# INVESTIGATING THE RELATIONSHIP BETWEEN PERCEIVED SOCIAL SUPPORT AND PARENT SELF-EFFICACY IN PARENTS OF PRESCHOOL-AGED CHILDREN

by

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#### Abstract

The relationship between perceived social support and parent self-efficacy was investigated in this study. The concept of self-efficacy as defined by Bandura was explored and the concept of perceived social support examined. It was hypothesized that high levels of perceived social support would be related to high levels of parent self-efficacy. Participants were 77 parents of children 2 to 5 years who had not yet started kindergarten. Parent selfefficacy was measured using the Parenting Sense of Competence Scale (PSOC; Gibaud-Wallston & Wandersman, 1978). Parents' perceived social support was measured through the Social Provisions Scale (SPS; Cutrona & Russell, 1987). The shortened Perceived Stress Scale (PSS-10; Cohen & Williamson, 1988) was used to determine the levels of parents' general life stress. The possibility of a stress-moderated model was explored and analyzed using SPSS (Statistical Package for the Social Sciences) software. A significant positive relationship between social support and parent self-efficacy was noted as were significant negative relationships between stress and social support and stress and parent self-efficacy. There was no significant difference in the social support and parent self-efficacy relationship based on the levels of stress (moderated model). There was significant mediation of the social support/parent self-efficacy relationship by stress. Including stress in the regression accounted for 34% of the variance in parent selfefficacy scores (compared to 15% when only social support was included). The present study discusses the benefit of social support programs for families with preschool-aged children within a specific population.

## Preface

This study was conducted with the approval of the University of British Columbia's Behavioural Research Ethics Board certificate number H11-00555.

### **Table of Contents**

Abstract	ii
Preface	iii
Table of Contents	iv
List of Tables	viii
List of Figures	ix
Acknowledgements	x
Dedication	xi
Chapter One: Introduction	1
Terminology for the Present Study	2
Child.	2
Parent.	3
Perceived social support.	3
Parent self-efficacy.	3
Perceived stress.	3
Statement of Purpose	4
Research Questions	4
Chapter Two: Review of the Literature	6
Bioecological Model	6
Social Support	8
Social networks.	8
Benefits of social support	9

	Parent Self-Efficacy	. 13
	Self-efficacy, self-esteem, and similar concepts.	. 13
	Increasing self-efficacy.	. 15
	Benefits of self-efficacy.	. 16
	Parent Self-Efficacy and Social Support	. 19
	Stress	. 22
	Summary	. 23
Chapte	er Three: Methodology	. 24
	Overview	. 24
	Instrumentation	. 24
	Family Background Questionnaire.	. 24
	Parenting Sense of Competence Scale	. 24
	Social Provisions Scale	. 26
	Perceived Stress Scale	. 27
	Participants	. 28
	Recruitment and Consent	. 30
	Ethics	. 31
	Data Analysis	. 32
	Significance and missing data.	. 32
	Examining the assumptions.	. 32
	Regression analysis.	. 32

Chapter Four: Results	33
Overview	
Research Question One	
Research Question Two	36
Post-Hoc Analyses	41
Effects of income	42
Summary	43
Chapter Five: Discussion	44
Overview	44
Demographic Variables	44
Discussion of Key Findings	
Research question one	45
Research question two	47
Limitations of the Study	49
Strengths of the Present Study	50
Implications of this Study	51
Research.	51
Practice	52

Directions for Future Research	52
Concluding Comments	54
References	56
Appendix A: Family Demographic Questionnaire	67
Appendix B: Parenting Sense of Competence Scale (PSOC; adapted from Johnston & Mash	ι,
1989)	70
Appendix C: Social Provisions Scale – Short Form (SPS-10; Russell & Cutrona, 1984)	72
Appendix D: Perceived Stress Scale – 10 (PSS-10, Cohen & Williamson, 1988)	73
Appendix E: Recruitment Letter	74
Appendix F: Consent Letter	75

## **List of Tables**

Table 1	Demographic Characteristics of Participants (N=77)	29
Table 2	Characteristics of the Families	30
Table 3	Means and Standard Deviations for PSOC and SPS Scores	34
Table 4	Social Provisions Scale Score as a Predictor of Results on the Total Scale and Subscale	les
	of the PSOC	35
Table 5	Correlations, Means, and Standard Deviations of all Measures.	37
Table 6	Predictors of Parenting Sense of Competence	38
Table 7	Regression Analysis Summary for Variables Affecting the Results on the PSOC Scale	<b>;</b>
	Including the Interaction Variable	40

# **List of Figures**

Figure 1	Representation of Bronfenbrenner's ecological model.	7
Figure 2	The hypothesized model.	36
Figure 3	The hypothesized mediated model.	41
Figure 4	The results of the mediated model	42
Figure 5	The relationship between social support and parent self-efficacy at different levels of	
	stress	48

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# To my family

#### **Chapter One: Introduction**

Nobody has ever before asked the nuclear family to live all by itself in a box the way we do.

With no relatives, no support, we've put it in an impossible situation. ~Margaret Mead

Healthy, stable, supportive families produce healthy, resilient children who are able to function well in school and society. The reality is that families need support of their own to be healthy, stable, and supportive. In today's mobile society, families often move away from their extended families for various reasons including employment, housing, and life changes such as getting married or starting a family (Mulder & Cooke, 2009). In 2010/2011 over 258,900 new immigrants arrived (Statistics Canada, 2012a) and in the final quarter of 2011 it is estimated that 63,750 Canadians changed provinces (Statistics Canada, 2012b). The once common situation of supportive grandparents, aunts, uncles, and cousins living close by to help a family as it faced the challenges of raising children has become less common. Families still require support; however, the traditional extended family is often no longer available to provide this support. It is to society's benefit to support families so that the parents can do their best job raising the children. Casual observations and research have shown the difference between parents who appear supported by those around them and those who do not have extensive social support (Balaji, Claussen, Smith, Visser, Morales, & Perou, 2007; Jackson, 2009). Parents who have social support are more resilient than those who are more isolated and are better able to handle the daily challenges posed by parenting a young child (Ekas, Lickenbrock, & Whitman, 2010; Lee, Anderson, Horowitz, & August, 2009; Unger & Powell, 1980). According to Bronfenbrenner (1979, 1986), the support that parents receive affects their view of their abilities (parent selfefficacy) and subsequently their ability to raise their children effectively.

Self-efficacy is the belief in one's abilities to carry out behaviours, and parent self-efficacy is one's view of one's own parenting abilities. Strong self-efficacy is linked with reduced parental stress levels (Jackson, 2000; Jackson & Huang, 2000; Raikes & Thompson, 2005), increased parental sensitivity (Teti, O'Connell, & Reiner, 1996); and decreased parental depression (Teti & Gefland, 1991). Given these benefits, it is worthwhile to investigate how to increase parent self-efficacy. Links between social support and parent self-efficacy have been documented, but research has focused on these two concepts as separate dependent variables (Chislett & Kennett, 2007; Gross, Fogg, & Tucker, 1995; Lipman & Boyle, 2005), separate independent variables affecting stress levels (Raikes & Thompson, 2005) or factors that can positively affect stressed parents (Swick, 2009). In the present study, social support as a means to increase parent self-efficacy and how that relationship is moderated by parental stress levels was examined.

#### **Terminology for the Present Study**

Throughout the study, the following terms are used: child, parent, perceived social support and parent self-efficacy. As they are sometimes used in different ways by different researchers, these terms as used in the present study are defined below.

Child. A person between the ages of 2 to 5 years who has not yet started kindergarten. This age range was chosen because before age two, families often have continuing connections with the health care system which could be considered a form of support. Routine vaccinations end at 18 months until children receive the school entry booster vaccination. It was noted in another study that the age of two is also significant as toddlers are more mobile than infants and start to test the boundaries imposed by the parents (Coleman & Karraker, 2003). Parents are then faced with new challenges which can prompt them to develop social support networks as they

seek information about their child's behaviour. Once children enter school, parents have the opportunity to meet each other at school drop off and pick up, Parent Advisory Council (PAC) meetings, or volunteer activities. Social support systems can develop more easily than when one has to seek out a peer group. This study focused on the social support of parents before they are likely to have a more formal social support system available to them when their children enter school.

**Parent.** The parent is an adult caregiver who is responsible for the child the majority of the time. This included biological parents, adoptive parents, step-parents and foster parents. This study was not limited to biological parents because it was the relationship between the parent's social support and their self-efficacy that was of interest and this relationship may exist regardless of the nature of the relationship between the adult and the child.

**Perceived social support.** For the purposes of the present study, perceived social support was any support that the parent believed was available to him/her. Perceived social support can include emotional, financial, and informational support. Perceived rather than enacted social support was measured as the parents' perceptions affect their beliefs. Additional discussion of perceived social support is included in Chapter Two.

**Parent self-efficacy.** The belief that one's actions have an effect within the parenting domain is defined as parent self-efficacy in the present study. Parent self-efficacy and not self-esteem or locus of control was investigated in the present study as it was hypothesized that these concepts may not be associated with positive actions in parenting. Further discussion of parent self-efficacy is included in Chapter Two.

**Perceived stress.** Perceived stress is defined as one's own views of one's life in the past month. This stress is general in nature and not specifically related to the activities of parenting.

It can include financial stress, relationship stress and job stress. There is a more detailed discussion of perceived stress in Chapter Two.

#### **Statement of Purpose**

The purpose of the current study was to investigate the relationship between perceived social support and parent self-efficacy. While there is research regarding the effects of more formalized parenting programs on parent self-efficacy (Chislett & Kennett, 2007; Gross et al., 1995), there is little information on the contributions of social support to levels of parent self-efficacy. Much of the research that investigates social support and parent self-efficacy examines these two constructs as both dependent variables resulting from an intervention or as co-occurring independent factors and their resulting effects on parenting behaviour or parental stress (Raikes & Thompson, 2005; Swick, 2009). In the present study, the effect of perceived social support on parent self-efficacy in families with children aged 2 to 5 years who have not yet entered kindergarten was examined.

#### **Research Questions**

- 1) Is there a relationship between perceived social support and parent self-efficacy? Hypothesis: A positive relationship between perceived social support and levels of parent self-efficacy was expected. Previous literature indicates that there is a relationship between formal social support (such as parenting programs) and parent self-efficacy levels (Chislett & Kennett, 2007; Jackson, 2009).
- 2) If there is a relationship, is it moderated by the stress levels of the parent?

  Hypothesis: The relationship between perceived social support and parent self-efficacy was expected to be stronger in parents with moderate stress levels than in those with very high or very low levels of stress. In addition, it was anticipated that the self-efficacy of parents with low

stress levels and parents with high stress levels would have a weaker relationship with their perceived social support than those with moderate stress levels because in high stress situations the effects of social support would be eclipsed by the stress and in low stress situations, the effects of social support would be negligible (Jackson, 2000; Ceballo & McLoyd, 2002).

#### **Chapter Two: Review of the Literature**

In this chapter, the literature relevant to the concepts of social support, parent self-efficacy, parent stress, and the relationships between them is reviewed. The historical perspectives and the current theories of these concepts are examined. These concepts have been studied in various countries and with different participant populations. The importance and benefits of parent self-efficacy are enumerated and this concept is distinguished from self-esteem and parent empowerment. The various elements of social support (informational, emotional and financial) and the types (perceived versus enacted) are discussed. The impact of stress on the concepts of social support and parent self-efficacy is considered.

