphere in the family system, their child's self-esteem, achievement without the pressure to succeed, social adjustment, encouragement and good vocational and educational plans. However, both past and current research (e.g. Colangelo & Dettmann, 1983; Keirouz, 1990; Morawska & Sanders, 2009) confirms that parents are often confused about their exceptional children and feel a great deal of pressure to provide sufficient educational opportunities and support to develop their talents.

How are parents to succeed in understanding and educating their gifted children? Psychological and educational professionals often suggest referring parents to guidance programs for this purpose (Dettmann & Colangelo, 1980; Devries & Webb, 2007; Kaufman, 1976; Silverman & Kearney, 1989; VanTassel-Baska, 1998; Zorman, 1982). In Canada, structured guidance programs are not widely available. Those available throughout the school year are at the University of Calgary's Centre for Gifted Education. Support teachers or gifted education specialists in some school districts offer education about giftedness for parents of gifted children, but this is often only once per year after the cycle of identifying more students as gifted. This limited guidance was not sufficient to address the needs of the parents of gifted children in the present research. Potentially, psychologists or counsellors could offer guidance programs such as the one described by

Morawska and Sanders (2008, 2009), but this would entail the need for these professionals to have specialized knowledge about parents and families of gifted children. These professionals are a rare resource.

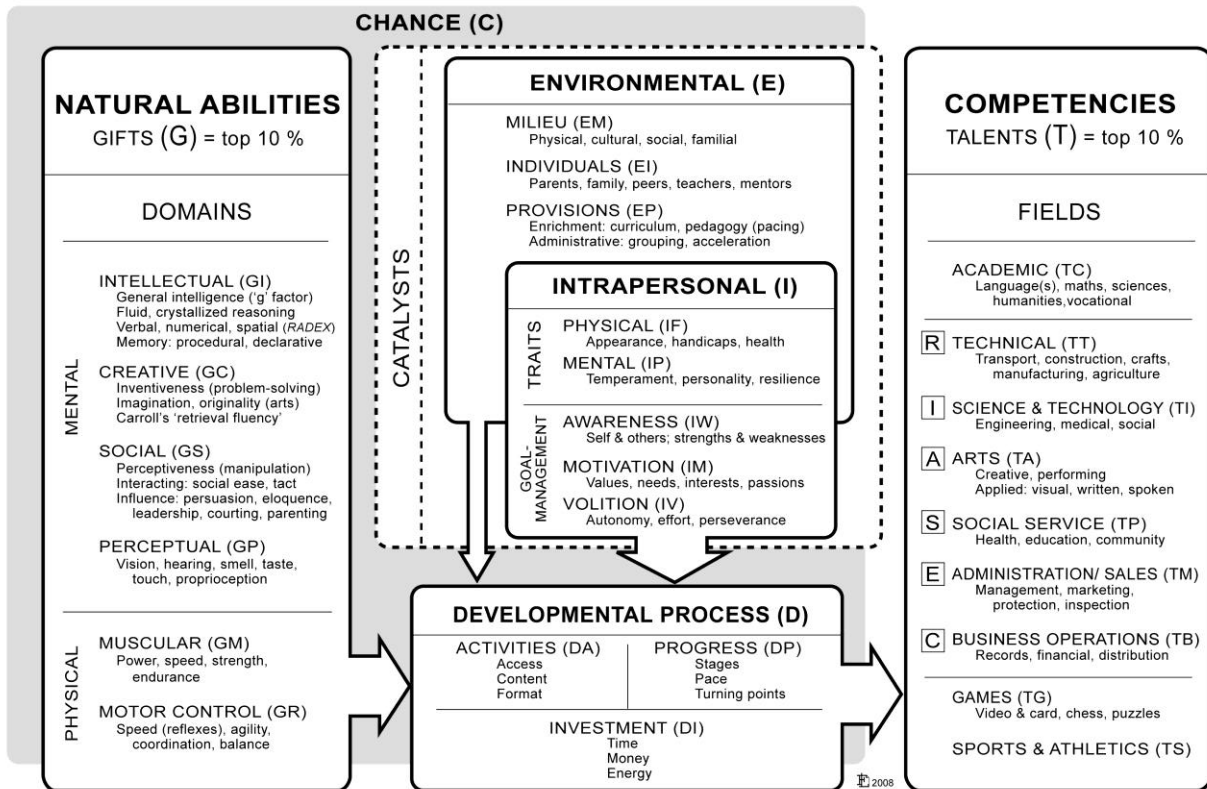
Another resource available to parents in Canada is the volunteer organizations led by parents in the four provinces that participated in this study. Even as members of those organizations, these participants most often turn to books and materials, both for information and for support. Further research is needed to determine the levels of needs being met for parents of gifted children in other provinces, and whether they have opportunities to associate with other parents of gifted children.

Conducting a review of the research with families of average ability children, Bronfenbrenner (1986) found that there was very little research that examined the reciprocal relationship of the child and the family with the nested systems they are situated within. Similarly, Colangelo and Dettmann (1983) and Keirouz (1990) found that the research with families of gifted children focused on the influence of parents on their gifted children, and made a long list of recommendations about how important it is to create the right atmosphere for learning, socializing and developing the talents of gifted children. These authors reported that parents felt confused about how to understand and provide for their gifted children's needs, and at the same time were under great pressure to accomplish this nebulous but daunting task. Clearly there is an enduring need for research to examine the intricacies of the influence on the families of having gifted children, to learn more about parents' experiences and how to best alleviate their concerns.

