

**WHO KNIT YA? A STUDY OF MOTHERS' SENSE OF PARENTING
COMPETENCE IN NEWFOUNDLAND AND LABRADOR**

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Abstract

The role mothers play is arguably one of the most influential and imperative factors in defining the family dynamic and child development, however the scholarship on the maternal experience remains sparse. Much of the focus on motherhood has been in the context of the intensive motherhood ideology, which posits that societal expectations place unrealistic demands on mothers. Little is known about the modern normative experience of motherhood, and therefore the focus of this project is to gain a socio-demographic understanding of the maternal experience for women in Newfoundland and Labrador (NL). As part of a province-wide study, 1082 mothers completed an online survey of their socio-demographic characteristics and a variety of motherhood scales. The current study examines some of the unique demographic and social aspects of motherhood in NL including differences between urban and rural populations, family structure, the prevalence of mobile work, and predictors of maternal sense of parental competence. The Circumplex Model of the family emphasizes the importance of cohesion and communication in family functioning, and these factors were considered in the context of understanding maternal sense of parenting competence. The parenting sense of competence scale (PSOC) was used as the main outcome measure for this study as it assesses how mothers feel about their skill and enjoyment within their parenting role. Two hierarchical multiple regressions aimed at predicting maternal self-efficacy and motherhood satisfaction on the PSOC were conducted using demographic variables, maternal mental health, and family variables in three separate blocks. The significant predictors of PSOC-Efficacy explained 28.1% of the variance and included maternal age, maternal mental health (OQ-45), co-parental communication (closeness), and child parent

relationship (conflict and closeness). The predictive model of PSOC-Satisfaction included a number of significant predictors: child health, maternal mental health, and child parent relationship (conflict and closeness), which explained 45.3% of the variance. The results of this study bring forward a portrait of motherhood in NL, and contribute to the growing scholarship on maternal sense of parental competence.

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Who Knit Ya:

A phrase used in Newfoundland and Labrador meaning “who is your mother” or “who is your parent” (Kirwin, Story & Widdowson, 1982).

**Who Knit Ya? A Study of Mothers' Sense of Parenting Competence in
Newfoundland and Labrador**

Motherhood is a defining pillar of family, relationships, children, and society, however there is limited scholarship on defining and understanding the experience of motherhood, outside of a simple dominant vs marginalized discourse. There are 9.8 million mothers in Canada (including biological, step, and adoptive mothers) and 164 000 of these mothers reside in Newfoundland and Labrador (NL) (Statistics Canada, 2011), however beyond demographic information there has not been adequate psychological research about the environments in which families exist and its relationship to the psychosocial adjustment of mothers in general (Arendell, 2000). The literature that does exist around motherhood focuses on mothers who are mentally ill (Dolman, Jones & Howard, 2013), on the impact of mother's behaviour on their children (Kingston, Tough & Whitfield, 2012), or on mothers who are parenting children with illness (Bourke-Taylor, Howie & Law, 2010; Cousino & Hazen, 2013). Becoming a parent is one of the most demanding social changes and role transitions a person can experience, and establishing a healthy maternal identity can contribute to a women's psychological wellbeing (Mercer, 2004; Vance & Brandon, 2017). Maternal health and wellness can influence the quality of functioning of other members of the family unit in terms of child attachment and development, spousal self-efficacy and dyadic adjustment, and overall wellbeing and yet there is little understanding of the characteristics that contribute to the psychosocial adjustment of mothers (Alhusen, Gross, Hayat, Nancy Woods, & Sharps, 2012; Berryhill, 2016; Leahy-Warren, McCarthy, & Corcoran, 2012). In particular, little

is known about the experience of Canadian mothers as parents, women, and partners and the ways in which they navigate these unique roles and responsibilities (Urquia, O'Campo, & Ray, 2013).

Much of the child and family literature focus on children as the dependent variable and family as the mechanism or mediator for child wellbeing, rather than focusing on the mother as an independent area of study. The existing literature emphasizes the challenges faced by marginalized mothers (e.g., single mothers, lower SES mothers, mothers with mental health issues), or correlates that contribute to negligent or harmful mothering practice; however, there is scarce information pertaining to a more general strengths-based maternal experience, or what motherhood looks like in 21st century Canadian households. When it comes to NL, the published literature, particularly in the area of parenting competence, is largely inexistent.

Models of the Family and Motherhood

There are a number of theoretical models explaining family, family systems, and the interaction of gender and parenting. For the purposes of this dissertation, a feminist approach is applied to understand the experience of mothers. Feminist research focuses on the deconstruction of women's lived experiences, and understanding the social construct of gender (Campbell & Wasco, 2000). The Circumplex Model of the family is the main theoretical approach selected to understanding the dynamics within the family system, and how this may contribute to maternal parenting competence and experiences (Olson, 2000).

Feminist Theory and Intensive Motherhood. The role of feminism in understanding women and gender is long standing, however the discussion of motherhood

within this framework is often limited. Further, despite the efforts from feminist scholars to understand motherhood from an academic lens, there remains a fragmented and disconnected understanding of what it means to be a mother (Kawash, 2011). Much of the exploration of motherhood from a feminist perspective hinges on the work of Sharon Hays, who coined the term ‘intensive mothering’, which describes the ideology that captures the social standards for motherhood. Mothers are expected to be experts, the primary caregiver for their children, engage in intensive labor relative to their children, and to value their children above all else (Hays, 1996). Hays identified a ‘guilt gap’ in parenting, where mothers experience higher levels of guilt about their child’s wellbeing compared to their co-parent, even when both parents are equally responsible for child rearing. Mothers are expected to give themselves joyfully and completely to motherhood, and to sacrifice their own lives to meet the demands of these motherhood myths (Hays, 1996; Sutherland, 2010).

It has been proposed that the emphasis placed on parenting of mothers and fathers, wherein mothers emphasize parenting more, may explain why mothers and fathers differ on their reports of parenting competence. For example, in a study of mothers and fathers, mothers were found to report having less competence which may be due to the increased pressure they feel to be an ideal mother (Knauth, 2000). When comparing the roles of motherhood to fatherhood and parenthood, Pedersen (2012) identified that to be a ‘good mother’, women identified the need to be dependable as well as the presence of managing extra demands that do not exist for fathers. Within the dominant ideology of intensive motherhood, mothers are expected to ask for help when they are overburdened, whereas fathers can ask for help when they want to be involved. Given the imbalance of

responsibility between parents, mothers must be able to appropriately negotiate and communicate with their co-parent (Pedersen, 2012). The demands of the intensive motherhood ideology speak not only to the importance of mother's wellbeing in the family, but also to the need for effective co-parental communication, and the reliance on external validation of their capacity as a 'good mother'.

Douglas and Michaels (2004) have also discussed how delinquent mothers are often contrasted with the media's portrayal of intensive motherhood leading to increased surveillance of mothering. Motherhood that is shaped by the media can result in an impossible standard of idealized mothering that can never be obtained, and thus the standards continue to escalate (Douglas & Michaels, 2004). The public perception of mothers suggests that women must prioritize their motherhood role above all other needs. Even mothers who do not buy into the intensive motherhood ideology, which supports rigid, perfectionistic motherhood standards, experience guilt and stress related to their parenting (Henderson, Harmon, & Newman, 2016). From a feminist perspective, many scholars attribute the high prevalence of postpartum depression to the impossible standards set by the medical model and societal expectations of mothers (Beck, 2002). Feminist scholars have also questioned the emphasis on children when discussing improvements to the intensive motherhood ideology. O'Reilly (2006) acknowledged that change for mothers cannot occur if the improvement of motherhood and mothering practices is defined as for, and about, children. For this reason, it is important for feminist informed motherhood research to understand motherhood as an independently important area.