#### **Bioecological Model**

Urie Bronfenbrenner proposed a bioecological view of the developing person (Bronfenbrenner, 1979, 2001; Bronfenbrenner & Evans, 2000). It was within this model that the current study viewed social support. Bronfenbrenner's model is represented in Figure 1. The parents' perceived social support resides within the mesosystem of this model if the developing person is the child in the family. The mesosystem consists of the interactions between two microsystems. For example, interactions between home and school (discussions between the teacher and parents) would be a part of the child's mesosystem while interactions between family members and medical professionals would be part of a parent's mesosystem. According to Bronfenbrenner, the social support system of the parents in the family does not specifically affect the developing child; however, social support does affect the family in various ways that in turn affect the child. These influences include an improvement in maternal mental health (Balaji et al., 2007) and effects upon child social-emotional development (Marshall, Noonan, McCartney, Marx, & Keefe, 2001). Parents' life experiences, social relationships and the support they

receive from their social network all have an effect on parenting skills (deGraaf, Onrust, Haverman, & Janssens, 2009). Social support could be considered to reside within the microsystem of the model if the developing person is the parent. The effects of social support would then be considered to be proximal processes (Bronfenbrenner & Evans, 2000). These proximal processes involve exchanges between the developing person and the people, objects and situations within his or her immediate environment. These exchanges can result in positive or negative outcomes (Bronfenbrenner & Evans, 2000). For the purposes of this study, the parent was viewed as the developing person and his or her social support resided within the microsystem of the bioecological model.

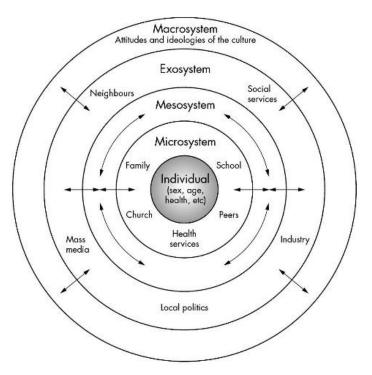


Figure 1 Representation of Bronfenbrenner's ecological model. Reproduced from Ecological perspectives in health research by L. McLaren and P. Hawe, 2005, Journal of Epidemiology and Community Health, 59, p.7. with permission from BMJ Publishing Group Ltd. The focus of this study is the microsystem.

#### **Social Support**

Social support has been characterized as being one of three types of information: that which lets us know that we are loved and cared for, that which lets us know that we are esteemed and valued, and that which lets us know we belong to a group that includes communication and mutual obligation (Cobb, 1976). One of the common theories regarding the function of social support is the buffer model. This model states that adequate social support works as a protection from harmful factors such as low income (Lee et al., 2009; Swick, 2009). According to Shinn, Lehmann, and Wong (1984), social support can only be considered social support if it includes interactions and exchanges of resources that are viewed by the recipient or the provider as beneficial to the recipient. Finfgeld-Connett (2005) noted that social support consists of both instrumental and emotional support and that it is reciprocal. Social networks provide one's social support. As a result, some discussion of social networks and their features are necessary to describe the concept of social support.

Social networks. Thompson (1995) specified the many affiliated features of social networks. The quality of these features affects the benefits received. These features included homogeneity (the extent to which the support is congruent with the receiver's beliefs and values); multidimensionality (the extent to which the different members of the receiver's support network have different roles: child care provider, listening ear, financial support, etc.); reciprocity (the extent to which the receiver can also be a donor and vice versa); valance (the emotional quality of the network); density (the extent to which the members of the receiver's social support network are in contact and/or known to each other); enacted support (that support that is actually experienced); and perceived support (that support that the recipient believes is at his or her disposal, should it be needed).

Interestingly, homogeneity of a social network can be either positive or negative. A highly homogenous social network may provide comfort but at the same time may not bring about any behaviour changes if change was the expectation of the social support (Belsky, 1984). As well, a highly heterogeneous social network may provide a wider variety of opinions but may prove to be more stressful than helpful as the recipient deals with the myriad of (possibly mixed) messages he or she receives (Belsky, 1984). There is research indicating that it is the goodness of fit between the support required and the support received that is necessary for the optimum benefits of social support (French, Rodgers, & Cobb, 1974).

**Benefits of social support.** The benefits of social support are mentioned extensively in the literature (Balaji et al., 2007; Guralnick, Hammond, Neville, & Connor, 2008; Jackson, 2009; Quittner, Glueckauf, & Jackson, 1990). Many of the studies regarding social support come from the medical field, where social support is linked to wellness, overall health, and timely recovery from various illnesses including cancer (e.g. Berkman, 1984; Hoey, Ierpoli, White, & Jefford, 2008; Uchino, 2006). Support for parents can take many different forms. It can range from informal playgroups or meetings with neighbours to formal parenting classes that have set curricula and take place over numerous weeks. Social support benefits parents in a variety of ways. However, these benefits depend on the parent receiving the support and, in some cases, the child whose parent is receiving the support. Bronfenbrenner (1986) noted that mothers with more irritable babies received the greatest benefit from social support. French et al. (1974) overviewed the various types of social support an individual receives throughout his or her lifetime and noted the need for a good fit between the support that is needed and the support that is offered in order for the full benefits of the support to be realized. The researchers concluded that if parents needed a listening ear and instead received copious amounts of advice, the social

support, although present, would not have had the same benefits as if the parents had had someone simply listen. The current study used a measure for perceived social support to avoid measuring enacted support that may not have been viewed as supportive.

Parents with adequate social support have fewer negative reactions to stress than those without adequate support. In a study of 125 mothers of children aged 9 months to 14 years, Koeske and Koeske (1990) noted that social support helped to diminish parental stress, especially among those parents who lacked in other resource areas such as parental education. Social support can positively influence maternal care-giving behaviours. In their longitudinal study of 62 African-American mothers with low-incomes, Burchinal, Follmer, and Bryant (1996) noted that larger social networks were associated with more developmentally appropriate parenting and mothers who were more attentive and less obtrusive in their interactions with their infants and preschool-aged children than those mothers who were more isolated. However, not all studies reflected this result. Lipman and Boyle (2005) studied nine groups of low income single Canadian mothers (N=116) and noted a change in mothers' mood and self-esteem following a 10-week, small-group social support intervention. However, there was no change in parenting or in levels of social support. Furthermore, the differences in mood and self-esteem decreased over the follow-up period with no significant differences between the intervention and control groups noted at the 18-month follow-up. This study raises the question of whether the improvements in mood and self-esteem would have remained had the social support continued beyond 10 weeks.

In a review of interventions that are designed to foster social networks, Balaji et al., (2007) found that two types of social support were particularly helpful for parents of young children: the provision of childcare and the provision of emotional support. Positive social

support was found to help mothers use adaptive parenting techniques and cope with stressful life events. Balaji et al. noted that larger and supportive social networks were associated with increased self-efficacy in comparison with smaller or less supportive networks. These social networks were also linked with less harsh and punitive parenting styles in low-income families (Balaji et al., 2007).

The stress-reducing benefit of social support is not a recent idea, nor is it solely a North American phenomenon. Francois Dolto, a French psychoanalyst, was interested in mothers who were experiencing stress because of their isolation and participation in "intensive mothering", a term he used to describe the experience of being the main caregiver for a young child, concerned almost entirely with the well being of the child. In 1979, he founded La Maison Verte, a drop-in centre where mothers could meet with other mothers of young children to avoid isolation (Rullo & Musatti, 2005). Rullo and Musatti (2005) sought to examine this phenomenon in a large Italian city. Telephone interviews with 384 mothers of children aged 1-3 years indicated that mothers look for social contact that allows them to share the mothering experience. Rullo and Musatti contended that this need for social contact does not stem from social isolation, as it is similar for mothers with varying levels of social interaction. They confirmed their hypothesis that having the chance to participate in various social networks helped mothers to feel confident in their role (Rullo & Musatti, 2005).

In the Home Start program in the United Kingdom (UK), trained volunteers visited willing families with children from birth to age five. In interviews with 305 families involved in Home Start, Frost, Johnson, Stein, and Wallis (2000) noted that 64% of participants reported improvements in maternal emotional well-being following the program. The specific service

that was reported as helpful was having a neutral person to listen without judgment who was concerned for and developed a relationship with the family.

Social support programs in Australia included supported playgroups, led by a facilitator, as a place for parents to come with their child and socialize with other families with young children. In a qualitative study of three separate playgroups, Jackson (2009) found that parents benefited from the social support provided through these playgroups regardless of their socioeconomic status or the structure of their family.

Social support and socio-economic status. The availability and effects of social support can vary based on a person's socio-economic status (SES). In examining data from the ECLS-K study (N=12,580), Turney and Kao (2009) noted that families with higher SES reported more "private support," a term coined to reflect perceived social support. These families generally had more people than those in lower SES groups that they could count on to help if their child was sick or if they needed to leave their child with someone to run an errand, as well as having people available with whom they could discuss their concerns.

Henly, Danzinger, and Offer (2005) reviewed data gathered from 632 single African-American and White mothers who were residents of an Urban Michigan county and receiving TANF (Temporary Assistance for Needy Families). They noted that those respondents who reported more perceived social support also reported significantly less perceived economic hardship. They concluded that the social support networks of low-income families may have assisted them in "getting by." The results of these two studies exemplify the two sides of the relationship. Higher SES can lead to greater social support, and greater social support can buffer the negative effects of low SES.

#### **Parent Self-Efficacy**

Discussion of parent self-efficacy requires a clear understanding of the concept of self-efficacy. Albert Bandura is a major contributor to the literature on self-efficacy and much of the current understanding of self-efficacy derives from his writings. Bandura (1977, 1982) posits that perceived self-efficacy consists of the judgments one makes about one's ability to deal with current or prospective situations. He stated that it was these judgments that determined what actions we took and how long we persisted in an action. Maddux (2000) reaffirmed that self-efficacy was people's beliefs about what they were capable of doing. People with poor self-efficacy would determine themselves incapable of dealing with a situation or perhaps judge their actions to be ineffective and subsequently prematurely desist in the aforementioned action.

People with high self-efficacy would see obstacles as challenges and believe themselves to be up to the task, persisting in the chosen course of action.

Self-efficacy, self-esteem, and similar concepts. Bandura (2006) made a distinction between self-efficacy and self-esteem – the former being the belief in one's abilities, the latter being belief in one's worth. While some researchers use self-esteem and self-efficacy interchangeably, it is this researcher's belief that the terms refer to two different, although related, constructs, and the one under investigation in the current study was self-efficacy, not self-esteem. Self-esteem refers to the overall view one has about one's worth. Self-esteem can come from many different areas and is the culmination of one's beliefs about oneself as well as one's feelings about those beliefs (Maddux, 2000). Self-efficacy, however, is the set of beliefs that a person has about his or her abilities in a specific area. These beliefs can contribute to one's self-esteem. The impact on one's self-esteem depends on how one's abilities in this area are valued. (Maddux, 2000). If someone perceives low self-efficacy in the area of computer

programming, for example, but does not value the ability to be a good computer programmer, it will likely not negatively affect that person's self-esteem.