After further development, *NPGC* will be a valuable tool to assist with understanding the needs of parents of gifted children, and the production of relevant programs and materials. Currently, *NPGC* is a step along the road towards developing a needs assessment that could illuminate the concerns and needs for information specific to these parents. *NPGC* goes beyond prior research through consultation with focus groups of gifted children, as well as offering a theoretical perspective. Family Systems and Ecological Systems Theories guide the interpretation of the influence family members have on each other, as well as peers and many layers of school and community systems. Further research is needed in this area to develop an understanding of the needs of the population of parents of gifted children, and to meet those needs in a manner parents will welcome.

APPENDICES

Appendix A: Gagné's Developmental Model of Giftedness and Talent



Note. From “Building gifts into talents: Brief overview of the DMGT 2.0,” by F. Gagné, 2008, Unpublished manuscript, p. 3, Université du Québec à Montréal. Copyright 2008 by François Gagné. Used with permission.

Appendix B: Focus Group 1 Script

Welcome and thank you for participating in this focus group meeting. You all have signed the consent form stating that you are volunteering to participate in this focus group and are willing to be audio and video recorded. If at any time you would like to withdraw your participation, please feel free to do so.

As part of this focus group, we will be meeting two times. Tonight I will be talking with you about your experiences as a parent of a gifted child or children. I will be asking you to have a group discussion about two things:

1. What kinds of questions you have about understanding and parenting your gifted child(ren); and
2. What concerns you might have regarding your gifted child or your family.

I am studying this topic because I believe that it is very important to support parents of gifted children. Most of the research has been done with gifted children focused on their achievement in school. However, I believe of equal if not more importance is gifted children having the understanding and support they need at home from their parents, friends and community members.

My goal is to gather meaningful information so that I can help organizations which support parents to know more about what parents' needs are, and to develop some resources for parents of gifted children. I appreciate your input, especially since this is a new area of research, and I need your help to build a survey that is meaningful to parents of gifted children and is more comprehensive than I could develop on my own.

I'd like us to start by introducing ourselves, stating your name, how old your child is, and how long ago you found out your child is gifted.

Information

Now let's turn to the topic of questions you have or information you would like about your gifted child.

Please discuss amongst yourselves the kinds of complexities you think arise when there is one or more gifted children in a family.

Where do parents turn when they have questions or need more information to decipher these complexities?

Concerns

What kinds of concerns do parents have regarding their gifted children?

What kinds of concerns arise for parents about how their gifted children and the rest of their family interacts?

Who do parents turn to for support when experiencing concerns about their gifted child or the interaction of the gifted child and the rest of their family?

Are there any other things you think would be important for me to know while assessing the needs of parents of gifted children?

Thank you very much for your time tonight. I will take your information and advice and incorporate this into my draft questionnaire. During our next meeting on [DATE], ask you to fill out the draft questionnaire and then let me know if you have any further suggestions for revision.

Good night, and I look forward to seeing you then.

Appendix C: Focus Group 2 Script

Welcome back to this focus group meeting. Please remember that if at any time you would like to withdraw your participation, you are welcome to do so.

Tonight I will be asking you to fill out a draft of my survey, and to give me feedback on this draft while you are completing it. I am interested in your thoughts on each of the questions, especially if they do not make sense, or if they do not represent what we discussed at our last focus group.

I will be timing how long it takes you to complete the survey, so once you finish please let me know. Please begin now.

[Once the participants have finished]

Please discuss amongst yourselves how clear the questions were regarding their wording and what the questions were asking. Any additional problem questions or concepts in the survey?

What did you think about the order the questions were asked in?

Based on our discussion in our first focus group, are there any ideas or concepts missing?

Any further comments?

Thank you very much for your time tonight. I will take your feedback and use it to revise my questionnaire. Once I complete the data analysis of my survey, I will be happy to share my results with you.

Good night, and thank you again for your participation. My research will be much more meaningful thanks to your assistance.

Appendix D: Focus Group Recruitment Email

Dear Member of the Maple Ridge Local Member Group of the GCABC,

Do you sometimes have questions about how to understand and guide your gifted child?
Do you sometimes have concerns about having a gifted family member, and believe you would benefit from more support?

I am looking for five parents of gifted children to participate in a focus group for my PhD study called "Information and Support for Parents of Gifted Children." My intention is to learn from parents about their needs in order to assist organizations who try to meet those needs. Being a parent of gifted children myself as well as working for 10 years as a Registered Clinical Counsellor, I have a strong commitment to helping parents of gifted children. I am being supervised in conducting this study by Dr. Lannie Kanevsky, Associate Professor in the Faculty of Education at Simon Fraser University, and a long time member of the GCABC.

There has been very little research that has directly asked parents what kinds of assistance they might benefit from in parenting their gifted children. My intention is to learn more about parent's needs by asking parents to fill out an online survey. Since this area of research is relatively new, I am starting from scratch in developing this online survey. Once I have gathered this information from parents, I intend to develop materials and provide information about parents' needs to existing organizations and professionals who support parents. I will share the summary of results of my research with the GCABC.

I would very much like your help in understanding the types of questions and concerns parents of gifted children have. Through discussions with the focus group, together we will develop a much more comprehensive and meaningful survey than I could develop on my own. If you agree to participate, I will ask you to be available to attend two focus group meetings. These meetings would be on weeknight evenings ideally in November 2007, and last 1 – 1.5 hours. I will be recording the meetings with audio and video recording equipment.