Even in a therapeutic context, mothers are rarely discussed as agents of change in their own lives as women, and more often are considered as caregivers to their children or partners (Medina & Magnuson, 2009). In particular, the intensive motherhood ideology is said to be based on the social construction of white, middle class, heterosexual couples, in a nuclear family, which means that this discourse is most likely to impact those mothers - and mothers outside of this may be considered deviant (Arendell, 2000; Medina & Magnuson, 2009; O'Reilly, 2008). Thus, we would expect mothers from this socio-demographic background to experience motherhood through the intensive motherhood ideology. Their sense of parental competence would be partially reliant on positive co-parental communication, positive feedback from their environment (be it their child or others in her social circle), and to be determined by the overall health and wellbeing of their child. A feminist perspective of motherhood recognizes that both mothers and their children benefit when mothers live their own lives, have independent identity, and mother with autonomy and authenticity (O'Reilly, 2008).

While the feminist academic scholarship has questioned the intensive ideology, it appears that mothers themselves are still heavily influenced by this rhetoric. A qualitative study of mothers and their beliefs about motherhood found that participants were influenced by myths about motherhood and the beliefs that as mothers they should, and can, be a 'superwoman' as a parent. This study found that mothers felt surprised by their inability to meet their maternal expectation, and this led to feelings of being overwhelmed and less efficacious (Staneva & Wittkowski, 2013). Mothers whose prenatal expectations are challenged or changed in childbirth or child-rearing are more likely to experience lower self-esteem, and increase depression and anxiety (Lazarus & Rossouw, 2015).

Idealized motherhood is related to poor mental health and lower self-efficacy (Henderson, Harmon & Newman, 2016) and therefore the cultural pressures of mothers must be acknowledged when examining mothering and maternal sense of competence. As recommended by Anderson, Webster and Barr (2018), more focus in academic literature must be put on depicting realistic portraits of motherhood, to allow mothers, their families, and health professionals to understand motherhood more holistically. As such, the present study attempts to create a feminist informed, strengths-based, and holistic view of the maternal experience.

Circumplex Model. The Circumplex Model of Marital and Family systems is an integrated, system-focused model including dimensions of family cohesion, flexibility, and communication. In this model, family cohesion is defined as emotion bonding between family members ranging from low cohesion (disengaged) to high cohesion (enmeshed). The Circumplex Model suggests that a balanced level of separation and togetherness allows for the most functional family cohesion. The flexibility dimension refers to the amount of change in family leadership, relationships, and rules, including roles and negotiation styles. More flexible family structures, such as the democratic or egalitarian approach to parenting, tend to be more functional, whereas unbalanced marriages and families with rigid or chaotic roles are less functional. Finally, the dimension of communication is considered the facilitator between cohesion and flexibility. Communication is measured in the family by looking at listening skills, oral communication, self-disclosure, clarity, respect, and regard for others. The Circumplex Model suggests that families that are balanced and functional tend to have better communication (Olson, 2000; Olson, Waldvogel, & Schlieff, 2019).

The Circumplex Model emphasizes the role that communication plays in supporting family cohesion and adaptability (Schrodt, 2005). The main hypothesis of this model is that balanced levels of cohesion and flexibility are most conducive of healthy family functioning (Olson, 2011). The Circumplex Model lends itself well to the current study of parenting satisfaction and efficacy in mothers, because it emphasizes family variables such as communication between co-parents and bonding relationships between parents and children. The model can be used to illustrate different stages of family from pregnancy, childbirth, child raising, launching adolescent children, and moving into life as a couple after children. Given the diversity in age and family stage in this sample, the dynamic nature of the Circumplex Model allowed for it to fit different family contexts (Olson et al., 2019). While the relationship between dimensions in this model has been debated (Olson, 2000; Perosa & Perosa, 2001) it has been established that optimal flexibility, adaptability, and balance of communication between family members is ideal for family functioning (Perosa & Perosa, 2001). High family functioning is characterized by a warm atmosphere, open communication, clear but adaptable role assignment, and effective problem-solving during conflict (Wang & Zhou, 2015). Thus, we would expect that mothers who report more positive co-parenting experiences, as well as positive parent-child interactions, would also report a more positive and well-adjusted parenting experience.

The Circumplex Model was selected for this dissertation because it considers the interaction of cohesion, communication, and flexibility rather than viewing these as independent constructions. Further, it heavily focuses on relationships between the couple and within the family. Many of the scales used in this survey were focused on

relationships because it was hypothesized that, according to this particular model, family relationships influence maternal functioning and wellbeing. The Circumplex Model also emphasizes family wellbeing on a systemic level and considers all members of the family as it requires all members to feel good about their needs and relationships (Olson, 2000). The model was not used to assess family functioning per se, however the key concepts associated with this model (family communication, cohesion, and flexibility) were represented in the study's measurement of relationships, maternal satisfaction, and wellbeing.

Models such as Bronfenbrenner's bioecological theory were considered, however much of the scholarship using this theory focuses on children and childhood, and on community factors (Bronfenbrenner, & Morris, 1998; Tudge, Mokrova, Hatfield & Karnik, 2009). The variables in this study do not adequately capture the community aspect of this model (mesosystem and exosystem), and the cross-sectional design does not allow for the consideration of movement over time. The Beavers Systems Model of Family Functioning (Beavers & Hampson, 2000) was also considered as it focuses on family competence and family style to determine which family groupings require clinical intervention. This model takes a problem-focused approach to understanding family, and has not been used in recent literature. Further, the model focuses primarily on measuring a family's actual competence and focuses on the family unit as a whole, rather than the collective experience of each individual member. For these reasons, the Beavers Systems Model was not retained as a model to help us contextualize findings from this study.

Bandura's Theory and Parenting Self-Efficacy

Self-efficacy is an individual's belief in his or ability to successfully engage and in a task or behaviour. According to Bandura (1977) self-efficacy determines how much effort a person puts into a task and how long they persist at it despite challenges or adversity. Parenting self-efficacy specifically is of particular interest given the inevitable emotional, physical, and psychological challenges of parenting (Kohlhoff & Barnett, 2013). Much of the understanding of parenting self-efficacy is primarily based on Bandura's Social Learning Theory, which discusses that self-efficacy can connect a person to their environment and their actions and behaviours. Self-efficacy helps determine how a parent will respond to their child, especially during parenting tasks that involve difficulty (Bandura, 1977; Coleman & Karraker, 2003; Mouton & Roskam, 2015). This also relates to potentially social learning between one co-parent and another. It follows that a mother may learn parenting skills and subsequently increase her parenting self-efficacy if she has positive connection with other parents and her co-parent. As such, measuring a mother's social support and relationship with co-parent may capture some aspects of learned parenting practice.