Bandura also discussed how locus of control, or what lies within one's own control as opposed to what lies outside of one's own control, differs from self-efficacy. One can believe that an action, such as reacting patiently to a child's negative behaviour, is entirely within one's own control (high locus of control) but still not believe that one has the ability to carry out this action (low self-efficacy). Previous research has used a locus of control measure as an indication of parental competence (e.g. Mondell & Tyler, 1981). Measuring locus of control only captures part of the construct of parental competence. Believing that something is in one's control does not mean that a person will attempt the action and experience the benefits. A parent can list all the positive behaviours necessary to improve his or her parenting; however, that parent may not believe that he or she can carry out these behaviours. Parental competence comprises more than the belief that something is within one's control. It includes the belief that one can carry out the necessary behaviours.

Efficacy beliefs also differ from outcome expectations (Bandura, 1977). Efficacy beliefs are what a person has before attempting an action, while still deciding what to do. Outcome expectations are what a person expects will happen because of that action. Bandura noted that outcome expectations would not necessarily change behaviour as efficacy beliefs will. One can understand that praising desired behaviour while ignoring negative attention-getting behaviour will lead to fewer negative behaviours (outcome expectation) but at the same time doubt one's ability to carry out this course of action (efficacy belief).

The construct of empowerment as it relates to parents has been described as having three levels. The first level includes feelings of self-efficacy. After receiving support through a home-

visiting program, parents started to have more positive feelings about themselves and their abilities as parents than they had previously (Cochran & Dean, 1991). These positive feelings were followed by increased social networks and subsequently increased social action on behalf of their children. Empowerment is something that is outside of the person. Other people and organizations can empower parents by providing the opportunities and the information needed for parents to take specific actions. Parents may feel empowered by a situation or a relationship, and it is this empowerment that can increase a parent's self-efficacy – beliefs held about one's own abilities (Dunst, Trivette, & Hamby, 2007).

**Increasing self-efficacy.** Self-efficacy is not a static state of being (Bandura, 1977) nor is it a personality trait (Maddux, 2000). Perceptions of one's abilities change depending on the situation, the information one has received from one's surroundings, and one's experiences. Self-efficacy is changeable through experiences and knowledge. People can increase their selfefficacy in four ways (Bandura, 1982, 1997; Bandura & Adams, 1977; Maddux, 2000). First, experiencing success in a particular situation (also referred to as performance experiences) increases perceived self-efficacy. Bandura and Adams (1977) considered this method to be the most effective. Trying something new and being successful is the most effective way of increasing one's self-efficacy. Second, self-efficacy is increased vicariously by witnessing another person's successful actions in that situation. This method is seen as being less effective than actually performing the action (Maddux, 2000). Third, receiving verbal encouragement that one is able to perform well (or not) in a specific domain also has an effect of one's self-efficacy beliefs. The magnitude of that effect depends on the relationship with the person giving the verbal persuasion as well as that person's perceived expertise in the area in question. Fourth, one's physiological and emotional states are influential in determining one's sense of selfefficacy. A more positive state leads to higher feelings of competency (Maddux, 2000). The success of the first method (experience) of raising self-efficacy has been noted in studies with new mothers. In a review of maternal parenting self-efficacy literature with post-partum women, Leahy-Warren and McCarthy (2010) noted that multiparous mothers consistently rated higher in measures of maternal parental self-efficacy. Mothers who have already had children may also have social support available to them. The second and third methods of raising self-efficacy beliefs (viewing someone else being successful and receiving encouragement that you can be successful) both require the support of another person. The transactional aspect of these methods strengthens the current study's proposal that social support is related to greater parent self-efficacy.

Benefits of self-efficacy. Various positive outcomes are linked to self-efficacy. People with high self-efficacy, a strong belief in their own abilities, adopt healthy behaviours, and continue to use them, in some cases successfully overcoming substance abuse problems and experiencing reduced stress (Maddux, 2000; Raikes & Thompson, 2005). Self-efficacy encourages people to continue with a particular action. One example might be exercise. If a person has high self-efficacy regarding exercise, he or she will persevere with exercising, expecting that his or her actions will have a desired outcome and that he or she is capable of completing these actions. As well, when presented with challenges such as injury or lack of time, a person with high self-efficacy will work to conquer these challenges, rather than submit to them. People's levels of self-efficacy differ in the various areas of their lives. A person may perceive himself or herself as highly self-efficacious in his or her profession, but experience low self-efficacy as a parent (Bandura, 2006). The focus of the current study was on self-efficacy in parenting. In a study of 93 employed and 95 non-employed, low-income single African-

American mothers of preschoolers in New York, Jackson (2000) investigated self-efficacy using the Mastery Scale (Pearlin & Schooler, 1978). Results indicated that those mothers with higher self-efficacy appeared to experience somewhat fewer adverse effects on their parenting when compared with those with lower self-efficacy. This was most notable in mothers of children with behaviour concerns. Those mothers with higher self-efficacy had better parenting skills. Low self-efficacy has also been linked to diminished parent competencies. Jackson and Huang (2000) studied the same participants and found that those who perceived their children as having behaviour problems were more likely to have increased depressive symptoms and increased parenting stress than those who did not report their children as having behaviour problems. The higher the stress levels, the lower the mother's ratings of her self-efficacy. In turn, those mothers with low self-efficacy exhibited less competent parenting as measured by the Home Observation for the Measurement of the Environment scale (HOME; Bradley & Caldwell, 1984). The Mastery scale, used to measure self-efficacy in these studies, is a measure of global self-efficacy, not specifically parent self-efficacy. As has been noted, one can feel self-efficacious in one area of one's life, and not in another. As well, the Mastery Scale includes questions that measure locus of control and self-esteem (Pearlin & Schooler, 1978). This raises a question of whether the construct of parental self-efficacy is actually being measured. As was stated earlier, locus of control and self-esteem are not the same as self-efficacy, although they are related. The Mastery Scale may produce scores that show a person to have strong self-efficacy, but may actually be measuring that person's beliefs that actions are within their control or that he or she feels generally worthy. According to Pearlin and Schooler (1978), the four questions used as an efficacy measure by Jackson and Huang (2000) were used to measure psychological coping resources within the mastery domain.

Sanders and Woolley (2005) examined self-efficacy as it related to parents' use of discipline. They used three measures of self-efficacy – a global measure, a maternal domain specific measure and a task-specific measure. Those parents who had low self-efficacy were more likely either to use harsh discipline or to be lax in their application of discipline than those parents with high levels of self-efficacy. Interestingly, this study noted a difference between task-specific self-efficacy and overall maternal self-efficacy. Task-specific self-efficacy, or the belief that the subject could deal with a specific task such as taking the child to the doctor or dealing with a child's talking back, was a strong predictor of parent stress levels and of parent discipline techniques. Maternal self-efficacy as measured by the efficacy subscale of the Parenting Sense of Competence Scale (PSOC) was not related to either of these, nor was it found to be significantly different between the two clinic and community groups studied. Sanders and Wooley (2005) suggested that maternal self-efficacy as measured by the PSOC (Gibaud-Wallston & Wandersman, 1978 cited in Johnston & Mash, 1989) may not be as valid as other measures. They contended that task-specific self-efficacy and global self-efficacy are better measures because of their ability to discriminate between their two populations.

In a randomized control treatment study measuring the effects of a family intervention program with mothers of preschoolers on parenting skills, MacPhee and Miller-Heyl (2003) found different results. In two trials, (N= 363; N=258) the parents' increase in self-efficacy was linked to an improvement in parenting skills (reduction of punishment and coercive interactions). While the two groups of mothers were on average the same age and with the same level of education, they differed on annual income and ethnicity. In a third study using the same intervention with groups of teen mothers, no relationship between self-efficacy and parenting skills was noted. Rather, the results of the teen mother study showed, through structural equation

modeling, that problematic child behaviour and maternal stress were directly linked with hostile parenting and that this was not mediated by self-efficacy. MacPhee and Miller-Heyl (2003) concluded that for specific high-risk groups, interventions should focus on behaviour management and emotion regulation rather than increasing parent self-efficacy.

Jones and Prinz (2005) reviewed the literature concerning parent self-efficacy and various outcomes including parental stress and role satisfaction. They found that parent self-efficacy tends to strongly negatively co-vary with parental stress, but they could not find sufficient evidence to show which came first or whether the relationship was in fact transactional. They also found that there was a relationship between parent role satisfaction and parent self-efficacy but that the direction of this relationship was unclear and could be affected by many other factors including the emotionality of the child.

#### **Parent Self-Efficacy and Social Support**

Some studies have examined parent self-efficacy and its link to social support. Suzuki, Holloway, Yamamoto, and Mindnich (2009) studied Japanese (N=114) and American (N=121) mothers of toddlers and found a positive relationship between parent self-efficacy and perceived parenting support. This relationship was mediated by the mother's satisfaction with the father's support. The more satisfied a mother was with her husband's support, the stronger her feelings of parenting self-efficacy. American mothers were more self-efficacious than Japanese mothers were; however, this relationship was highly related to the satisfaction with husband's level of support. Once the effect of the husband's level of support was controlled for, the country difference on parent self-efficacy reduced significantly.

Winkworth, McArthur, Layton, and Thompson (2010), in an Australian phone survey study of low-income, single parents with children under five (N=55), reported that two-thirds

considered themselves well linked to their social network and also had high self-efficacy. This study used the Family Empowerment Scale (Koren, DeChillo, & Friesen, 1992) to measure both the social connectedness and the self-efficacy of the single mothers.

Leahy-Warren, McCarthy, and Corcoran (2011), in a quantitative study of 410 first-time Irish mothers, found significant relationships between informal social support and maternal parental self-efficacy at six weeks post-partum. They concluded that new mothers benefited from support that was not limited to experts such as nurses and midwives, but also from their own mothers and partners. This study used a researcher-developed questionnaire as a measure of informal social support and the Perceived Maternal Parental Self-Efficacy Scale (Leahy-Warren et al., 2011).

In a longitudinal study of 260 low-income mothers of infants, Green and Rodgers (2001) found the relationship between self-efficacy and social support to be reciprocal. Mothers with higher mastery at time one also reported higher levels of support. As well, mothers with higher levels of tangible support were more likely to report higher levels of mastery at time two (one year later). Green and Rodgers (2001) suggest that, for this particular demographic group, enhancing their social support may lead to increased feelings of mastery and control over their lives.

Raikes and Thompson (2005) investigated the effects of efficacy and social support on the stress levels of families living in poverty. A group of mothers (N=65) with children ranging in age from 2 months to 3 years were contacted through their enrollment in an Early Head Start program in a Midwest city in the United States. Results revealed that parenting stress was not related to social support but significantly negatively related to self-efficacy and somewhat negatively related to income. Mothers with high self-efficacy did not show a relationship

between parenting stress and income. The authors used the Parenting Stress Index (PSI; Abidin, 1995) to measure stress. This index focuses on the stresses one feels as a parent rather than general life stress. Given this parent stress focus, it is not surprising that parent self-efficacy is strongly related to the stress index. Social support was measured by the Family Resource Scale (Dunst & Leet, 1987). Raikes and Thompson (2005) created a subscale using five of the 30 scale items including having time to spend with friends and significant others, having someone to talk to and having childcare and babysitting for children. As noted by the authors, this scale did not measure if the participant viewed the support as positive or negative. The current study proposed that a more in-depth measure of social support may produce different results.