At the first meeting we will discuss the questions you have regarding what giftedness means for your child and where you look for information to answer those questions. I will also ask you about what kinds of concerns you might have regarding your gifted child or your family, and who you turn to for support. At the second meeting I will ask you to fill out a draft of the survey, and to give me feedback on how it could be improved.

My ultimate goal after parents have filled out the online survey is to develop materials and provide information to existing organizations and professionals who support parents. I would be pleased to share a summary of the results of my study with you. If you would like to volunteer to participate in this focus group, please send me an email at clelland@sfu.ca.

Sincerely,

Debbie Clelland, M.A., RCC, PhD Candidate, clelland@sfu.ca

Appendix E: Focus Group Consent Form

Study Title: Information and support for parents of gifted children

Ms. Debbie Clelland, M.A., Registered Clinical Counsellor is looking for parents of gifted children to participate in a focus group for her PhD research. Her intention is to learn from parents about their needs in order to assist organizations which try to meet those needs. Ms. Clelland has a strong commitment to helping parents of gifted children which is informed by being a parent of gifted children and being employed for 10 years as a Registered Clinical Counsellor. She is being supervised in this study by Dr. Lannie Kanevsky, Associate Professor in the Faculty of Education at Simon Fraser University, and a long time member of the GCABC.

There has been very little research that has directly asked parents what kinds of assistance they might benefit from in parenting their gifted children. Once Ms. Clelland has gathered this information from parents, she intends to develop materials and provide information about parents' needs to existing organizations and professionals who support parents. She will share the summary of results of her research with the GCABC.

What the participants will be required to do:

Participants will agree to participate in a focus group. The purpose of this focus group is to discuss the concepts being researched, and assist with the development of a survey. The focus groups will be audio and video recorded to allow as a memory aid in analyzing the discussions. This group will meet two times for 1 to 1.5 hours each time. The meetings will be held during the Fall of 2007, with the purpose of helping Ms. Clelland develop her questionnaire. During the first meeting Ms. Clelland will facilitate a group discussion about the information and/or support participants would like as a parent of a gifted child. During the second meeting parents will fill out a draft copy of Ms. Clelland's survey, and comment on strengths and areas for improvement in the survey. There are no risks to participants participating in this study.

Once Ms. Clelland has collected this information she intends to share it with organizations which support parents of gifted children, so that they may provide information or support in a way which meets the needs of more parents.

Ms. Clelland intends to maintain confidentiality and not reveal your identification. Your name will not be included in reports of the study, and all data will be presented in a summarized form.

Since this study is the beginning of a process of resource development, Ms. Clelland intends to use the data from this study in future research.

I understand that I may withdraw my participation at any time. I also understand that I may register any complaint with the Director of the Office of Research Ethics.

Dr. Hal Weinberg
Director, Office of Research Ethics
Office of Research Ethics
Simon Fraser University
8888 University Drive
Multi-Tenant Facility
Burnaby, B.C. V5A 1S6
hal_weinberg@sfu.ca

I may obtain copies of the results of this study, upon its completion by contacting: Ms. Debbie Clelland, M.A., RCC, PhD Student in Education, Simon Fraser University <clelland@sfu.ca>

By consenting to participate in the focus group I confirm that any information you encounter will be kept confidential and not revealed to parties outside the focus group.

I understand the risks and contributions of my participation in this study and agree to participate:

Participant Last Name: _____

Participant First Name: _____

Participant Contact Information:

Participant Signature: _____

Date: _____

Do you agree that this data may be used in additional research studies? (Please circle one)

Yes No

Appendix F: Recruitment Email

Dear Member of the GCABC,

Are you a parent of a gifted child or children? Do you sometimes have questions about how to understand and guide your gifted child? Do you sometimes have concerns about having a gifted family member, and believe you would benefit from more support?

The researcher is looking for parents of gifted children to participate in an online survey for her PhD research called "Information and Support for Parents of Gifted Children." Her intention is to learn from parents about their needs in order to assist organizations who try to meet those needs. Ms. Debbie Clelland has a strong commitment to helping parents of gifted children which is informed by being a parent of gifted children and working for 10 years as a Registered Clinical Counsellor. She is being supervised in conducting this study by Dr. Lannie Kanevsky, Associate Professor in the Faculty of Education at Simon Fraser University, and a long time member of the GCABC.

There has been very little research that has directly asked parents what kinds of assistance they might benefit from in parenting their gifted children. Once Debbie has gathered this information from parents, she intends to develop materials and provide information about parents' needs to existing organizations and professionals who support parents. She will share the summary of results of her research with the GCABC.

If you would like to volunteer to participate in gathering this important information, please click the link below to go to the consent form and online survey. Your answers are confidential, and your name will not be recorded in any way. The online survey will be available from [Insert date] to [Insert date], and takes approximately 20 minutes to complete.

[<http://websurvey.sfu.ca/survey/provincial> link number]

It is important that each person only fills out the survey one time, and that only one parent from each family answers the questions.

Debbie very much looks forward to learning about your experiences of parenting your gifted child. If you have any questions about the survey or its contents, please contact Debbie at clelland@sfu.ca.

Sincerely,

Debbie Clelland, M.A., RCC
PhD Candidate
clelland@sfu.ca

Appendix G: Needs of Parents of Gifted Children

Needs of Parents of Gifted Children

Are you a parent of a gifted child or children?