Self-efficacy predicts emotional reactions, such as stress or anxiety, during adverse experiences (Bandura, 1977). Bandura (1977) also explains that the stronger the perceived self-efficacy, the more effortful a person will be in trying to accomplish a task. Strong parenting self-efficacy belief may allow for mothers to persist despite the inevitable challenges that come with motherhood, making parenting self-efficacy protective and essential for successful parenting practices (Moutin & Roskam, 2015). Many studies have examined the link between parenting self-efficacy and mental health (Farkas & Valdés, 2010; Haslam, Pakenham, Smith, 2006; Heerman, Taylor, Wallston &

Barkin, 2017; Hodgson & Fridovich, 2105; Kolhloff & Barnett, 2013; Porter & Hsu, 2003; Sevigny & Loutzenhiser, 2010) and the link between mood disorders and self-efficacy is well established. Given that anxiety and depression can decrease a mother's ability to persist within difficult tasks and lower parenting self-efficacy, it is important to measure maternal mental health when studying this concept.

Further, Bandura (1989) attests that an individual's self-efficacy varies across domains, and is a state based on the behaviour being performed and the context of this behaviour. Self-efficacy is thought of as a varying state, rather than a global trait. As such, understanding the self-efficacy and sense of competence of mothers in their parenting role is a unique domain to be studied, as it cannot be assumed a mother with high self-efficacy in other areas of life will have high self-efficacy in motherhood. The relationship between self-efficacy and performance is bi-directional, meaning that in the context of parenting, the dynamic of the relationship between parent and child can influence a mother's sense of parenting self-efficacy and competence (Bandura, 1977; Cutrona & Troutman, 1986; Kohlhoff & Barnett, 2013). As such, when seeking to better understanding maternal sense of parenting competence in NL an understanding of the quality of mother-child relationships is especially important.

Diversity of Family Structures in NL and Canada

The prototypical family structure in Canada has changed dramatically over the past century, and present day mothers function in a variety of different parental roles and family contexts. The 2016 Statistics Canada census reported 5, 817, 085 families with children under the age of fourteen. Of these children, 98.6% lived with at least one biological parent, 73.3% lived with both biological parents, and 19.2% lived in a lone-

parent family (Statistics Canada, 2016). In the 2016 census, of the households surveyed 26% of couples had children, 26% did not have children, and 9% were lone parent families. Changes in family structures are not only becoming more prevalent, but are occurring more rapidly. Between 2006 and 2011, the number of married couples increased by 3.1%, while more notably, the number of lone parent families increased by 8% and the number of common law couples by 13.9% (Statistics Canada, 2006; 2011).

The institution of the family has evolved into a more complex and a more diverse set of constellations, and the definition of a traditional nuclear family consisting of a mother, father, and their biological children no longer represents the Canadian population as a whole (Gucciardi, Celasun, & Stewart, 2004). Despite this national trend, the family structure in NL remains more traditional, with the 2016 Census reporting that 277, 300 couples (62%) are married or common-law in the province, compared to the national average of 56% of couples identifying as married or common-law. Further, in 2016, it was determined that 60,745 woman had children in their census family, 19,290 of whom were lone parents (Statistics Canada, 2016). The 2011 census reported on family structure and found that 88.3% of families in NL were intact (with biological children) and 11.7% were blended/step-families. This compliments a 2010 report from the Vanier Institute of the Family that reported that NL has the highest proportion of married individuals, as well as the lowest total divorce rate (21.6%) in Canada. However, in 2016, the majority of children in NL lived in an intact two-parent family (64.8%), 23.2% lived in a lone-parent family, 10.0% lived in a stepfamily, and 2.0% lived without their parents. Compared to the rest of Canada, NL was found to have the oldest population (mean age 43 years), as well as the lowest prevalence of immigrants (1.7%) suggesting that the province's

population is aging, and very homogeneous (Vanier Institute of the Family, 2010). These statistics suggest that compared to the rest of Canada, NL has a more traditional structure with the majority of families consisting of a married, Caucasian heterosexual couple with biological children. This makes NL an interesting case study for understanding traditional families and the socio-demographic profile of an island province.

Family literature has established that, in some ways, marriage can be a protective factor. For example, studies indicate that divorce can negatively impact women's mental health, and that marriage is protective because of increased economic resources, socio-emotional support and attachment, and giving their life a purpose (Umberson, Thomeer, & Williams, 2013). In contrast, it has been discussed that non-traditional parenting structures can lead to challenges for the family. For example, some studies suggest that stepmothers are at a higher risk for depression compared to biological mothers in married families (Shapiro & Stewart, 2011) and this has been examined in a variety of different types of stepfamilies (Doodson & Davies, 2014). Similarly, lone mothers, regardless of employment status, report feeling higher levels of personal stress, feeling overworked, and having chronic stress compared to partnered mothers (Maclean et al., 2004).

However, it is important to note that marriage in itself is not a protective factor in all cases, as studies indicate that individuals in second and higher order marriages may experience poorer mental health outcomes than those in first marriages (Hughes & Waite, 2009). The present literature indicates that different marital status' and partner relationships will influence the experience of motherhood and maternal wellness, however the mechanism and interactions of how this occurs in families is yet to be fully understood. For this reason, when studying the experiences of NL mothers, their marital

status will be considered as a predictor for maternal wellbeing and sense of competence. The present study aims to understand the prevalence of various material statuses among mothers in NL, as well as any differences between these groups.

Mothering in NL

NL is one of the least populated provinces in Canada, and prides itself on its unique culture and strong heritage. Surrounded by ocean, much of coastal NL consists of fishing communities whose people were negatively impacted by the 1992 cod-fishing moratorium which brought economic crisis to many communities (Fowler & Etchegary, 2008). There is a distinction between urban and rural populations in the province, which extends across employment, population density, and family structure. Rural populations in NL have a higher percentage of people in the labor force, compared to more academic and tertiary industry jobs found in urban areas (Vital Signs, 2016). Compared to the national average, census families are growing at a slower rate in NL (2.3% compared to 5.5%), which is likely attributed to slower population growth and faster population aging (Statistics Canada, 2011). In the 2016 census it was found that of the 60,675 census families with children in NL, there were 53,210 intact families (87.6%) and 7,465 stepfamilies (12.4%). The distinct age and family structure in the province is important to consider, as it differs slightly from the national norms. Although the regional age distribution is not available, rural populations are likely responsible for the slow population growth and aging. A 2016 population analysis found 34% of individuals in areas outside of the capital city of St. John's were over 60 years old, whereas only 22% of those within the urban center were over 60 years (Vital Signs, 2016).

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Rural mothers, particularly young mothers, are characteristically different than urban mothers in NL, reporting more traditional cultural roots and ties to close knit-communities (Vital Signs, 2016). Whereas mothers in urban centers of NL report receiving extensive amounts of information about mothering from doctors and healthcare providers, rural mothers report a larger involvement from older relatives, such as grandmothers, as information sources (Bonia et al., 2013). Access to medical care is also more difficult in rural NL. For instance, a 2004 study of urban, semi-urban, and rural populations across the province found 15% of Newfoundlanders did not have a regular doctor, with 74% of those without a doctor coming from rural areas (Mathews & Edwards, 2004). When considering the role of motherhood, access to healthcare and sources of parenting education are extremely important and regional disparity may be an important variable in some of the factors that contribute to maternal wellbeing. Understanding the differences that occur provincially across NL is important, as it is possible that mothers in different communities face different and unique challenges based on their geographical location.