Recent literature regarding parent self-efficacy and social support has focused on families and children with extra challenges such as those living on low-income or those raising a child with developmental disabilities (Guralnick et al., 2008; MacPhee & Miller-Heyl, 2003; Weaver, Shaw, Dishion, & Wilson, 2008). Guralnick et al. examined social support in the lives of 63 mothers of children with mild developmental delays aged 4 - 6.5 years. They found that high levels of parenting support in early childhood helped predict lower parental stress levels during the transition to elementary school. MacPhee and Miller-Heyl investigated the effects of an intervention program on the parenting practices of low-income mothers of preschoolers and found that improved self-efficacy was related to better parenting practices. Weaver et al. examined the relationship between parent self-efficacy, child conduct problems and maternal depression in a sample of 652 mother-toddler dyads over two years. They noted that parent self-efficacy increased significantly between the toddler and preschool years and that lower levels of parent self-efficacy at age two were linked with greater child conduct problems at age four, even when they controlled for the initial levels of conduct problems. These studies are a few

examples of the research available for families with identified risk factors such as low income. There has been little research done on typically developing children and/or families without risk factors. This study aimed to examine a wide range of families from various circumstances.

#### **Stress**

Stress is a concept that has many interpretations. A comprehensive overview of the concept of stress can be found in Lazarus (1966). The current study defined stress as "...some stimulus condition that results in disequilibrium in the system and produces a dynamic kind of strain...." (Lazarus, 1966, p.12). For the purposes of this study, the "system" was the parent's psychological state, as opposed to physical state, and what qualified as a stimulus condition was dependent upon that parent's interpretation. Previous studies have used the Parenting Stress Index (Abidin, 1995) or the Parental Stress Items (Pearlin & Schooler, 1978) when investigating a stress component (Dunn, Burbine, Bowers, & Tantleff-Dunn, 2001; Ekas et al., 2010; Quittner et al., 1990). This study employed a perceived general stress measure to allow the parent to define his or her stress level and to keep that separate from specific parenting stress. The questions in the measure are general enough to encourage the individual's interpretation.

Stress can affect parenting. In a study of 205 low-income mothers of children aged 2-6 years, Hall, Rayens, and Peden (2008) found that maternal chronic stressors accounted for 27% of the variability in their child's internalizing behaviours and 21% of the variability in their child's externalizing behaviours. Much of the research indicates that stress has a negative effect. Increased stress has been linked with more authoritarian parenting practices and reduced parent self-efficacy (Deater-Deckard, 1998). Scaramella, Sohr-Preston, Callahan, and Mirabile (2008) studied 47 families before and after Hurricane Katrina and noted that higher stress (financial and safety) were associated with increased maternal depression and that this increase was associated

with lower parenting efficacy. Ceballo and McLoyd (2002) studied 262 mothers of seventh and eighth graders and noted that the stress caused by low-income and unsafe neighbourhoods weakened the positive relationship between social support and positive parenting.

Previous literature indicated that while social support was related more strongly to parent self-efficacy in parents who were experiencing stress, extremely high levels of stress could in fact negate the positive effects of social support. The buffering hypothesis contends that social support helps to protect people from the adverse effects of stress. However, in a study of 96 mothers of hearing impaired children ages 2-5 and 118 matched mothers of typically hearing children, Quittner et al. (1990) found that social support did not buffer the experience of stress. The researchers attributed this result to the type of stress investigated in the study. Their focus was on specific stressors rather than a more global measure of life stress. In a study of 125 mothers of children aged 9 months to 14 years, Koeske and Koeske (1990) noted that social support did indeed buffer the effects of stress on parents. DeGarmo, Patras, and Eap (2008) found evidence for social support buffering stressors in 218 divorced fathers.

#### **Summary**

Social support, self-efficacy, and stress are well-researched constructs. The positive effects of both social support and parent self-efficacy on parenting have been investigated, as have the negative effects of stress. However, many of the studies have focused on families that can be viewed as being "at-risk" due to factors such as low-income or having children with developmental delays or at risk of developing conduct disorders. As well, the stress measure has often been parenting-specific. The aim of the current study was to add to the available body of literature by focusing on perceived social support, general life stress and parenting self-efficacy in a wide range of families.

#### **Chapter Three: Methodology**

#### Overview

This section explains the procedures for data collection, the questionnaires used, and their psychometric properties. As well, it includes a description of the participants and their recruitment. The fulfillments of the ethics requirements and the data analysis are explained. The data models are described.

#### Instrumentation

The current study employed a written questionnaire. The questionnaire consisted of four sections including a stress measure, a measure of social support, a measure of parent self-efficacy, and a demographic section. To help reduce order effects, the presentation of the first three parts of the questionnaire were counterbalanced with the demographic section always last in the package. This resulted in six versions of the package.

Family Background Questionnaire. This questionnaire, developed especially for the present study, included questions about the age and gender of the participant as well as the ages of the children in the family. The family make-up (e.g., number of adults, education level, and employment) was explored. Questions about family income, parental education levels, languages spoken, childcare arrangements, and satisfaction with childcare were included in this measure. Participants included information about programs they participated in with their child. Three questions asked about the participants' support systems directly related to parenting. Three questions related to the use of the Internet to gather parenting information. The Family Background Questionnaire is provided in Appendix A.

**Parenting Sense of Competence Scale** (PSOC; Gibaud-Wallston & Wandersman, 1978). The PSOC was designed to measure a parent's attitudes about parenting. The scale

consists of 16 questions regarding attitudes about being a parent and parenting. Participants used a six-choice Likert scale to indicate whether they agreed with the statement (strongly agree to strongly disagree). Nine of the items were reversed scored. A higher overall score indicated higher parent competence. Factor analysis had revealed two sub-scales within the entire measure: the skill-knowledge scale and value-comforting scale (Johnston & Mash, 1989). Gibaud-Wallston and Wandersman (1978) examined this measure with parents of infants and found good internal consistency for both scales (.70 and .82 respectively). Johnston and Mash (1989) reworded the questions to ask parents about children ages 4-9 years rather than infants (297 mothers, 215 fathers). The alpha for the full scale was .79. The two factors remained and were renamed "Efficacy" and "Satisfaction" (Ohan, Leung, & Johnston, 2000). Efficacy, the degree to which the parent feels capable, had an alpha of .76 and Satisfaction, an affective measure targeting feelings of frustration, anxiety and motivation, had an alpha of .75 (Johnston & Mash, 1989). Differences were found between mothers and fathers on the full scale score and on the Satisfaction scale but not on the Efficacy scale. There were no effects based on the age or sex of the child. The present study reworded the version from Johnston and Mash (1989) to allow for fathers and mothers to complete the same measure. This version is included in Appendix B.

In the current study, Cronbach's alpha for the full scale was 0.83. The efficacy subscale had an alpha of 0.72 and the satisfaction subscale had an alpha of 0.81. The low number of father participants (seven) made it unfeasible to check for differences between those two groups. These results indicate adequate reliability of the PSOC scales within the current study's population.

Social Provisions Scale (SPS; Cutrona & Russell, 1987). The SPS was designed to measure the six provisions of social support as identified by Weiss (1974). These provisions were guidance, reliable alliance, reassurance of worth, opportunity for nurturance, attachment, and social integration. The long form of the scale contained four questions for each of the six provisions (two positively worded and two negatively worded). Participants rated their current relationships on a Likert scale of 1 (strongly disagree) to 4 (strongly agree). The SPS had been used with a variety of populations including college students (Cutrona & Russell, 1987), public school teachers (Russell, Altmaier, & Van Velzen, 1987), nurses (Constable & Russell, 1986) and new mothers (Cutrona & Troutman, 1986). The factors for the long form were highly correlated (ranging from .55 to .99) indicating that the use of an overall social provision score was preferable to examining the individual provisions (Cutrona & Russell, 1987). A short form of the SPS (two questions for each provision except for "opportunity for nurturance") had been used as well. The provision "opportunity for nurturance" was excluded because it was seen to measure the opportunity to provide social support, rather than receive it (Gottlieb & Bergen, 2010). The short form had a reliability of .83 among community adults (Gottlieb & Bergen, 2010). The reliability for each provision in the short form was lower than for the long form: attachment (.65), social integration (.52), reassurance of worth (.51), reliable alliance (.40), guidance (.55)<sup>1</sup> (D.W. Russell, personal communication, October 18, 2011). However, given the length of the questionnaire for the present study, the ten-question form was preferable in hopes of minimizing participant attrition. The short form of the SPS is included in Appendix C.

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<sup>&</sup>lt;sup>1</sup> Reliabilities provided are for the SPS-short form. Reliabilities for the long form are available upon request.

In the current study, the Cronbach's alpha for the entire short form was 0.89. The reliability for four of the provisions was higher with the current population than previously noted: social integration (.67), reassurance of worth (.77), reliable alliance (.69) and guidance (.78). Interestingly, the attachment provision had a lower reliability in this study (.51).

Perceived Stress Scale (PSS-10; Cohen & Williamson, 1988). The PSS-10 was adapted from the original PSS (Cohen, Kamarck, & Mermelstein, 1983). This scale had been used with college students, medical students, patients, and pregnant and post-partum women among others. It was designed to measure the extent to which one evaluated one's life's events as stressful. Normative data was available from more than 6300 adults in the U.S. (Cohen & Janicki-Deverts, in press). It had also been used in many different countries including Thailand (Wongpakaran & Wongpakaran, 2010), and Jordan (Chaaya, Osmanm, Naassan, & Mahfoud, 2010). The PSS-10 consisted of 10 items, half of which were reversed scored. Participants indicated how often they felt a specific way over the previous month, rating between zero for never to 4 for very often. The reported reliability for the entire scale ranged from .78 to .91 across studies. Exploratory factor analysis consistently showed two main factors (Perceived Self-Efficacy and Perceived Helplessness) (Roberti, Harrington, & Storch, 2006). Reliability for both factors was strong: Perceived Self-Efficacy, 4 items,  $\alpha$ =.82 and Perceived Helplessness, 6 items,  $\alpha$ =.85 (Roberti et al., 2006). The two factors were strongly correlated, r=.65, indicating a fair degree of overlap (Roberti et al., 2006). In the current population the total scale reliability was 0.63. The information indicating which questions were part of each factor was not available to the researchers and as a result the reliability for the two factors in this population was not calculated. The PSS-10 is included in Appendix D.

# **Participants**

The present study took place in the Lower Mainland of British Columbia. This area was diverse with many different ethnic groups residing within its communities. The majority of the respondents resided within one of the major cities in this area. A large proportion of the population of this city was under 15 years old and there were a large number of families, many with young children.