Do you feel that you could use more information or support to guide your gifted child to the best of your ability?

If so, then please help me discover how parent support organizations can better assist parents by filling out this survey.

Survey Description and Consent

I am looking for parents of gifted children to participate in this online survey for my PhD research. My intention is to learn from parents about their needs in order to assist organizations which try to meet those needs. I am being supervised in conducting this study by Dr. Lannie Kanevsky, Associate Professor in the Faculty of Education at Simon Fraser University.

Participants will complete this online survey containing 47 questions, which will take approximately 20 - 30 minutes.

It is my intent to maintain confidentiality. This survey is hosted on a secure server on the Simon Fraser University campus. There will not be any identifying information recorded when you fill out the survey. Since this study is the beginning of a process of resource development, it is my intent to use the data from this study in future research.

You may withdraw your participation at any time. You may register any complaint with the Director of the Office of Research Ethics: Dr. Hal Weinberg, Director, Office of Research Ethics, Simon Fraser University 8888 University Drive Multi-Tenant Facility Burnaby, B.C. V5A 1S6 hal_weinberg@sfu.ca.

You may obtain copies of the results of this study upon its completion by contacting: Ms. Debbie Clelland, PhD Student in Education, Simon Fraser University, clelland@sfu.ca.

By clicking on the "Next" button and filling out this online survey you are consenting to participate in this research study and to have this data used in future research.

It is important that only one parent from each family fills out the questionnaire.

First I would like to learn something about you. This information will be used to describe the group who responded to the survey. Please answer the following questions about yourself. Click "Next" to begin.

- Q1 . What is your gender?
Female
Male
- Q2 . What is your marital status?
Single
Married/Common Law
Separated
Divorced
Widowed
- Q3 . What percentage of the time do your children live with you? For example, if your children live with you 100 percent of the time, enter 100 below.
Percentage :
- Q4 . What kind of community do you live in?
Rural
Suburban
Urban
- Q5 . To which ethnic group(s) do you and your partner belong? Please select all that apply. If these groups do not include your ethnicity, please select N/A and enter your ethnic group in the next question.
Asian
Black
Caucasian
North American Aboriginal
N/A
- Q6 . If the ethnic groups in the previous question did not represent your ethnicity or that of your partner, please enter the other ethnicity below.
Other ethnicity :
- Q7 . How old are you? For example, if you are 40 years old, enter 40 below.
Age:
- The next set of questions asks about your gifted child or children.
- Q8 . What is the date of birth of your oldest child? Please enter the date Month, Day, Year (e.g. March 10, 2001).
Birth date :
- Q9 . What is the date of birth of your second child? (e.g. March 10, 2001) Please enter N/A if you do not have a second child.
Birth date :

- Q10 . What is the date of birth of your third child? (e.g. March 10, 2001) Please enter N/A if you do not have a third child.
Birth date :
- Q11 . What is the date of birth of your fourth child? (e.g. March 10, 2001) Please enter N/A if you do not have a fourth child.
Birth date :
- Q12 . Have any of your children been formally identified as gifted at school or by a psychologist?
Yes
No
- Q13 . Do you have any children who have not been formally identified but you suspect they are gifted?
Yes
No
- Q14 . Please select all forms of schooling that your gifted child or children attend.
Public School
Private School
Homeschooled
Not school age
- Q15 . Do your gifted children have any other "labels"? If yes, please select all that apply.
Learning Disability
Attention Deficit Disorder
Attention Deficit Hyperactivity Disorder
Asperger's Spectrum
Oppositional Defiant Disorder
N/A
- Q16 . If your child has another label not mentioned in the previous list, please enter the label below.
Other label :
If your gifted child or children are school age (5 - 18 years old), please answer the next set of questions indicating any provisions made for their exceptional abilities. If your children are not school age, please click "Next" until you reach Question 21.
- Q17 . Are your gifted children in special school-related programming for the gifted? If yes, please select all programming that your gifted children are currently participating in.
Gifted cluster class
Pull out challenge program
In-class enrichment
In-class differentiation
Accelerated in one or more school subjects

Grade acceleration

Early entrance to school or post-secondary education

N/A

Q18 . If your children participate in a special program not mentioned in the previous list, please list the program below.

Other school-related program :

Q19 . How long have your gifted children participated in special gifted programming?

Number of years :

Q20 . Over the past year have your children attended extracurricular programs for the gifted? If yes, please select all that apply.

After school program

Saturday program

Summer programming

N/A

Q21 . Do your gifted children participate in any other extracurricular gifted programs? Please list the program below.

Other extracurricular programs :

The next section asks questions about your family's history with and your understanding of giftedness.

Q22 . Do you think you were a gifted child?

Yes

No

Q23 . If yes, were you formally identified as gifted?

Yes

No

N/A

Q24 . Looking back, do you think anyone else in your family or your partner's family was a gifted child?

Yes

No

Q25 . If yes, then what relation is he/she to you?

Relation :

Q26 . How long have you been learning about giftedness in relation to yourself or your child/children?

Number of years :

The next set of questions asks about how well you understand different types of giftedness.

Q27 . Please rate your level of understanding of the following forms of giftedness:
Very Low Low Moderate High Very High

Intellectual or cognitive giftedness :

Social giftedness :

Emotional giftedness :

Creative giftedness :

The next section asks questions about your need for information.