NL also has a high percentage of mobile workers, which leads to many women heading lone-parent families while their partners are away. Mobile work or job-related circular mobility occurs when there is a significant distance between the place where one works and lives, often resulting in absence from the home for an extended period of time (Feldhaus & Schlegel, 2013) or the absence of a fixed work address (Morrice, Taylor, Clark, & McCann, 1985). Based on data from an unpublished descriptive analysis of interprovincial employees in Atlantic Canada by Long (2016), NL has the highest population percentage of interprovincial employees (IPEs) with 7.9% of its labor force

working out of province. Findings indicated that 44.6% of IPEs from NL are married or common-law, 7.4% are divorced, separated, or widowed, and 48% are single. While the study did not mention what percentage of IPEs were parents, the sheer volume of mobile workers and the fact that almost half of these workers are in relationships suggests that the investigation of the impact of mobile workers on women, couples, and families must be considered. The outcomes associated with having a spouse who is a mobile worker include feelings of isolation, reduced social support, and increased stress (Newhook et al., 2011). In addition to causing strain on the mother in her parental role, having a spouse who is a mobile worker is also linked to relationship strain. Long absences and non-standard work hours are characteristic of mobile work, and this can cause stress on the marital relationship (Newhook et al., 2011). This can be problematic, not only for the mental health and wellbeing of the couple, but also because of the implications on the child and parenting roles. Although recent investigation into this phenomenon illustrates potential negative aspects of mobile work on the family dynamic, there is extremely limited research to indicate how it influences the maternal experience. It is possible that having a partner who is absent may influence a mother's sense of parenting competence, mental health, or the communication between her and her co-parent and therefore mobile relationship status will be considered in the context of this dissertation.

Maternal Sense of Parenting Competence

Parenting sense of competence, described above as parenting self-efficacy, is often broken down into the constructs of satisfaction, a parent's perceived enjoyment of their role, and self-efficacy, a parent's belief in their own skill (Johnston & Mash, 1989). Internal appraisals regarding one's ability to successfully parent and the presence of

necessary skills are referred to as parenting competence and self-efficacy. Parenting stress has been found to be linked to parenting competence and self-efficacy (Berryhill, 2016; Leerkes & Burney, 2007). The subjective beliefs regarding whether a mother has the skills and knowledge to successfully parent her child contribute to a wide-variety of outcomes including positive mother-child interactions (Johnston & Mash, 1989) and maternal satisfaction in the parenting role (Berryhill, 2016). Confidence in parenting abilities is believed to help foster a well-adjusted resilient parent, as self-efficacy and perceived competence are two of the most evidence-based protective factors against postpartum depression (Lovejoy, Graczyk, O'Hare, & Neuman, 2000; Montigny & Lacharité, 2005). When parents are more confident in their ability to parent, they are more likely to use effective strategies that will benefit their children.

Further, a parent's perceived sense of their competence has been shown to accurately represent their actual competence, behaviours, and skills (Vance & Brandon, 2017) which emphasizes the importance and utility of this variable in family research. A review of 23 studies on parenting self-efficacy found strong evidence linking perceived parenting self-efficacy to actual parenting competence (Jones & Prinz, 2005). A quasi-experimental design aimed at manipulating mother's parenting self-efficacy found enhanced self-efficacy was protective against reactive parenting behaviours, feelings of frustration, and observable task-specific parenting behaviours. This Belgian study of 42 mothers with children aged four or five years in highlighted the measurable link between a mother's self-efficacy and her actual parenting behaviour, further strengthening the evidence between perceived and actual parenting competence (Mouton & Roskam, 2015). This suggests increasing parenting self-efficacy may actually improve parenting

competence, and that parenting self-efficacy is an accurate assessment of parenting quality.

Parenting sense of competence levels have also been suggested to mediate the relationship between risk factors, such as maternal depression, and child outcomes (Gilmore & Cuskelly, 2009). A woman's sense of competence in her own abilities to fulfill the role of mother can influence her life as well as her child's life, and the life of the other members of her family. Early research in the field established that a mother's sense of competence about her role as parent influences her children's wellbeing. Mothers with more parenting competence have a tendency to parent in such a way that they maximize benefits and positive development for their children, and minimize risk and harm (Raver & Leadbeater, 1999). Similarly, much of the present literature suggests that poor parenting competence leads to negative outcomes for children (Coleman & Karraker, 2003; Jones & Prinz, 2005; Shumow & Lomax, 2002; Steca, Bassi, Caprara, & Fave, 2011), which suggests that understanding the factors that contribute to mothers' sense of parenting competence will benefit both mothers and children alike. Parenting sense of competence and self-efficacy has also been identified as a mediator between parent personality and parenting style (De Haan, Prinzie, & Deković, 2009), a proposed mechanism of change in parenting programs such as 'Home Start' (Deković et al., 2010); and is also linked to maternal anxiety, depression and attachment (Haslam, Pakenham, & Smith, 2006; Kohlhoff & Barnett, 2013), which can contribute to marital satisfaction and family functioning (Sevigny & Loutzenhiser, 2010).

For the purposes of this study, parenting sense of competence will be used as the main outcome as it will allow for a better understanding of maternal resilience, wellbeing,

and the experience of mothers in their parenting role. Maternal sense of parenting competence has been linked to parenting stress and engagement (Berryhill, 2016), maternal role satisfaction (Ngai, Wai-Chi Chan, & Ip, 2010), maternal mental health (Ponomartchouk & Bouchard, 2015), and the quality of co-parenting relationships (Angle, Divney, Magriples, & Kershaw, 2015; de Haan et al., 2009) suggesting that this measure is related to many other components of the maternal experience. Given that parenting sense of competence is predictive of so many important aspects of family life and success, creating a comprehensive model that predicts parenting competence will allow for a thorough understanding of the relevant factors that contribute to the parenting experience and resilience of mothers in NL. However, to date no other study has included various types of predictors, including socio-demographic, maternal mental health, and family variables into a comprehensive predictive model of maternal sense of competence. It is the main objective of this dissertation to increase our understanding of the relationship that exists between the most robust predictors identified in the literature and maternal sense of parenting competence.

Predictors of Maternal Sense of Parenting Competence

Informed by the literature on maternal sense of parenting competence, a number of categories of variables were identified as important predictors to include in this study, specifically: 1) socio-demographic factors, 2) maternal mental health, and 3) family relationship characteristics. These categories of predictor variables have been found to relate to the maternal sense of parenting satisfaction and maternal self-efficacy, and it was hypothesized that these variables would be identified as significant predictors of maternal sense of parental competence in our sample of NL mothers. These three key areas were

chosen as the broad categories of predictors because they capture the key components of the maternal experience, and the aim was to determine the predictive variance accounted for by a holistic model. As Arendell (2000) describes, maternal practice involves intimate relationships, feelings, dynamic connections, and skill and therefore it is important to capture all of these facets within the parenting experience.

Socio-Demographic Predictors

Maternal Demographic Characteristics. When trying to understand what can affect the experience of motherhood, it is important to recognize basic demographic and health related factors and the role they might play in predicting maternal wellbeing. For example, an Australian longitudinal study examining parenting and childhood looked at a variety of factors that contributed to family adjustment and wellness (Australian Institute of Family Studies, 2016). The study found that compared with other parents, financially disadvantaged parents had poorer parenting skills and outcomes including overprotectiveness and self-efficacy. Younger mothers tended to report poorer parenting skills, particularly overprotectiveness, compared to older mothers. The study also found that compared to mothers who do not work outside the home, mothers who worked full-time were more likely to be overprotective. Mothers who worked part-time experienced the highest levels of parenting self-efficacy.

Overall this Australian study revealed that demographic characteristics including financial status, age, and employment influence parenting self-efficacy and traits such as overprotectiveness in Australian mothers. While the study did not attempt to explain causality, they noted differences across personal, social, and occupational characteristics.