Participants for this study were 77 parents whose oldest child was between two and five years old and had not yet started kindergarten. Over 120 surveys were handed out and 79 were returned. Two were excluded as the child did not fall within the required age range. Table 1 and Table 2 present the descriptive statistics for the sample. Families with children aged 2 to 5 years are not yet formally associated with the school system and they are typically responsible for seeking out social contacts and support from others on their own. Prior to their child turning two years of age many families still have contact with public health. As well, two-year-olds often produce new behaviours that can test a parent's self-efficacy (Coleman & Karraker, 2003).

Table 1 Demographic Characteristics of Participants (N=77)

Characteristic	n	% <sup>1</sup>	M	SD
Age at time of survey				
20-29	14	18.2	34.10	5.38
30-39	52	67.5		
40-49	10	13.0		
50-59	1	1.3		
Age at birth of oldest child (N=77)				
<20	1	1.3	30.43	6.68
20-29	34	44.2		
30-39	36	46.8		
40-49	4	5.2		
50-59	1	1.3		
Number of children in household				
1	27	34.2	1.71	0.61
2	46	58.2		
3	3	3.8		
4	1	1.3		
Age of preschooler				
2	26	33.8	3.28	0.98
3	23	29.2		
4	19	24.1		
5	9	11.4		
Relationship of participant to children				
Mother	70	90.9		
Father	7	9.1		
Primary language spoken				
English	67	87.0		
Other <sup>2</sup>	10	13.0		

Percentages do not always equal 100 due to rounding

Other languages include Punjabi, French, Spanish and Korean.

Table 2 Characteristics of the Families

Characteristic	n	% <sup>1</sup>
Family makeup		
Single parent	5	6.5
Two parent	70	90.9
Blended	0	0
Extended	2	2.6
Other	0	0
Highest education level of adult in home		
Some high school	1	1.3
High school diploma	2	2.6
Some post secondary	4	5.2
Diploma/Certificate	22	28.6
Bachelor degree	25	32.5
Postgraduate degree	21	27.3
No answer	1	1.3
Employment status		
Two full time employed adults	19	24.7
One full-time employed adult	4	5.1
One full-time, one part time	14	18.2
One full-time, one stay at home parent	30	39.0
Two part-time employed adults	1	1.3
One part-time, one stay at home parent	2	2.6
Other employment configurations	6	7.8
No answer	1	1.3
Family income		
Less than 14,999	0	0
15,000-19,999	2	2.6
20,000-29,999	6	7.8
30,000-39,999	5	6.5
40,000-49,999	10	13.0
50,000-59,999	3	3.9
60,000 or more	44	57.1
No answer	6	7.8

<sup>&</sup>lt;sup>1</sup> Percentages do not always equal 100 due to rounding

## **Recruitment and Consent**

Parents were recruited using convenience sampling through flyers placed in public places where parents and children were believed to frequent such as grocery stores, libraries,

community centres, arenas, swimming pools, laundromats, coffee shops, and shopping malls. A contact phone number and email address were provided for those who were interested in the study. As well, the researchers and assistants attended drop-in Family Places and library story times to introduce the study and to hand out surveys to those who were interested in participating. Once a participant contacted the researcher to indicate interest, the investigator confirmed that the child met the age eligibility criteria and mailed out the survey package. The package included a consent form, a list of support services in the area, the questionnaire, a draw form, and a stamped, self-addressed envelope. Participants kept a copy of the consent for their records. Completing and returning the survey implied written consent. A draw for a \$50 grocery store gift certificate from those who participated in the study served as an incentive to encourage participation in the study. To enter the draw, participants completed the draw form and mailed it back along with the survey.

#### **Ethics**

The proposal for the current study including all measures was submitted to the UBC Behavioural Research Ethics Board (BREB). Approval was received. Participants were able to withdraw from the study at anytime. No identifying information was collected on the surveys. When surveys were returned to the researchers, the envelopes were opened and the identifying number from the envelope was noted on the survey. The envelopes were discarded. The draw card was placed in a separate file folder. Survey results were held in a locked filing cabinet in the Children, Families and Communities Lab in the Scarfe Building at UBC. Data was entered into PASW software (version 20) by the researcher. Each survey received a new identifying number based on the order it was entered into the program. This new number was also used to identify the survey when the descriptive data were entered into an Excel document.

## **Data Analysis**

**Significance and missing data.** To maintain a conservative type I error, the Bonferroni correction was employed. Analyses were considered significant if p<0.002, allowing for a maximum of 25 analyses. Throughout the analyses, missing data were dealt with by excluding cases pairwise within the PASW software calculations.

**Examining the assumptions.** Prior to running the regression analyses, the assumptions required for a valid multiple regression model were examined. The P-P plot showed minimal snaking around the line, indicating that the residuals were fairly normally distributed. The boxplot and the histogram for the total PSOC scores indicated that the dependent variable was normally distributed with one clear outlier. This outlier was removed from the analyses once it was established that the scores from this individual were strongly affecting the results of the analyses. There were two missing cases meaning N=74. The Shapiro-Wilks was not significant  $(W_{74}=0.99, p=.550)$  indicating that the total PSOC scores were normally distributed. The Durbin-Watson statistic  $(Dw_{(1.72)}=1.70)$ , indicated that there was no serial correlation and that the residuals were independently distributed. An examination of the squared residuals showed no discernible pattern indicating homoscedasticity. The standardized residuals and the predictor (SPS scores) were not significantly correlated (r=.05, p=.684). VIF and tolerance both equaled 1, indicating no multicollinearity.

**Regression analysis.** Scores on the PSOC, SPS and PSS were totaled and linear regression analyses were run using PASW software. The SPS scores were entered into the regression first. A second model was run with both the SPS and PSS scores as independent variables. The results of the analyses are presented in Chapter Four.

# **Chapter Four: Results**

#### Overview

The purpose of this chapter is to convey the results of the investigation of a relationship between social support and parent self-efficacy in parents of preschool-aged children. This chapter presents the results for each research question as well as post-hoc analyses. Discussion of the implications of these results is presented in Chapter Five.

## **Research Question One**

The first three measures in the questionnaire (PSS, SPS, PSOC) were counter-balanced to control for possible order effects. There were no significant differences between the various forms of the questionnaire.

To investigate the presence of a relationship between perceived social support and parent self-efficacy, the scores for the SPS-10 were totaled (reversing the scores for items 2, 3, 5, 6, and 9) providing a score ranging from 10 to 40. The PSOC scores were converted to numbers (SA=6, SD=1) and totaled (reverse scoring for items 2, 3, 4, 5, 8, 9, 12, 14, and 16) providing a score ranging from 16 to 96. Descriptive statistics for the results are presented in Table 3. This score was compared using multiple regression from the PASW data analysis software. Results are presented in Table 4. Analyses were conducted on the parent satisfaction subscale (items 2,3,4,5,8,9,12,14, and 16) and the efficacy subscale to determine the relationship between perceived social support and the subscales separately.

Table 3 Means and Standard Deviations for PSOC and SPS Scores

Variable	N	M	SD	SPS
Parenting Sense of Competence (total)	74	69.32	10.56	.40**
PSOC (Efficacy)	74	31.35	4.74	.28
PSOC (Satisfaction)	74	37.97	7.46	.39*
Social Provisions Scale (SPS)	76	34.54	4.66	1.00

<sup>\*\*\*</sup>p<.001, \*p=.001

There was a significant relationship between the scores on the social support measure (SPS) and the parent self-efficacy measure (PSOC) ( $F_{(1,72)}$ =13.97, p<.001) and significant relationships between social support and the satisfaction subscale ( $F_{(1,72)}$ =13.11, p=.001). The relationship between the efficacy subscale and social support was non-significant, ( $F_{(1,72)}$ =6.15, p=.015). The results of the social support measure accounted for 15% of the variance in the PSOC scores and 14% of the variance in the satisfaction subscale scores. The effect size was small ( $f^2$ =0.17) for the total scale model. The null hypothesis for research question number one was rejected and it can be stated that social support had a significant relationship with parent self-efficacy scores, accounting for almost one sixth of the variance in those scores. Research question one's hypothesis was supported. This means that as one's social support increased, so did one's parent self-efficacy. While the relationship is supported, the fact that only 15% of the variance in the scores is accounted for indicates that there are other factors affecting the results on the PSOC.

Table 4 Social Provisions Scale Score as a Predictor of Results on the Total Scale and Subscales of the PSOC

	Parenting Sense of Competence Scale								
-	Satisfaction			Efficacy	Total Scale				
Variable	В	95% CI	В	95% CI	В	95% CI			
Constant	16.28	[4.24, 28.33]	21.50**	[13.52, 29.49]	37.79**	[20.82, 54.76]			
Social Provisions Scale (SPS)	.63*	[0.28, 0.97]	.29	[0.06, 0.51]	.91**	[0.43, 1.40]			
$R^2$	.15		.08		.16				
$Adj R^2$	.14		.07		.15				
Effect size $(f^2)$	.16		.08		.17				
$F_{(1,73)}$	13.11*		6.15		13.97**				

Note. N=75. CI = confidence interval. \*p=.001, \*\*p<.001

# **Research Question Two**

The impact of stress on the relationship between social support and parent self-efficacy was examined. A moderated model was hypothesized. This model is presented in Figure 2. The PSS-10 scores were totaled (reverse scoring items 4, 5, 7, and 8) for a total score ranging from 0 to 40. The scores on the PSS-10 were examined using a moderated regression model. Missing data were treated through pairwise deletion. The N for this analysis was 73. The correlations, means and standard deviations for all measures are presented in Table 5. A linear regression was run to see if there was a significant difference when the PSS scores were included in the model. Results of this regression are presented in Table 7.

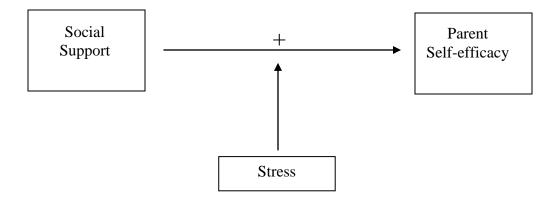


Figure 2 The hypothesized moderated model. Social support is positively related to parent self-efficacy and the level of stress experienced by the parent affects that relationship.

The Durbin-Watson ( $Dw_{(1,70)}$ =2.15) statistic indicated that there was some serial correlation among the variables. While the remaining assumptions indicated no concerns, caution should be used when interpreting these results because this statistic indicated that the residuals are not independently distributed. The social support, parent self-efficacy and stress variables scores were not completely independent of each other.

Table 5 Correlations, Means, and Standard Deviations of all Measures.

Measure	N	M	SD	1	2	3	4	5
1. SPS	76	34.54	4.66	1.00				
2. PSS	75	15.62	6.90	(76) 56**	1.00			
3. PSOC	74	68.80	11.43	(75) .40**	(75) 59**	1.00		
Total	71	21.00	5 21	(74)	(73)	(74) .78**	1.00	
4. PSOC Efficacy	74	31.09	5.21	.28 (74)	43 <sup>**</sup> (73)	(74)	1.00 (74)	
5. PSOC	74	37.71	7.76	.39 <sup>*</sup>	56**	.92**	.47**	1.00
Satisfaction				(73)	(73)	(74)	(74)	(74)

Note: Number in brackets indicates N for that correlation. \*\* p<.001, \*p=.001

The addition of the stress scores significantly changed the model ( $\Delta F_{(1,70)}$ =20.56, p<.001), accounting for 33% of the variance in the PSOC scores compared to only 15% when using social support as the sole predictor. The effect size was large (f  $^2$ =0.49). Investigating a moderated model was warranted because the addition of the PSS scores significantly changed the model and more than doubled the amount of variance that was accounted for solely by social support. These results indicated that stress was a factor in the relationship between social support and parent self-efficacy.