Parents are often able to face challenges related to parenting their gifted children once they have the appropriate information.

At the end of this section on information you will be asked which three topics you would most like information on. You may want to either make a mental note of the highest priority topics as you complete Questions 28 - 31, or use the "Previous" button to go back and "copy and paste" the top three into the comment box.

For the remainder of the survey, the word "child" will be used; however, if you have more than one gifted child, please respond based on whichever gifted child the question applies to.

Q28 . Please rate how important it is to you to have information on topics related to a general understanding of gifted children.

Very Low Low Moderate High Very High

Definitions and characteristics of giftedness :

Methods of identifying gifted children :

Normal physical and social development may happen at a different rate in gifted children :

Emotional development in gifted children :

Intellectual development in gifted children :

Differing levels of development within the same child :

Common issues which arise in families with gifted children :

Possible positive and negative aspects of the "gifted label"

Q29. Please rate how important it is to you to have information on topics related to your gifted child.

Very Low Low Moderate High Very High

My child's particular combination of strengths and challenges associated with giftedness :

The resulting educational needs of my child

My child's post-secondary selection :

My child's career and life planning :

Q30 . Please rate how important it is to you to have information on topics related to school-related education for your gifted child (including homeschooling).

Very Low Low Moderate High Very High

Advantages and disadvantages of public, private and homeschooling options for gifted children in my local area :

How to gain access to gifted programming options such as challenge centre programs for my child :

Expectations of parent participation in district gifted programming (e.g. driving to the program):

Feasibility of changing schools to have access to more gifted programming options:

Communicating with my child's teacher about his/her giftedness and related educational needs :

Ensuring my child is challenged at school (e.g. asking for breadth/depth extensions on projects or in particular subjects) :

Advocating for gifted programming in my school district :

Teaching my child to advocate for his/her own educational needs :

Please rate how important it is to you to have information on topics related to
Q31 . community- based extracurricular enrichment for gifted children.

Very Low Low Moderate High Very High

How to support learning through enrichment activities :

Recommended extracurricular activities that are often enjoyed by gifted children :

Q32 . Of the topics outlined previously in the information section, which three topics are most important to you?

Most important topics:

Q33 . If you would like additional information related to your gifted child that is not in the information section, please describe this information below.

Additional information

The next section asks questions about your concerns and need for support. Sometimes parents of gifted children have all the information they need, and they still have worries or concerns about parenting their gifted children.

At the end of this section on concerns you will be asked which three concerns you would most want support for. You may want to either make a mental note of the topics you are most concerned about as you complete Questions 34 - 40, or use the "Previous" button to go back and "copy and paste" the top three into the comment box.

Q34 . Please rate your level of concern about your gifted child in general.

Very Low Low Moderate High Very High

My child feels pressure to meet expectations of others :

My child is perfectionistic :

My child is "high strung" :

My child has difficulty with transitions due to intense focus :

My child is overly inattentive or daydreams :

My child is hypersensitive :

My child is noncompliant or behaves in an oppositional manner :

My child has low self-esteem :

My child has physical problems with no known medical cause (i.e. loss of appetite, headache, stomach-ache, overweight, loss of sleep, etc.) :

My child often feels intensely anxious or fearful :

My child often feels intensely angry or frustrated:

My child often feels intensely sad or depressed :

My child feels suicidal :

Q35 . Please rate your level of concern about your child at school.

Very Low Low Moderate High Very High

There is a lack of gifted programming for my child :

My child lacks academic challenge or is bored in the classroom :

My child fails to work up to his/her potential

(with or without poor grades) :

My child lacks motivation for school learning :

My child is disorganized, forgetful, or has a tendency to lose or misplace things :

My child is not following the school rules :

My child refuses to go to school :

My child is in conflict with his/her teachers or administrators :

Q36 . Please rate your level of concern about your child's teacher or gifted programming at the school.

Very Low Low Moderate High Very High

The teacher doesn't think my child is gifted :

Each year I have to train the teacher about meeting my gifted child's educational needs in the classroom :

The teacher doesn't have time to adapt curriculum for gifted education :

The school does not support parent-led gifted programs :

The support teacher doesn't have time to work with gifted students due to working with other special needs children :

Q37 . Please rate your level of concern about your child with his/her peers.

Very Low Low Moderate High Very High

My child argues or fights with friends or peers :

My child has friends that are older or younger than him/her :

My child feels different from his/her peers :

My child is being bullied by peers :

My child is isolated from or being rejected by peers and feels lonely :

My child has undesirable friends :

My child believes he/she must act "dumb" or hide his/her abilities to be accepted by peers :

My child has poor social skills :

Q38 . Please rate your level of concern about having a gifted child in your family.

Very Low Low Moderate High Very High

Major family decisions are made based on my gifted child's educational needs :

My gifted child is noncompliant or behaves in an oppositional manner resulting in discipline issues:

My child hides his/her gifts at home:

My family is experiencing financial strain due to money spent on my gifted child's needs :

Please rate your level of concern about having a gifted child in your family. If Q39 . you have only one child or do not have a partner, please select N/A for the appropriate question.

N/A Very Low Low Moderate High Very High

There is sibling conflict amongst my gifted children because some children have been identified as gifted and some have not :

I am watching for giftedness in my other child

We are experiencing marital stress related to disagreement about our child's giftedness or what is necessary for our child's development

Q40 . Please rate your level of concern about being a parent of a gifted child.