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Factors such as age, employment, hours worked, and family income appear necessary in defining the typical experience of motherhood.

Despite the findings of the 2016 study in Australia, there is some contradictory evidence in the literature with regards to the influence of maternal age on parenting sense of competence. A study of 248 first-time mothers found that the younger the mother the greater her perceived sense of competence (Tarkka, 2003). However, in a 2010 study that included 184 first time mothers, it was found that age was positively related to maternal role competence, and findings suggested that those women who were younger were less likely to feel competent compared to older women. The authors hypothesized that older women may have more social and financial resources to cope with motherhood (Ngai, Wai-Chi Chan, & Ip, 2010) . The inconsistencies in the literature pertaining to maternal age and competence suggest there is a need to study further the relationship between these two variables.

There is some evidence to suggest that education is a predictor of parenting sense of competence. A Canadian analysis of parenting sense of competence by Gilmore and Cuskelly (2009) involved a sample of 586 mothers and 615 fathers who completed the parenting sense of competence scale. In this study, parents of children from birth to 18-years old were included. When using educational status as a predictor of parenting sense of competence scores, it was determined that parenting satisfaction and competence was increased as education increased. Specifically, parents whose highest education level was below a grade 10 level were found to be statistically significantly less satisfied with their parenting abilities compared to parents with a Bachelor's degree or higher. This study suggests maternal education may be a contributor to parenting sense of competence,

however the results in the literature are mixed. It may also be the case that because of the established links between education, socioeconomic status, and child/family wellbeing and access to resources (Bornstein & Bradley, 2014) that maternal education may be linked to parenting competence in a more nuanced way. A Canadian study of parenting sense of competence and self-efficacy in mothers of toddlers found no relationship between mother's education and self-reported self-efficacy (Sevigny & Loutzenhiser, 2010). These mixed findings indicate the necessity of including maternal education in current analyses in order to better understand the relationship between education and parenting sense of competence.

Child Demographic Characteristics. In addition to understanding maternal characteristics, the characteristics of a mother's household and her child must also be considered. While household characteristics are important to study, they are dynamic variables that change over time with the development and aging of family members, which can lead to variation in wellbeing throughout the lifespan. As suggested by Vance and Brandon (2017) it is imperative to consider the opportunities parents have to engage with children in developing competence. Mothers who have multiple children but deliver another with health complications or other complex needs may report a variation in their confidence of parenting based on this new context. In this way, parenting confidence is a combination of both mastery or parenting behaviours and tasks as well as increased feelings of competence based on interactions with child and a child's developmental success (Vance & Brandon, 2017).

A cross-sectional, quantitative analysis explored parenting competence across children of different developmental levels and observed that parents of adolescents had a

lower sense of competence compared to other ages. Additionally, quality of parent-child relationship and amount of parent-child communication were shown to influence the parenting competence with increased communication indicating increased parenting competence and self-efficacy (Glatz & Buchanan, 2015). While some child characteristics serve to influence a parents self-evaluation of their parenting skills, the literature does not suggest that child gender influences parenting sense of competence (Gilmore & Cuskelly, 2009; Rogers & Matthews, 2004). Overall, while some child characteristics, such as child age and parent-child relationship are suggested to influence parenting sense of competence and should be considered, child gender is unlikely to be a relevant consideration.

Of note, much of the literature that focuses on parenting sense of competence has been completed on parents whose children have diverse needs such as children with diabetes (Rodrigue, Geffken, Clark, Hunt, & Fishel, 2010), low income minority families (Farkas & Valdés, 2010; Heerman, Taylor, Wallston, & Barkin, 2017) or mothers of children with behavioural difficulties (Slagt, Deković, de Haan, van den Akker, & Prinzie, 2012). The significant relationships established here signify the need to understand child health and wellbeing, as well as a broader understanding of the impact of family on parenting competence. Given the Circumplex Model, it is clear that relationships influence family functioning and the relationship with children likely is no exception.

Social Support. The role of social support during the transition from pregnancy to motherhood is an established correlate with increased perceived maternal competence. One of the first studies to establish the importance of social support in parenting found

that mothers with increased social support are better able to form secure attachments with their children and have a higher sense competence in their parenting abilities (Cutrona & Troutman, 1986). More recent studies have further established that social support can aid with the transition to parenthood, especially in first time parents (Ahlborg, Berg, & Lindvig, 2013; Bloomfield et al., 2005). In an American longitudinal study of adolescent mothers, followed from pregnancy to parenthood, higher perceived social support was found to be positively associated with parenting self-efficacy, perceived competence, and satisfaction. It is believed that increased social support creates an increased perception of parenting potential resulting in better overall competence and parenting satisfaction (Angle et al., 2015). Support from one's partner, family members, friends, and health-care professionals have been positively associated with increasing maternal parenting sense of competence in adolescent and young mothers (Leahy-Warren et al., 2012; Royce & Balk, 1996). While much of the research to date has focused on adolescent and first time mothers, increased perceived social support is expected to contribute to the increase of parenting competence in mothers across all maternal profiles.

Family Health. Maternal, child and family health factors can influence the experience of motherhood, as a mother is responsible for her own health as well as the health of her children. For example, an American study using a convenience sample of 166 women to examine maternal health and mother-child attachment found that in pregnancy and early child-rearing, higher levels of education, social support, and socioeconomic status highly correlated with improved health practices and care for both mother and child (Alhusen et al., 2012). This suggests the relationship between health and demographic variables are closely related and can influence a variety of maternal

outcomes. Another recent study of the health and wellbeing of mothers of children with developmental disabilities found that these parents were statistically more stressed, and had more mental health difficulties of their own. Protective factors included participation in health promoting activities, social support, and self-empowerment (Bourke-Taylor, Pallant, Law, & Howie, 2012). These findings suggest that child-health, maternal health, community relationships and social support are also closely linked to maternal wellbeing, indicating the importance of these variables in particular motherhood experiences.

Maternal Mental Health

A diagnosis of a mental health disorders, such as depression, can seriously impair a mother's ability to possess strong parenting competence. Mental illness or poor mental health may generate feelings of incompetence in mothers and situations where they believe they do not have the sufficient knowledge, resources, or capacity to implement parenting strategies. Concerns about setting appropriate boundaries, finding balance in discipline, and regulating emotions are common in mothers with diagnosed mental health difficulties, and these concerns contribute to poorer sense of parenting competence (Oyserman, Bybee, Mowbrary & Hart-Johnson, 2005). Studies of parental self-efficacy and sense of competence have shown that it is inversely correlated with maternal depression, indicating that the presence of postpartum or maternal depression may negatively influence a positive belief in one's competence (Kohlhoff & Barnett, 2013; Ngai, Wai-Chi Chan & Ip, 2010; Tarkka, 2003). Similarly, an American longitudinal study of 104 new mothers found both depression and anxiety to influence parenting efficacy and ability (Biehle & Mickelson, 2011). There is also some evidence to suggest that the healthier a mother is, the more likely she is to have increased competence in

parenting abilities (Tarkka, 2003). Both maternal physical and mental health can have an influence on parenting competence. Understanding overall wellbeing as a contributor to parenting competence would be an advancement of the literature.