Table 6 Predictors of Parenting Sense of Competence

Parenting Sense of Competence (PSOC)					
	Model 2				
Model 1 B	В	95% CI			
37.79**	74.42**	[52.31, 96.52]			
.91**	.24	[28, .77]			
	88**	[-1.27,49]			
.16		.35			
.15		.33			
.17		.49			
13.78**		19.07**			
		.19			
		20.56**			
	Model 1 <i>B</i> 37.79**  .91**  .16  .15  .17	Model 1 B B  37.79** 74.42**  .91** .24 88**  .16  .15			

Note. N=73. CI = confidence interval. \*\*p<.001

The moderated model required the SPS and PSS scores to be centred on the mean and then the regression was run using these centred scores and the interaction effect (SPSxPSS). The results of this regression are presented in Table 7. The interaction effect did not have a significant effect upon the PSOC scores. The null hypothesis failed to be rejected for the second research question. While the results indicated that stress made a significant contribution to the relationship between social support and parent self-efficacy, varying levels of stress did not predict varying strengths of the relationship. It was not the interaction between social support and stress that increased the amount of variance explained. As stress levels increased or

decreased, the strength of the relationship between social support and parent self-efficacy was not significantly changed.

Table 7 Regression Analysis Summary for Variables Affecting the Results on the PSOC Scale Including the Interaction Variable

# Parenting Sense of Competence

			Mode	12		Mode	13
Variable	Model 1 B	В		95% CI	В		95% CI
Constant	69.04**	68.96**		[66.95, 70.98]	68.80**		[66.37, 71.24]
Centred Social Provisions Scale	.91**	0.24		[-0.28, 0.77]	0.27		[30, 0.84]
(SPS) Centred Perceived Stress Scale		-0.88**		[-1.27, -0.49]	-0.86**		[-1.28, -0.44]
(PSS) Interaction Effect (SPSxPSS)					-0.01		[-0.09, 0.07]
$R^2$	0.16		0.35			0.35	
$Adj. R^2$	0.15		0.33			0.33	
Effect size $(f^2)$	0.17		0.49			0.49	
F	13.78**		19.07**			12.56**	
$\Delta R^2$			0.19			0.01	
$\Delta F$			20.56**			0.06	

Note. N=73. CI = confidence interval. \*\*p<.001

# **Post-Hoc Analyses**

Mediated model. The literature did not provide a clear direction regarding the influence of stress on a relationship between social support and parent self-efficacy. Subsequently the researcher decided a priori to investigate a moderated model. As previously noted, the addition of the PSS scores significantly increased the amount of variance accounted for in the PSOC scores and this increase was not explained through a moderated model. This suggested the need for investigation of a mediated model. The hypothesized mediated model is presented in Figure 3.

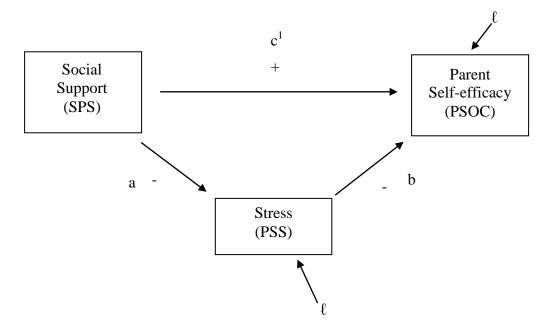


Figure 3 The hypothesized mediated model. Social support is positively correlated with parent self-efficacy. It is also negatively correlated with stress which in turn is negatively correlated with parent self-efficacy.

The mediated model was tested using the method described in Baron and Kenny (1986) with assistance from a macro designed by Preacher and Hayes (2008) to bootstrap the standard error. The results of this analysis are illustrated in Figure 4.

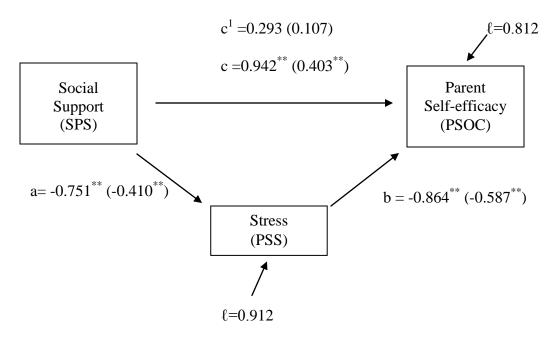


Figure 4 The results of the mediated model.

The c path (social support to parent self-efficacy through stress) accounts for significantly more variance (34%) than the c-prime path. The direct effect of social support on parent self-efficacy becomes non-significant in this model.

Effect size is large,  $f^2=0.51$ . N=73. \*\*p<.001. 95% CI = [.30, 1.10]. Standardized betas are in parentheses.

The SPS scores predicted the PSS scores and the PSOC scores. As well, SPS scores and PSS scores also predicted the PSOC scores. Stress (PSS scores) was shown to be a significant mediator of the relationship between social support and parent self-efficacy. It accounted for more than twice the amount of variance in the parent self-efficacy scores than social support alone. While this model accounted for 34% of the variance in the PSOC scores, the  $\ell$  values indicated that there was a large amount of the variance in both the stress (PSS) and parent self-efficacy (PSOC) that could not be explained by the social support perceived by the parents (SPS).

**Effects of income**. In an attempt to investigate possible income differences, the income groups were divided based on the Statistics Canada Low-Income Cut-off of \$36 504 for a family

of 4 in a Census Metropolitan Area (Statistics Canada, 2012c). There were no significant differences between these groups on the social support, parent self-efficacy or stress measures. This indicated that in the current population, income was not a significant factor in a parent's perception of his or her social support, self-efficacy or stress.

## Summary

Results of the investigation indicated that there was a significant relationship between social support and parent self-efficacy. Although causality cannot be proven, social support did account for 15% of the variability in the parent self-efficacy scores. Stress was also an important part of this relationship. When the stress scores were included in the model, 34%, a third, of the variance was explained. While stress did not have a moderating effect, that is to say, the relationship between social support and parent self-efficacy did not change based on the level of stress experienced by the parent, stress did mediate that relationship. Social support and stress together accounted for 34% of the variance in the parent self-efficacy scores which was significantly higher than social support alone. However, the results indicated that much of the variance in the parent self-efficacy scores was not explained by this model. Income was not shown to be a factor in the relationship between social support and parent self-efficacy; however, there must be other variables that were not accounted for in these analyses that would help to explain this relationship. Further discussion of possible variables occurs in Chapter 5.

# **Chapter Five: Discussion**

#### Overview

The purpose of this study was to investigate the relationship between social support and parent self-efficacy in parents of preschoolers. It was hypothesized that parents who perceived having more support would consider themselves more self-efficacious as parents. As well, stress was hypothesized to moderate this relationship. Moderate levels of stress were expected to be related to a stronger relationship between social support and parent self-efficacy while both low and high levels were expected to have the opposite effect. Seventy-seven parents (70 mothers) completed a written survey that measured their perceptions of social support, parent self-efficacy and their perceived stress over the past month as well as demographic information. In this chapter the major findings will be discussed in relation to the literature. The limitations and strengths of the study as well as directions for future research are also addressed.

# Demographic Variables

This study took place in a large city in the Lower Mainland of British Columbia. While a strong effort was made to include participants from a variety of neighbourhoods and socioeconomic levels, over half (57.1%) of the study population reported an annual income of \$60,000 or more. As well, more than half of the population reported having an adult in the family with at least one university degree and the majority spoke English as their first language (87%). This sample was consistent and similar to similar studies in this area of literature. Most studies reviewed previously included predominantly English speakers (see Suzuki et al., 2009 for a notable exception) and unless the researchers were investigating low income families specifically (for example, Henly et al., 2005; Jackson & Huang, 2000; Winkworth et al., 2010),

the samples often included mostly well educated, middle-class parents (Koeske & Koeske, 1990; Suzuki et al., 2009), similar to the present study.

In an attempt to investigate possible income differences, the income groups were divided based on the Statistics Canada Low-Income Cut-off of \$36 504 for a family of four in a Census Metropolitan Area (Statistics Canada, 2012c). Based on the demographic survey which asked participants to indicate their annual income, those who earned \$40 000 or more were grouped into one category and those who indicated earning \$39 999 or less were grouped into another category. There were no significant differences between these groups on either the social support, parent self-efficacy or stress measure. However, as the current sample did not include a large number of extremely low income families, this homogeneity between groups may be expected. The uniformity of the income level reported by this study's sample meant that the effects of social support and stress on parent self-efficacy could not be generalized to populations with extremely low or extremely high incomes. The relationship that was observed in this study may only take place in middle income families. There may be different relationships among stress, social support, and parent self-efficacy when people are living well below or well above the poverty line; however, given the fact that these social constructs are not dependent upon one's income, it is not expected that there would be a difference. This lack of difference based on SES was noted in the previously discussed Australian phone survey (Jackson, 2009). The consistency of the sample may also have had an effect on the results of the moderation analysis discussed further below under Research Question Two.

## **Discussion of Key Findings**

**Research question one.** This question investigated the relationship between perceived social support (as measured by the SPS) and parent self-efficacy (as measured by the PSOC).

The correlation between these measures was high, (r=.40) as expected. The regression analysis indicated that social support accounted for 15% of the variance in the parent self-efficacy measure. Interestingly, while social support did not account for a significant amount of the variance in the efficacy subscale (7%), it accounted for a significant amount of variance in the satisfaction subscale (14%). This relationship between social support and satisfaction with parenting was not something that had been specifically explored in the literature review; however, there is literature that links social support with coping with stress (Balaji et al., 2007; Koeske & Koeske, 1990). Perhaps being able to cope with stress in a more effective way leads to greater satisfaction in the parenting role. When one is able to deal with the stressors of life then one may be free to enjoy the various experiences that can result from life in general and parenting specifically. Research Question Two investigated the influence of stress on the relationship between social support and parent self-efficacy and it alluded to the possibility that when stress was reduced, the scores on the parent self-efficacy measure (of which satisfaction is one factor) were increased. These results make sense as when people perceive a situation as stressful and difficult to handle, they may receive less satisfaction from the situation. Coleman and Karraker (2000) observed this link between stressful parenting situations and reduced satisfaction in the parenting role in children aged 5 to 12 years. The results of the current study indicated that stress and social support accounted for a third of the variance in the parent selfefficacy scores in parents of preschoolers.