Very Low Low Moderate High Very High

It is difficult to maintain my role as parent when my gifted child is adult-like :

It is difficult to maintain a balanced focus on academics and other types of development in my gifted child :

I feel pressure to support my gifted child's talent development to the fullest extent possible :

I feel that my gifted child's success at school depends on my ability to be a good advocate :

I worry that my gifted child may have a bad school experience like another member in our family did :

It is difficult to find other parents who understand what our family is experiencing :

It is difficult to understand my child with gifts that do not fit within traditional academic learning :

Q41 . Of the previously mentioned concerns, which three concerns do you feel you most need support for?

Highest concerns:

Q42 . If you have additional concerns related to your gifted child that are not mentioned in the concerns section, please describe these concerns below.

Additional concerns:

The next section asks questions about where you turn for information and support related to your gifted child.

When you have a question about parenting or guiding your gifted child, where do you turn for information?

When you have a concern related to your gifted child, where do you turn to get support, advice, strategies for coping or a listening ear?

Q43 . Please rate the likelihood you will turn to the following sources for information or support. If you do not have contact with the source listed, please select N/A.

N/A Very Low Low Moderate High Very High

To my partner for information :

To my partner for support :

To my ex-partner for information :

To my ex-partner for support :

To my parents or parent-figures for information :

To my parents or parent-figures for support :

To my partner's parents or parent-figures for information :

To my partner's parents or parent-figures for support :

To my friends for information :

To my friends for support :

To my family doctor or pediatrician for information :

To my family doctor or pediatrician for support :

To my minister or equivalent for information :

To my minister or equivalent for support :

Q44 Please rate the likelihood you will turn to the following sources for information or support. If you do not have contact with the source listed, please select N/A.

N/A Very Low Low Moderate High Very High

To a helping professional in my community (e.g. counsellor or psychologist) for information :

To a helping professional in my community (e.g. counsellor or psychologist) for support :

To a support group of parents of gifted children for information :

To a support group of parents of gifted children for support :

To an Internet on-line parent community for information :

To an Internet on-line parent community for support :

To my child's teacher for information:

To my child's teacher for support :

To the support teacher for information:

To the support teacher for support :

To my local librarian for information :

To my local librarian for support :

To books or articles about gifted children for information :

To books or articles about gifted children for support :

Q45 . If you have additional sources you turn to for information or support, please describe them below.

Additional sources:

The next section asks questions about how you would like to receive information or support.

Q46 . Thinking of any unmet needs you have for information or support, please rate your level of interest in the following forms of assistance.

Very Low Low Moderate High Very High

Print or Internet-based text materials
(e.g. newsletter, brochures, web site) :

Single session presentation or seminar
by an expert :

Single session presentation by another
parent of a gifted child :

Video or audio presentations by
experts for home use (e.g. CD, DVD,
Internet-based) :

Multiple session parent education
group conducted by an expert :

Multiple session parent education
group conducted by another parent of
a gifted child :

Ongoing social support and advocacy
group with other parents of gifted
children :

Q47 . If you would like additional forms of information or support, please describe these below.

Additional forms:

This is the end of the survey. Please click "Submit" when you are finished. If you want to review or change any answers, use the "Previous" button. Your answers cannot be changed once you click "Submit".

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Appendix H: Newsletter and Website Advertisements

Newsletter advertisement

I am looking for parents of gifted children to participate in an online survey for my PhD research called "Needs of Parents of Gifted Children." My intention is to learn from parents about their needs in order to assist organizations who try to meet those needs.

I have a strong commitment to helping parents of gifted children which is informed by being a parent of gifted children, and working for 10 years as a Registered Clinical Counsellor. I am being supervised in conducting this study by Dr. Lannie Kanevsky, Associate Professor in the Faculty of Education at Simon Fraser University.

It is important to directly ask parents what kinds of assistance they might benefit from in parenting their gifted children. With the results of this survey, I intend to develop materials and provide information related to parents' needs to existing organizations and professionals who support parents. I will share the summary of results of my research with any participants who would like that information.

The survey consists of 47 questions, and takes approximately 20 – 30 minutes to complete. Your answers are confidential, and your name or other identifying information will not be recorded in any way. If you would like to volunteer, please do one of the following: contact me to have the survey invitation and link emailed to you <clelland@sfu.ca>, or enter the link below in your web browser.

[http://websurvey.sfu.ca/survey/\[survey number link\]](http://websurvey.sfu.ca/survey/[survey number link])

I am grateful for your participation.

Debbie Clelland, M.A., RCC
PhD Candidate, SFU
clelland@sfu.ca

Website advertisement

Have you filled out your parent survey? If not, click here to go to the survey page.

[survey link]

Appendix I: First Follow Up Email

Dear parents of gifted children,

A few days ago you received an invitation to participate in my survey, “Needs of Parents of Gifted Children.” Thank you very much to those of you who have completed the survey.

If you have not yet completed the survey, please consider filling out the survey now. It is by learning about the experiences of parents like you that I will be able to develop materials and assist parent networks to support parents as they navigate the challenges of raising their gifted children.

As I mentioned in my first message, no identifying information will be recorded when you fill out the survey. The survey consists of 47 questions, and takes 20 – 30 minutes to complete. If you would like to volunteer, please click the link below to go to the consent form and online survey.