A Finnish study of maternal mental health self-efficacy examined the relationship between mental health, parenting self-efficacy, and family interactions in a sample of 120 mothers with clinically elevated symptoms of anxiety or depression. The study examined marital satisfaction, parenting self-efficacy, and family interactions in a structured play setting. There were established correlations between maternal mental health and self-efficacy, suggesting that anxiety and depression are related to lower maternal self-efficacy (Hodgson & Fridovich, 2015). Other studies have also suggested that maternal mental health issues, particularly depression, can be associated with reduced self-efficacy and poor outcomes in child development (Knoche, Givens, & Sheridan, 2007; Kohlhoff & Barnett, 2013). While specific mental health traits and diagnoses, primarily anxiety and depression, have been suggested to lower levels of maternal self-efficacy and competence, it is important to consider a broader perspective of maternal mental health as it might relate to competence and wellbeing. The present study uses the total score of the Outcome Questionnaire (OQ-45) as a possible predictor of maternal parenting sense of competence, as this broad measure captures a variety of components of mental health and functioning.

Family Relationship Characteristics

Co-parental Communication. Coparental communication refers to the way parents or parental figures relate and discuss their roles, responsibilities, and coordination of childrearing (Feinberg, 2003). Parents can communicate in a variety of ways, and may

have coparental relationships with their current partner, former partner, former partners new partner, current partners former partner, or a variety of other figures that share responsibilities or information about one or more children. In both intact and separated families, the co-parenting relationship is influenced by child related factors such as the number of children, child age, and child gender (Margolin, Gordis, & John, 2001).

Previous studies suggest that regardless of relationship status, co-parenting communication can influence marital satisfaction (Feinberg, 2003; Schrod, 2010). Given the importance of co-parental communication emphasized in the Circumplex Model of family (Olson, 2000), it can also be expected that this dynamic is related to parenting, family wellness, and family functioning. From an intervention perspective, one of the focuses of the Triple P- Positive Parenting Program, a program designed to improve actual parenting competence, is co-parental communication and partner support through communication (Sanders & Sanders, 2003).

Co-parenting in first-marriage or intact families is an important factor of both parent and child wellbeing. Quality of co-parenting can influence marriage quality, parental role adjustment, and overall child adjustment (Feinberg, Kan, & Hetherington, 2007; Schrod, 2010). When co-parenting relationships are positive, cooperative, and involve low levels of conflict the parental alliance is stronger, which increases overall relationship and parenting satisfaction (Sheftall, Schoppe-Sullivan, & Futris, 2010). These findings suggest that in married couples, a high quality of co-parental communication is associated with improved parental functioning, and overall wellbeing. While research is somewhat limited in this area, the suggestion that quality of co-parenting collaborating and communication can influence parental role adjustment could

indicate a possible relationship between co-parental communication and parenting sense of competence.

Knowing the importance of co-parental communication, maternal wellbeing and child development, and that 12.6% of Canadian families are stepfamilies (Statistics Canada, 2011), it is important to consider the communication between separated parents within stepfamilies. In an American study of 127 stepfamilies, coparental communication, relationship satisfaction, and individual mental health was assessed to determine the influence coparental communication had on wellbeing (Schrodt, 2010). Communication with non-residential parents was a predictor of positive relationship satisfaction in the new stepfamily relationship, suggesting that stepfamilies can benefit from inter-parent communication. However, there were some significant levels of stress in some of the stepfamilies, suggesting that mental health may be negatively impacted if the quality of the communication is poor. Similarly, a Portuguese study of 314 divorced parents examined the level of life satisfaction as it related to co-parenting conflict (Lamela, Figueiredo, Bastos, & Feinberg, 2016). Parents with high co-parenting conflict and low quality of close communication experience less effective parenting and more negative mood-symptoms than their cooperating peers. Children of cooperative co-parents exhibited less mental health problems, and the separated parents each reported higher overall functioning. This suggests that high quality of co-parental communication can improve wellbeing for both children and parents (Lamela et al., 2016). Finally, a study using the American National survey of Families and Households looked at non-intact families where the mother is the primary caregiver to the children. This analysis found that cooperative co-parenting relationships are more likely to increase father involvement.

This finding is beneficial to all members of the family, as it increases the father-child relationship and overall maternal wellbeing (Sobolewski & King, 2005). Overall, maternal wellbeing and improved quality of parent-child relationships seems to be associated with high quality co-parental communication in both separated and intact families. As such, we included a measure of co-parenting relationship quality as a predictor of maternal wellbeing and parenting sense of competence.

Relationship Satisfaction. The demands and transitions associated with motherhood require strong relationships with both the co-parent/partner as well as with her child. A mother's relationships, and quality of relationships have been proven to be an essential part of mental health, wellness, and overall wellbeing. In a Norwegian cohort study of 62, 956 couples experiencing a first pregnancy, relationship satisfaction was responsible for 6.3% of the total variance of maternal emotional distress (Røsand, Slinning, Eberhard-Gran, Røysamb, & Tambs, 2011) indicating that the quality of the relationship between partners has a modest yet significant impact on wellbeing. Similarly, there is evidence to suggest that poor partner relationships are predictive of maternal depression pre and post-partum (Bennett et al., 2004; Lancaster et al., 2010; Røsand et al., 2011). Furthermore, Røsand et al. (2011) found that partner relationship satisfaction reduced the negative effect of frequent moving, somatic disease, maternal smoking, family income, irregular working hours, dissatisfaction at work, work stress, and mother's sick leave which further supports the powerful effects that positive relationships can have on maternal wellbeing.

It is important to understand a mother's satisfaction in both her relationship with her partner and her child, as the two relationships are closely related in the literature. For

example, a mother's negative relationship satisfaction and poor attachment with her partner was found to be related to attachment avoidance and negative feelings to her children among a sample of 503 German first time parents (Sierau, Jungmann, Philipp, & Herzberg, 2013). This suggests that relationship satisfaction in one area of family life may influence others, and highlights the importance of understanding both child and partner relationships, as well as the link to relationships and mother's satisfaction in their parenting roles. A study comparing the wellbeing of happiness and wellbeing of parents and non-parents emphasized the importance of parents having positive relationships with family members and found marital dissatisfaction was related to more negative emotions and less wellbeing (Nelson, Kushlev, & Lyubomirsky, 2014). The evidence that family relationship quality is linked to wellbeing and parenting sense of competence is consistent with the Circumplex Model of family, which states that family functioning influences an individual's development, wellbeing, and identity (Schrodt, 2005). Overall, the literature suggests that family relationship satisfaction and co-parenting may have strong ties with maternal health and wellbeing, and as such will be examined as predictors of maternal sense of competence.

This Dissertation

This dissertation focuses on two main research objectives based on the NL Motherhood Project data. The first is to create a comprehensive profile of mothers in NL focusing on socio-demographic characteristics, given that no such profile currently exists. This will include age, marital status, education level, geographic location, access to healthcare services, perceived social support, and questions pertaining to life in NL specifically, such as questions regarding mobile work and the use of fertility treatments.

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This research objective will allow for a better understanding of the population and will identify any unique characteristics to NL mothers and will answer Research Question 1: What is the demographic profile of mothers in NL. This aspect of the dissertation is inspired in part by the recent publication of *'Newfoundland & Labrador's Vital Signs'* - however it will focus exclusively on mothers (Vital Signs, 2016).

The second research objective is to identify predictors of mothers' parental sense of competence using the Parenting Sense of Competence Scale (PSOC) to understand both facets of parenting sense of competence: parenting satisfaction and efficacy. Research Question 2 asks: What are the predictors of motherhood satisfaction and maternal self-efficacy?