It was hypothesized that perceived social support would have an effect upon parent self-efficacy; however, the data were also analyzed in the opposite direction to see if they would indicate a bidirectional relationship. While this relationship was also significant ( $F_{(1,72)}$ =13.97, p<.001), an examination of the residuals indicated a high level of multicollinearity and the

Shapiro-Wilks was significant ( $W_{(76)}$ =.921, p<.001), which indicated non-normality in the distribution of the social support scores. This non-normality implied that this model (parent self-efficacy affects social support) did not fit and so was not a possible explanation for the data. One possible reason that the model did not fit these data was the positively skewed results on the social support measure. Parents reported moderate to high levels of perceived social support. Despite attempts to gather information from parents who were receiving a variety of levels of social support, this population did not have a normal distribution on the social support measure. The researcher avoided recruitment from formal support groups; however, contacting a large number of parents with preschoolers required visiting places such as libraries and Family Places that may have already been providing some social support for these families. As well, snowball sampling was employed, meaning that parents who were referred through word of mouth may already received some level of social support from the person who referred them.

Research question two. The effect of stress upon the relationship between social support and parent self-efficacy was investigated. It was hypothesized that stress would moderate this relationship. The results did not support this hypothesis. While this study had adequate power, the homogeneity of this sample (as discussed in the demographic variables section) did not allow for enough variance in the stress scores or the social support scores to possibly show a moderated relationship. The graph of the moderated relationship does not show an interaction effect between stress and the PSOC/SPS relationship; in fact the lines on the graph are almost completely parallel (Figure 5). The sample for this study was biased; it consisted primarily of well-educated parents who already attended library story times and Family Place drop-ins. The lack of variability in the study sample prevented the possibility of finding a moderated relationship.

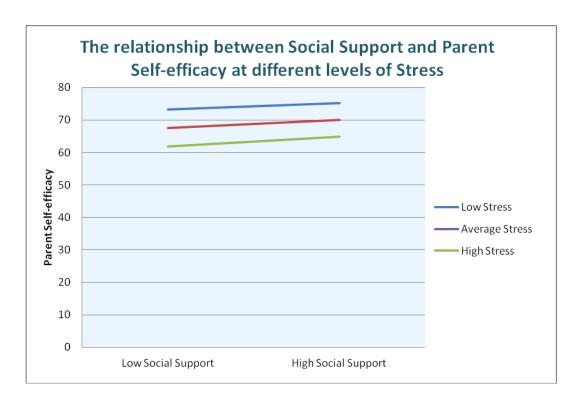


Figure 5 The relationship between social support and parent self-efficacy at different levels of stress.

As was noted in Chapter Four, the lack of a clear direction from previous literature allowed for a post-hoc meditational analysis of the data. The mediated regression indicated that the stress measure significantly increased the amount of variance explained in the parent self-efficacy scores than did social support alone. This result made sense in light of the literature that indicated a relationship between social support and stress (Balaji et al., 2007; Koeske & Koeske, 1990). The relationship between social support and parent self-efficacy did not vary based on the level of stress experienced by the parent; however, social support combined with stress accounted for a greater amount of variance in the parent self-efficacy scores than social support alone.

# **Limitations of the Study**

Given the demographics of the sample (mid-high SES and highly educated) the results of this study could not be generalized to people with lower socio-economic or educational levels. Interestingly, Koeske and Koeske (1990) noted that highly educated individuals appeared to be buffered from stress. Given the education levels of this study's population, this may also explain the lack of variability in the stress scores. This sample is not random in its selection. Participants were predominantly recruited from public libraries and Family Place drop-ins. As a result, the findings of this study can only be generalized to families who make use of library story times and Family Place drop-ins.

Self-report measures also open themselves to social desirability bias – the tendency of people to respond to questionnaires in ways that they feel are more socially acceptable (King & Bruner, 2000). This may have led to an under-reporting of perceived stress, and an over-reporting of support and parent self-efficacy. Efforts were made (confidential questionnaire, sealable envelope for return, option to mail completed questionnaire) to counteract this effect. Incorporating a social desirability measure may have allowed for investigation of this factor.

Two other limitations of the study centre on the study design. As the study was carried out through a written survey method, both the level of English reading required and the exclusion of non-English-speaking parents were limitations. The survey package was lengthy (a consent letter, an introduction page and six pages of questions). While attempts were made to keep the required reading level low, the three main measures were published; validated measures and their wording could not be changed. It was estimated that a participant would require at least a grade six reading level to complete the questionnaire. There were no resources available to translate the survey or the posters. The researcher was not fluent in any other language. This required all

participants to speak and read English or to have a close relationship with someone who could orally translate the questionnaire for them. 87% of the participants indicated that English was their first language. Oral translations did occur in the case of seven questionnaires, and no significant differences were found in the answer patterns of these participants. A possible way to attract a more culturally diverse sample would be to administer this survey orally and with interpreters, or to translate the written survey.

Fathers are typically under-represented in family research, and the current study is no exception. While all parents were invited, only seven fathers participated in the current study. One probable reason for this was the method of data collection. Surveys were distributed at library story times and Family Places as well as to families who called in response to word-of-mouth, poster, or handout invitations to participate. The majority of story-times and all the Family Places took place during morning or early afternoon hours and many fathers were not present during this time. There was one library story time held during the evening that had a few fathers in attendance. Due to the small number of fathers, it is not possible to analyze the data separately for this group.

## Strengths of the Present Study

This study employed measures that have strong psychometric properties and that were well suited to answering the research questions and this was a strength of the study. The data collection was rigorous, endeavoring to cover all geographic areas of the city in question and reaching out to a variety of demographic groups.

Much of the previous research looked at the relationship between social support and parent self-efficacy in low-income families. This study was successful in investigating this relationship in a different population. This study captured the experiences of families who have

higher income, education, and employment levels. Families were not chosen because they faced specific risk factors.

As well, parents of preschoolers were not represented well in previous research (Ceballo & McLoyd, 2002; Coleman & Karraker, 2000; Izzo, Weiss, Shanahan, & Rodriguez-Brown, 2000, Suzuki et al., 2009; see Morawska, Winter & Sanders (2009) for an exception). This study focused on parents of preschoolers in an attempt to gather information about families before their children enter the school system.

The current study looked at social support as a determinant of parenting self-efficacy, rather than a co-dependent variable. Previous research has hinted at a relationship between social support, life stressors, and parent self-efficacy, but little research has investigated the model presented in this study. The results of the current study, specifically the link between social support, stress and the resulting parent self-efficacy, indicate a need for further research in this area.

## **Implications of this Study**

Research. This study is significant in that it looked at how perceived social support in parents of preschoolers may have been related to their perceptions of their own parent self-efficacy. Unlike previous studies, the current research looked at families without specific risk factors such as low-income, migrant families, or children with special needs (Ceballo & McLoyd, 2002; Green, Furrer, & McAllister, 2007; Izzo et al., 2000; Quittner et al., 1990). This study aimed to measure the participants' perceptions of social support as well as their perceptions of stress, rather than use objectively imposed measures of these two constructs. This study has implications for research as well as for practitioners and policy makers who work with parents of young children.

Practice. Social support and stress were related to parent self-efficacy. While stress had a negative relationship, social support was positively related to this important construct.

Practitioners who work with young families are interested in ways to help those families become stronger, use less punitive discipline and buffer the effects of stressors such as low income. Increasing social support appears to be one method of achieving these goals. Creating opportunities for parents to interact and to become connected, building their own feelings of social support, can be related to increased parent self-efficacy. This is consistent with the findings of Bandura and others who noted that self-efficacy can increase through witnessing another person's success and receiving encouragement from people whose opinions are valued (Bandura, 1982, 1997; Bandura & Adams, 1977; Maddux, 2000).

## **Directions for Future Research**

The current study indicated that there was a positive relationship between social support and parent self-efficacy. Parent self-efficacy's importance to parents' stress levels and positive parenting actions has been shown in previous studies (Coleman & Karraker, 1997; Morawska et al., 2009; Sanders & Wooley, 2005). Given the benefits of parent self-efficacy, increasing this quality among parents of young children is an area requiring further research. While the current study cannot assume a causal relationship, the fact that social support is significantly related to parent self-efficacy indicates a possible way to increase parent self-efficacy. Further research into whether this relationship exists in a more diverse population would be of use to city and community planners as they seek to develop programs to help families.

The father's role in the social support/parent self-efficacy relationship requires further investigation. Suzuki et al. (2009) noted a difference in mothers' parent self-efficacy related to their satisfaction with the husband's support. It would be worthwhile to investigate a

relationship between the father's parent self-efficacy and the level of support he perceives. There has been an increase over the past 12 years in informal social support programs (such as play groups and story times) that target fathers with young children. These programs are offered during the evenings and weekends in an attempt to draw in more fathers who may work daytime, weekday hours. Further research into the father's parent self-efficacy and how or if it relates to social support may support providing additional programs.

Research into how the social support/parent self-efficacy relationship changes as children enter into a school system would be of interest as well. The current study investigated families with no children in the school system to try to control for the "automatic social group" that can exist from being part of a class. Once children are in the school system, parent social contacts are easily available if desired through the child's daily interactions with classmates. Further study into how these available parent contacts may change the relationship would be of interest. As well, investigating the possible differences between school system families and homeschooling families is another area for future research.

While this study did ask about parents' interactions through the Internet (blogs, search engines, and online discussions) it did not delve deeply into this more contemporary way of seeking support using social media. Further research into how the social support/parent self-efficacy relationship may change based on the method of receiving the support would be worthwhile. While virtual groups do not allow for the children to socialize, they provide many benefits for parents. They are flexible in their timing; there is no maximum number of people who can "attend" at any one time. As well – if parents are uncomfortable interacting face to face with a group of people, an online option may provide benefits without the stress. Online

interactions also counteract the isolation of people who are unable, due to distance or transportation issues, to attend a social group.

# **Concluding Comments**

Parents affect their children in a myriad of ways. The choices parents make on a daily basis have far-reaching effects. Parenting is a task that cannot be taken lightly and one that requires support. What is viewed as support differs based on the person receiving the support (Bronfenbrenner, 1986; Shinn et al., 1984). Support for parents can come in a variety of ways. There are formal support programs with curricula and goals. There are online discussion groups, blogs and web pages with parenting information. Parents can also receive support less formally, through contact with other parents at the playground, the library, Family Place drop-ins, and other locations. This study showed that perceived social support was positively related to parent self-efficacy in a sample of parents who are well-educated and have a mid-high socio-economic status.

Parent self-efficacy has numerous benefits to parents and children including increasing positive parenting (MacPhee & Miller-Heyl, 2003) and more consistent discipline (Sanders & Wooley, 2005). Parents who are more self-efficacious view difficult parenting situations as challenges and visualize ways to succeed, while those with low parental self-efficacy view those situations as obstacles and visualize ways they might fail (Bandura, 1993). Many times people may choose activities where they feel self-efficacious. However, becoming a parent is not always a choice nor is it an activity that people can opt out of easily if they do not feel self-efficacious. Increasing the self-efficacy of parents is desirable as it can positively affect many aspects of daily life.

Stress affects parenting relationships and perceptions (Deater-Deckard, 1998; Ceballo & McLoyd, 2002; Hall et al., 2008; Scaramella et al., 2008). This study illustrated how stress can mediate the relationship between social support and parent self-efficacy. Reducing stress in young families is another important area that requires further research. Communities that are interested in building strong families and supporting parents of young children may look to increasing parent self-efficacy through providing opportunities for building social support. Further research into this relationship in a more diverse population is required before widespread recommendations can be made.