[http://websurvey.sfu.ca/survey/\[provincial survey number\]](http://websurvey.sfu.ca/survey/[provincial survey number])

If you have any questions about the survey or its contents, please contact me at Clelland@sfu.ca

Sincerely,

Debbie Clelland, M.A., RCC
PhD Candidate
clelland@sfu.ca

Appendix J: Second Follow up Email

Dear parents of gifted children,

Over spring break GCA Local Member Group leaders sent you an invitation to participate in my online survey "Needs of Parents of Gifted Children." If you have already completed the survey, thank you very much for your participation. As there is no identifying information recorded, I am not aware of who has completed the survey. However, I am contacting you and others now to ask if you have not done so, to please consider adding your thoughts and experiences by completing the survey at this time.

My intention is to learn from parents about their needs in order to assist organizations who try to meet those needs. I have a strong commitment to helping parents of gifted children which is informed by being a parent of gifted children and working for 10 years as a Registered Clinical Counsellor. I am being supervised in conducting this study by Dr. Lannie Kanevsky, Associate Professor in the Faculty of Education at Simon Fraser University, and a long time member of the GCABC.

Very little research has directly asked parents what kinds of assistance they might benefit from in parenting their gifted children. Once I have gathered this information, I intend to develop materials and provide information about parents' needs to existing organizations and professionals who support parents. I will share the summary of results of my research with the GCABC and any participants who would like that information.

The online survey will be available until [date]. The survey consists of 45 questions, and takes approximately 20 – 30 minutes to complete. Your answers are confidential, and your name will not be recorded in any way. If you would like to volunteer, please click the link below to go to the consent form and online survey.

[http://websurvey.sfu.ca/survey/\[provincial survey number\]](http://websurvey.sfu.ca/survey/[provincial survey number])

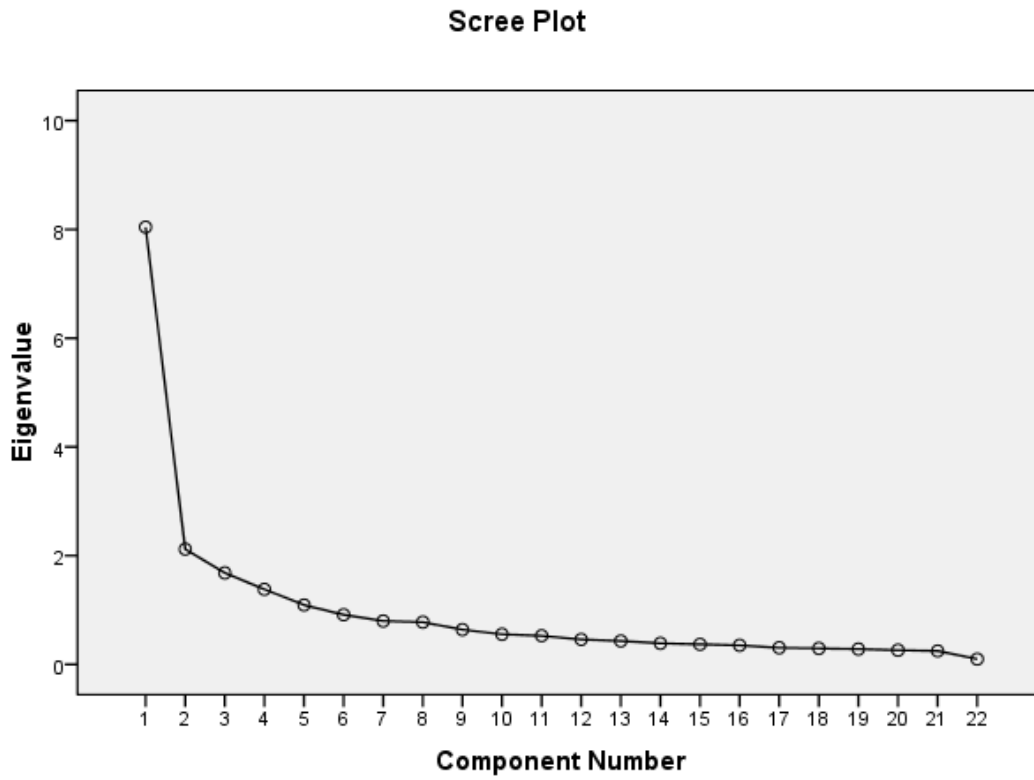
It is important that only one parent from each family answers the questions, and that parent only fills out the survey one time.

I very much look forward to learning about your experiences of parenting your gifted children. If you have any questions about the survey or its contents, please contact me at clelland@sfu.ca