Much of the literature in parenting sense of competence has focused specifically on the demographic characteristics of marginalized mothers and their children (Heerman et al., 2017; Ngai, Wai-Chi Chan & Ip, 2010; Ponomartchouk & Bouchard, 2015). This differs from that of the current study, which utilized a community sample to help further understand demographic predictors of PSOC. Given previous findings, it was expected that demographic variables such as maternal age, education level, social support, family structure, and marital status would be found to be significant predictors of PSOC scores. Specifically, we hypothesized (hypothesis 1) that older more highly educated mothers who generally report a stronger social support network would report a higher level of parental competence (Anglely, Divney, Magriples & Kershaw, 2015; Gilmore & Cuskelly, 2009; Ngai, Wai-Chi Chan, & Ip, 2010).

In following the emphasis placed on maternal mental health in the literature (Haslam, Pakenham, & Smith, 2006; Leahy-Warren, McCarthy, & Corcoran, 2012),

mental health was considered as one of the primary variables contributing to a mother's sense of parenting competence. It was expected (hypothesis 2) that poorer mental health would be related to a lower sense of parenting competence (Berryhill, 2016; Jones & Prinz, 2005; Lovejoy et al., 2000; Ngai, Wai-Chi Chan & Ip, 2010).

Finally, given the importance of family cohesion and communication emphasized in the Circumplex Model (Olson, 2000), family variables and relationship scales that were significant in the correlational analyses, were included in the third block of our regression model, after controlling for demographics (block 1) and maternal mental health (block 2), to see if family relationships provided any additional contribution to the prediction of parenting sense of competence. It was expected (hypothesis 3) that mothers who reported close co-parenting experiences, and close parent-child interactions would also report a stronger sense of parenting competence (Lamela et al., 2016; Røsand et al., 2011; Schrodtt & Braithwaite, 2011). The overall aim of the second research question was to obtain a clearer understanding of the predictors of both aspects of parenting sense of competence (i.e., efficacy and satisfaction) by creating the first comprehensive predictive model of its kind. Two separate regression models using the same predictors were run for each dependent variable, the parenting sense of competence efficacy subscale and the parenting sense of competence satisfaction subscale.

Methods

Participants

Participants for this study were mothers living in NL who chose to complete an online survey about their maternal experience. Mothers of any marital status, sexual orientation, age, or gender orientation were able to participate in the study, as were

mothers of biological, adopted, or stepchildren. The study focused primarily on mothers with children under the age of 18, as many of the questions were more appropriate for mothers with young children who still live in the family home. Mothers with children over the age of 18 were still included in the survey, however they were able to skip questions that did not pertain to their specific parenting situation. Mothers from across the province were recruited for the study in order to obtain as diverse and representative sample of both urban and rural mothers as possible, given the recruitment strategy. Every attempt was made to ensure the sample of participants was inclusive of mothers from across the province. Populations that were under-represented throughout the recruitment process, such as adoptive mothers and mothers living in Labrador, were targeted via social media recruitment and newspaper interviewing to increase participation from these populations. Participants were included in the study if they consented to participate and completed the majority of an online survey. The survey included a series of measures examining demographic variables including personal, educational, financial, relational, and health-related questions as well as specific demographic questions regarding the participant's children. The survey also included a number of validated self-report measures such as the Child Parent Relationship Scale (Short Form), the Kansas Family Life Satisfaction Scale, the Brief Dyadic Adjustment Scale, the Quality of Co-Parental Communication Scale, the Parental Sense of Competence Scale, and the Outcome Questionnaire (measures described below; see Appendix E for full survey).

Measures

Demographic Variables. The demographic questions consisted of four categories of socio-demographic information relating to the maternal experience. There were 23

personal demographic questions, relating to employment, income, family structure, age, marital status, living situation, family structure, and geographical location in NL. There were six child and family health questions that asked about the child's health needs and access to services, use of services, availability of health services, and satisfaction with these services. There were eight personal health and experience questions that focused on maternal health, sleep, nutrition, mental health, traumatic or important life events, and quality/satisfaction of social support. Finally, there was a maximum of 28 child specific demographic questions. This section involved the use of skip-logic to ensure mothers were only asked the questions that pertain to a mother's particular circumstances and parenting situation. There were questions about biological, adoptive, and stepchildren that asked about the relationship, custody, and family involvement. The demographic questions in the questionnaire were adapted from the national motherhood survey on parenthood conducted by Gosselin and Gosselin, and from a study pertaining to growing up in Australia, conducted by the Australian Institute of Family Studies (Australian Institute of Family Studies, 2016; Gosselin & Gosselin, 2016).

Parenting Sense of Competence Scale. The Parenting Sense of Competence Scale (PSOC; Johnston & Mash, 1989) is a 17-item self-report scale that measures two dimensions of parenting self-esteem and competence: satisfaction and efficacy. Satisfaction is the degree to which the parent feels frustrated, anxious, or motivated in their role as a parent. Efficacy is the degree to which the parent feels competent, capable of problem-solving, and familiar with parenting duties. Each item is rated on a six-point Likert scale with 1 representing "strongly disagree" and 6 representing "strongly agree". Possible total scores range from 17 and 102 with a higher score indicating higher

competence. Scores on the eight-item efficacy subscale range from 8 - 48 and scores on the nine-item satisfaction scale range from 9 - 54. The scale's subscales both have good internal consistency, each with a Cronbach's alpha of .79, and the scale is a valid measure compared to other measures of family functioning and control (Ohan, Leung, & Johnston, 2000). The scale demonstrated test-retest reliability ranging from .46 to .82 (Gibaud-Wallston & Wandersman, 1978). It was initially developed for parents of infants, but the wording was changed in a later study to replace "infant" with "child" to extend the scale's use for children of different ages, and they found that there were no significant effects of the age of the child (Johnston & Mash, 1989). The PSOC scale is the most commonly used measure of parenting self-efficacy (Gilmore & Cuskelly, 2009). It has been validated in samples including Chinese mothers (Ngai, Wai-Chi Chan, & Ip, 2010), Australian parents (Rogers & Matthews, 2004), Canadian mothers (Ohan et al., 2000) and with American veterans (primarily fathers) (Bui et al., 2017). This scale was used as a primary outcome measure in the study and Cronbach's alpha was determined for the total scale (.53), efficacy subscale (.67) and satisfaction subscale (.78).

Child-Parent Relationship Scale: Short Form (CPRS; Pianta, 1998). The CPRS was used to measure the maternal experience of their relationship with their child. The CPRS is a 15-item self-report measure that assesses the relationship between a parent and their children using two subscales: conflict and closeness (Pianta, 1998). A six-point Likert scale ranging from "definitely does not apply" to "definitely applies" in response to each of the 15 situational prompts. The closeness scale measures the maternal experience of warmth, affection, and communication in the parent-child relationship and this scale consists of seven items. The conflict scale captures the maternal experience of

negativity and hostility in the parent-child relationship and consists of eight items. The CPRS is a well-validated and reliable measure for assessing relationships and interaction between parents and children on both dimensions. The conflict and closeness scales have a low correlation ($r = .16$), suggesting that they represent distinct aspects of maternal relationships. The Cronbach's alpha for maternal conflict and maternal closeness subscales have been found to be .84 and .69 respectively (Driscoll & Pianta, 2011). In the motherhood survey, participants completed this scale once per each type of child that applied to their parenting situation. Cronbach's alphas for the biological CPRS was determined to be comparable to the published norms: conflict (.91) and closeness (.63).