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# **Appendix A: Family Demographic Questionnaire**

l.	How many children live in your home?	7. Do you participate in any groups and/or activities with your preschool aged child (Eg. StrongStart, Family						
2.	What are their ages?	Places, Parks and Rec programs) Yes						
3.	What is your relationship to the child(ren) aged 2-5 years?	No						
	a) Mother	If yes, what programs (please list below)						
	b)Father	If yes, how many times per week & how long (describe below)?						
	c) Stepmother							
	d) Stepfather		T	T				
	e) Guardian (please specify)	Name of Program	How often (e.g 1	How long (e.g. 45				
	f) Other (please specify)		per week)	minutes each visit				
4.	What is your age?							
ō.	What was your age at the time of the oldest child's	8. How do you des	scribe the family livir	ng in your home?				
	birth?	a) Single parent family						
		b) Two parent	family					
<b>ó</b> .	How many adults (18 years or older) live in your home?	c) Extended fo	amily					
		d) Blended family						
		e) Other (plea	se specify)					
		, ,						

9. Please tell us the main language and any additional	D. It no, the children are in care:					
languages spoken in your home:	Fewer than 20 hours per week					
Main Language:	20 hours per week or more					
Additional Language(s):	When the children are in care they are:					
	Cared for by another adult in our home Yes or No					
	If yes, who cares for them? In a home day care facility (7 or fewer children)					
10. Please tell us about the education of the adults in your	In a large day care facility (more than 7 children)					
home. What is the highest level each adult has attained:	<i>y</i> , , , , , , , , , , , , , , , , , , ,					
3	Are you happy with your childcare situation? Yes or No					
Adult #1 #2 #3 #4	, , , , ,					
a) Elementary school	13. What best describes your annual household					
b) Some high school	income?					
c) High school diploma	a) Less than 14,999					
d) Some post-secondary	b) 15,000-19,999					
e) Diploma/Certificate	c) 20,000-29,999					
f) Bachelor degree	d) 30,000-39,999					
g) Postgraduate degree	e) 40,000-49,999					
	f) 50,000-59,999					
11. How many adults living in the home are	g) 60,000 or more					
a) Employed full-time	h) Prefer not to answer					
b) Employed part-time						
c) Stay at home parent	<ol> <li>Please indicate the first three letters/numbers of</li> </ol>					
d) Full-time student	your postal code:					
e) Part-time student	For the following questions please circle the answer that					
f) Not employed	describes how you feel MOST of the time.					
12. Please describe the childcare situation in your home						
a. I take care of the children full time: Yes or No						

15. As a parent I know that there are people who can help me				How often? Less than once a month				
with my child(ren) if needed.				1-4 times a month				
Strongly	Agree	Disagree	Strongly	1-6 times a week Everyday				
Agree	J	· J	Disagree	20. Do you read "blogs" or other sites about parenting?				
16. As a parent, I l child(ren).	nave someo	ne I can talk	to about my	No Yes How often? Less than once a month				
Strongly Agree	Agree	Disagree	Strongly Disagree	1-4 times a month  1-6 times a week				
17. As a parent, I l	nave someo	ne I can ask i	for advice about	Everyday				
parenting. Strongly Agree	Agree	Disagree	e Strongly Disagree	21. Have you ever participated in programs with a focus on mindfulness and parenting? Yes No				
18. Do you partici No Yes	pate in onlin	ne discussions	s about parenting?	22.Would you be interested in learning more about mindfulness and parenting?  Yes No				
	1-4 1-6	s than once a times a mont times a week ryday	h	23.In your opinion, what are the biggest challenges for parents with preschool age children?				
19. Do you use a co answers to pare No Yes	•		engine to find					

# Appendix B: Parenting Sense of Competence Scale (PSOC; adapted from Johnston & Mash, 1989)

**Instructions:** Listed below are a number of statements. Please place an X on the circle, indicating your agreement or disagreement with each statement.

	Strongly Disagree	Disagree	Mildly Disagree	Mildly Agree	Agree	Strongly Agree
The problems of taking care of a child are eas to solve once you know how your actions affec your child, an understanding I have acquired.	. ()	0	0	0	0	0
Even though being a parent could be rewarding I am frustrated now while my child is at his/h present age.		0	0	$\circ$	0	0
I go to bed the same way I wake up in the morning – feeling I have not accomplished a whole lot.	0	0	$\circ$	0	0	0
I do not know what it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.	$\circ$	0	0	$\circ$	$\circ$	0
My mother (or father if you are a father) was better prepared to be a good mother (father) than I am.	0	0	$\bigcirc$	0	0	0
I would make a fine model for a new mother (or father if you are a father) to follow in ord to learn what she (he) would need to know in o to be a good parent.		0	$\circ$	0	0	0
Being a parent is manageable, and any problem are easily solved.	s O	$\bigcirc$	$\circ$	$\bigcirc$	0	$\circ$

	Strongly Disagree	Disagree	Mildly Disagree	Mildly Agree	Agree	Strongly Agree
A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one.	0	0	0	0	0	0
Sometimes I feel like I'm not getting anything done.	$\bigcirc$	0	$\bigcirc$	0	$\bigcirc$	$\bigcirc$
I meet my own personal expectations for expertise in caring for my child.	$\circ$	0	0	0	$\bigcirc$	0
If anyone can find the answer to what is troubling my child, I am the one.	$\circ$	0	$\circ$	0	0	$\circ$
My talents and interests are in other areas, not in being a parent.	$\circ$	0	$\bigcirc$	$\circ$	0	$\circ$
Considering how long I've been a mother (or father if you are a father), I feel thoroughly familiar with this role.	0	0	$\bigcirc$	0	0	$\bigcirc$
If being a mother (or father if you are a father) of a child were only more interesting, I would be motivated to do a better job as a p	O arent.	$\bigcirc$	0	$\bigcirc$	0	0
I honestly believe I have all the skills necessary to be a good mother (or father if you are a father) to my child.	0	0	0	0	0	0
Being a parent makes me tense and anxious.	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$	$\bigcirc$

# Appendix C: Social Provisions Scale – Short Form (SPS-10; Russell & Cutrona, 1984)

**Instructions:** Please place an X on the circle that represents how you feel about the following statements.

	Strongly Disagree	Disagree	Agree	Strongly Agree
There are people I can depend on to help me if I really need it.	0	0	0	0
I feel that I do not have close personal relationships with other people.	$\circ$	0	$\circ$	0
There is no one I can turn to for guidance in times of stress.	$\circ$	0	$\circ$	0
There are people who enjoy the same social activities as I do.		0	0	0
I do not think other people respect my skills and abilities.	0	0	0	0
If something went wrong, no one would come to my assistance.	$\circ$	0	0	0
I have close relationships that provide me with a sense of emotional security and well-being.	$\circ$	0	$\circ$	0
I have relationships where my competence and skills are recognized.	$\circ$	0	$\circ$	0
There is no one who shares my interests and concerns.	$\circ$	0	$\circ$	0
There is a trustworthy person I could turn to for advice if I were having problems.	$\circ$	$\circ$	$\circ$	$\circ$

## Appendix D: Perceived Stress Scale – 10 (PSS-10, Cohen & Williamson, 1988)

Instructions: The questions in this scale ask you about your feelings and thoughts during THE LAST MONTH. Please place an X over the circle indicating HOW OFTEN you felt this way.

	Never	Almost Never	Sometimes	Fairly Often	Very Often
In the last month, how often have you been upset because of something that happened unexpectedly?	0	0	0	0	0
In the last month, how often have you felt that you were unable to control the important things in your life?	$\circ$	$\circ$	0	$\circ$	0
In the last month, how often have you felt nervous and "stressed"?	0	$\circ$	0	$\circ$	0
In the last month, how often have you felt confident about your ability to handle your personal problems?	$\circ$	0	$\circ$	0	$\bigcirc$
In the last month, how often have you felt that things were going your way?	0	$\circ$	0	0	$\bigcirc$
In the last month, how often have you found that you could not cope with all the things that you had to do?	0	$\circ$	0	$\circ$	$\circ$
In the last month, how often have you been able to control irritations in your life?	0	0	$\circ$	0	$\circ$
In the last month, how often have you felt that you were on top of things?	0	$\circ$	$\circ$	0	$\bigcirc$
In the last month, how often have you been angered because of things that were outside your control?	0	$\circ$	0	$\circ$	$\bigcirc$
In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?		$\circ$	$\bigcirc$	$\bigcirc$	$\bigcirc$

**Appendix E: Recruitment Letter** 

Family Support Study

Raising a family requires time and energy. The support a person receives can have an effect

upon their feelings about raising a family. This study seeks to find out more about the

relationship between support and parents' beliefs about raising their family. Your answers to

these questions will help us to learn more about this relationship.

There are four sections in this questionnaire. Each section has its own instructions. Please

read these carefully and answer the questions provided. The survey will take about 20 minutes.

There are no "right" or "wrong" answers for any of the questions. We want to learn about your

experiences.

If you have more than one child, please answer these questions with your preschool aged

child in mind.

We do not ask your name and ALL ANSWERS WILL BE KEPT CONFIDENTIAL.

Thank you for taking part in this study. We will learn a great deal because you have been willing

to share your experiences with us.

Laurie Ford

Principal Investigator

Michaelyn Hoven

Co-Investigator

74

#### **Appendix F: Consent Letter**



# a place of mind THE UNIVERSITY OF BRITISH COLUMBIA

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### Investigating the Relationship Between Perceived Social Support and Parent Self Efficacy "The Family Support Study"

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Centre for Cross-Faculty Inquiry in Education (Early Childhood Education Program)

Phone: xxx-xxx Email: xxxxxxxx@xxx.xx

Project Office: xxx-xxx-xxxx Email: xxxxxxxx@xxx.xx

Thank you for your interest in participating in our Family Support Study. Please read the following before completing the questionnaire packet. Keep this information for your records.

- 1. Completing and mailing back the questionnaire means you agree to take part in the study.
- 2. Taking part in this study means that you are willing to fill out the study questionnaire and mail it to us at UBC.
- 3. The questionnaire will take about 20 minutes to complete.
- 4. Your answers to the questionnaire will not be shared with anyone outside the study team. It will only be used for the purposes of the research study.
- 5. No individual information will be reported and no person will be identified by name in any reports about the study.

- 6. The questionnaire will be stored in a locked filing cabinet. The only people who will have access to the information you give us are the researchers working on this project.
- 7. There are no known risks if you choose to take part. However, if you are not comfortable with any of the questions you may choose to not answer them.
- 8. If you have any questions please contact us. While we do not think that there are any questions that will make you feel uncomfortable, we have provided you with a list of local support locations if you would like to talk with someone about additional support in the community.
- 9. As a thank you for your time, you will be entered into a draw for a \$50 Superstore gift card. If you want to be entered into the draw, complete the enclosed card and return it with your questionnaire.
- 10. If you would like to receive a copy of the study results please complete the enclosed card and return with your questionnaire.
- 11. If you decide to take part in this study, and if you have any concerns about your rights or treatment taking part in our research, you may contact the Research Subject Information Line in the UBC office of Research Services at the University of British Columbia, at xxx-xxx-xxxx.
- 12. If you have any questions or concerns regarding this project, you may contact either of the researchers at the numbers above.

Thank you for your help with our project.