Sincerely,

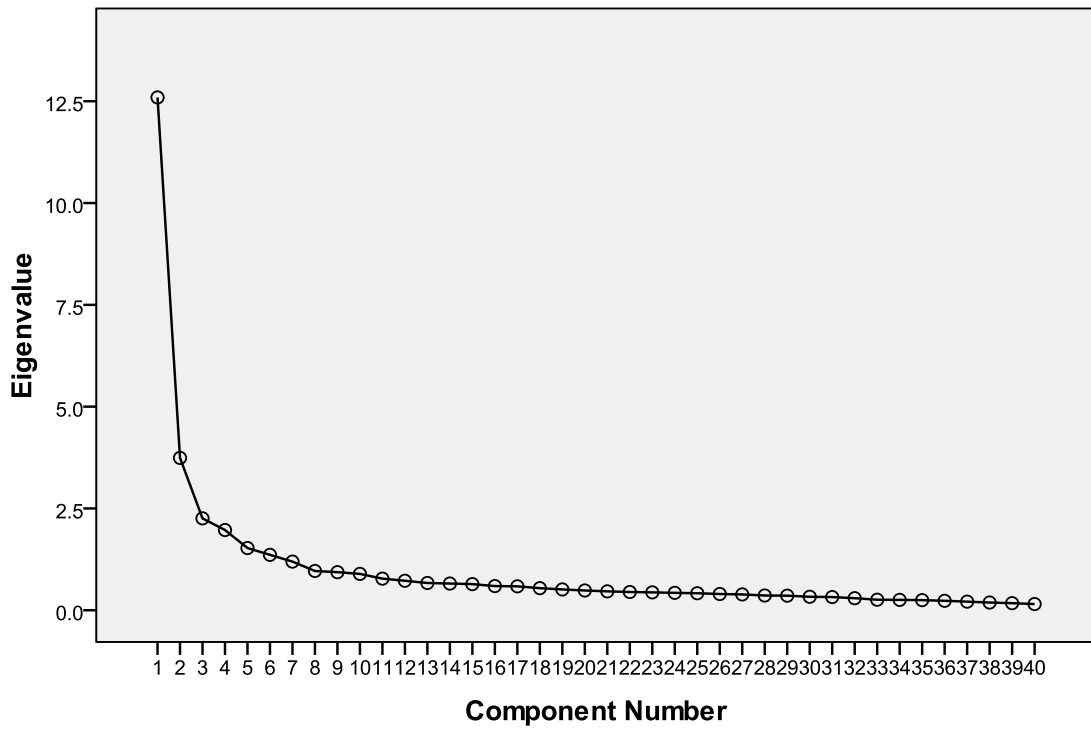
Debbie Clelland, M.A., RCC
PhD Candidate
clelland@sfu.ca

Appendix K: Scree Plot for the “Information” Section



Appendix L: Scree Plot for the “Concerns” Section

Scree Plot



Appendix M: Topics and Explanations of Open-ended Responses Not Fully Addressed by Survey Items

Topic	Explanation and example quotation
Parent gifted child to balance school work & life	“Ensuring that he has a ‘fun’ and balanced childhood”
Parent gifted child to be assertive	Parents want gifted children to learn to be assertive with peers and teachers “High concern for others' feelings even if detrimental to herself - wanting to please others”
Parent gifted child to be happy	“How I can best help my child live a happy and fullfilled life - now and in the future.”
Parent gifted child to persevere	“How to help them stick to completing a project/task before jumping ahead to the next "big idea" or getting frustrated and wanting to quit because it can't turn out like they picture it in their heads due to lack of time, money, energy or expertise.”
Parent gifted child to value self and not insult others	Teach child to be proud of and honour own gifts and not to put down others “teaching our child to not flaunt his inteligenge, but to not hide it or feel he has to down-play it either.”
Parent's expectations about gifted child	“Sometimes parents' expectations can be too high....”
Parent's experience is positive	“Our gifted child is comfortable in her own skin. Goes to a GATE program, has friends at school and outside of school, is active in sports, music and science fair.”
Parent related to multipotentiality	Child is unsure which career to choose with too many choices “I am very frustrated with a system that expects children to have a career focus starting in grade 7. My gifted children have so many interests and strengths that it is unfair to them to have to chose one at such a young age.”
Parent teen	“Learning how to deal with an overly emotional, gifted teenager who can talk circles around her parents because of her intellect, yet lacks the maturity to consider the consequences of her actions!”

Topic	Explanation and example quotation
Parent child related to lack of focus	“Has difficulty in participating in extracurricular activities because of focus issues”
Parent child related to sleep problems	“I have often noticed that gifted children tend to have trouble with sleep, nightmares, night terrors, some girls we know have abnormal fears; I'd love to know if this is the case”
Parent child related to stress	“I worry about striking a balance of encouraging him to reach his potential without pressuring him to always perform. I want him to be somewhat carefree, however he is always analysing and doesn't seem to relax.”
Understand brain development	“Understanding of his particular and unusual gifts and what differences in the brain make these possible i.e. teaching himself to read, like an adult, at age 2”
Understand gifted girls	“Harder for a girl to be gifted”
Understand relationship between education and life success	“Gifted children who happen to be lucky enough to find a challenging school program, do they end up any more successful as adults? Or do they end up at the same place as gifted children who do not have any options?”
Assessments	<p>Unsure how often child should be assessed, when & where to get assessments done, and how to understand the results</p> <p>“I would like to get a psycho-educational assessment for my child. It costs \$1800.00 and we can't afford it. How could we get funding for this?”</p>
Decide to home school	<p>Most parents described home-based distributed learning</p> <p>“A lot of our "problems" with our gifted child have vanished now that we homeschool and use a distance education program that is flexible. This program allows him to work at his own level, which is well above his peers. it also gives him freedom to work at his own pace. Many of my friends with gifted children have also seen their supposed "problems" disappear when SCHOOL disappeared.”</p>
Want community to understand	<p>Parents want understanding from parents of average ability children, the media, teachers, principals, and other community members such as babysitters</p> <p>“I also would like to know more about finding community support for gifted kids; how do I find a GP who understands the role of giftedness in diagnosing and treating kids? How do I find public swimming lessons with an instructor who understands intensity?”</p>

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