Quality of Co-Parental Communication Scale (QCPCS; Ahrons, 1981). The QCPCS is a 10-item self-report scale that measures a mother's perception of the communication between herself and her parenting partners with respect to interactions relating to childcare (Ahrons, 1981). The scale measures specifically the parenting communication as it relates to child-rearing issues. Prior to completing this scale, participants were asked to indicate if they communicate with their current partner and/or their former partner such that only the appropriate questions were asked to each participant. The QCPCS is the most widely used scale for determining communication in stepfamilies, has high inter-rater reliability between co-parents, and produces adequate internal consistency scores with Cronbach's alpha of .88 for parents and .84 for stepparents (Schrodt & Braithwaite, 2011). The scale consists of two subscales: a four-item conflict subscale and a six-item closeness subscale. Each item is rated on a five-point Likert scale of frequency where a score of 1 indicates "never" and a score of 5 indicates "always". On the conflict subscale, scores range from 4 - 20 with a high score

indicative of low compromise and high conflict between co-parents. On the closeness subscale, scores range from 6 - 30 with a high score indicative of compromise, parental alignment, and positive, close relationships between co-parents. The Cronbach's alpha was .61 for the total scale, .83 for the conflict subscale, and .84 for the conflict scale.

Outcome Questionnaire. The Outcome Questionnaire (OQ-45; Lambert et al., 1996) measures symptoms of anxiety and depression, interpersonal relationships, and social functioning and it was used as a measure of maternal mental health and wellbeing in this study. It is a 45-item self-report measure that uses a five-point Likert scale to assess three main areas of mental health: symptom distress (25 items), interpersonal relationships (11 items), and social role performance (9 items). Total scores on the OQ-45 range from 0 - 180 with a score of 63 commonly used as a cut-off for clinically significant distress (Lambert et al., 1996). A high total score indicates that an individual has a large number of symptoms of distress, interpersonal difficulties, and reduced quality of life. A low score on the OQ-45 suggests the individual has no more difficulties than an average individual (Lambert, 2004). The scale has been validated in clinical, community, and undergraduate samples and has high reliability and construct validity (Lambert et al., 1996). The OQ-45 has an internal consistency of .93 and has good test-retest reliability (Lambert, Hansen, & Harmon, 2010). This scale is a good measure of mental health as it has high concurrent validity coefficients with the Beck Depression Inventory and the State-Trait Anxiety Inventory (Umpress, Lambert, Smart, Barlow, & Clouse, 1997). On the motherhood survey, the Cronbach's alpha for the OQ-45 was .94.

Procedure

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The NL survey on motherhood was launched on February 1, 2017, on the survey platform Qualtrics (website) and was closed on October 6, 2017. The close date was determined because the recruitment goal was surpassed and there had been a two-week period with no new participants. Snowball recruitment was initially used to attract participants and the survey was widely disseminated on social media platforms, such as Facebook and Twitter, by members of the Family Resilience Lab. Written posts and posters advertising the study were shared in various Facebook groups such as motherhood groups and community groups. In order to minimize recruitment biases associated with posting in groups targeted at mothers, “buy and sell groups” from communities across the province were the primary target of Facebook posts because these groups are general and consist of a variety of individuals. Posts were made in 35 different Facebook groups, and from there many users chose to share the post on their personal pages as well (Appendix B). It was emphasized in the social media posts and on the posters that all moms were eligible to participate regardless of sexual orientation, relationship status, or type of children. To increase participation from across the province, 90 daycare centers, health care centers, and community centers were contacted via phone and asked to put up posters advertising the study (Appendix C). Packages including information about the study and posters were mailed to these organizations, and phone calls were made to follow-up with these centers to ensure they had received the packages and to answer any follow-up questions. Advertisements were also featured on the website of a provincial new radio station (VOCM), and radio interviews about the study aired on three local stations in May 2017 (CBC Gander, CBC Labrador, and CBC Corner Brook). In June 2017, multiple local newspapers featured an article about the study, which prompted a

substantial increase in participation by mothers from across the province, including mothers from rural areas and Labrador.

The first page of the survey featured an informed consent page detailing information about the purpose, risks, and ethical evaluation of the study (Appendix D). Participants were asked to give their consent by clicking the next page of the survey and were informed that they could exit the survey at any time. Participants were able to stop the survey and come back to it within seven days of starting. Participants were given the option to complete the survey online or to have a volunteer read them the questions over the phone, however all participants opted for the online version of the survey. The online survey used skip-logic and was customized based on the demographic questions to reflect the experience of the participant regarding questions about their family context. For example, lone mothers did not answer questions pertaining to quality of co-parental communication.

Mothers completed child-parent scales once for each type of child that applied to their parenting situation, including biological, step, and adopted children. To reduce completion time and maximize participation, the survey asked mothers to complete the child scales according to their experience with the child who has the next birthday. This method was chosen to randomize the response while still getting an accurate depiction of parent-child relationships. For example, a mother with a biological and adopted child would complete the scales twice, being prompted each time to respond according to their experience with the biological child who has the next birthday and adopted child who has the next birthday. On average, the questionnaire took approximately 20-30 minutes to

complete, with longer completion times reflecting more complex family structures. The survey launched on February 1, 2017, and was closed on October 5, 2017.

The original desired sample size for the study, 160 participants, was determined based on the Canadian motherhood study (Gosselin & Gosselin, 2016), and this goal was quickly surpassed. Once the survey was closed in October 2017, the data were exported from Qualtrics and cleaned before being imported into SPSS for analyses.

Data Cleaning and Missing Data

Upon exporting the database from Qualtrics, it was determined there was a significant amount of missing data due to attrition and random non-responding. Data are considered to be missing at random when the missing information is not related to the specific value, item, or responses, meaning that there is no data that has a higher probability of being missing compared to other data (Kang, 2013). When the missing data of the present survey was visually examined, it appeared to be missing at random. There were no items that had higher non-response rates than others, and the majority of unanswered items were followed by a series of unanswered items suggesting participant attrition rather than non-responding. The vast majority of participants who did not answer the bulk of the survey questions did not complete more than half of the demographic section, and therefore their information was excluded because we did not have enough information to draw a demographic profile for these participants. No statistical analyses were completed to determine if there was a difference between the mothers who completed the survey and those who did not, however a visual inspection determined that there were no noticeable differences between these mothers and the rest of the sample.

Case wise deletion was determined to be the best method of managing missing data in this case and therefore participants with a significant amount of data missing were omitted to ensure unbiased estimates and more conservative results (Donner, 1982). The sample size of this study allowed for this strategy to be used (Kang, 2013). To determine what cases needed to be deleted, members of the Family Resilience Lab who were involved with the motherhood study worked in pairs to examine the response rate for every case. The deletion was completed in two steps. First, a visual inspection of the missing data in this sample determined that participants with more than 50% of missing data did not have data missing throughout the survey, and instead reached a point where there was attrition. Participants who completed less than 50% of the survey were omitted from analyses.

After those participants who did not complete at least 50% of the survey questions were removed, there were still a significant number of cases with missing data that did not appear to be due to attrition or skip-logic. Given the sample size of the present survey, participants missing more than 10% of data were excluded as was suggested by Bennett (2001). The survey consisted of 75 multi-item questions, however participants were exposed to a different number of items dependent on their responses to demographic questions. Participants were exposed to a maximum of 205 items (if they had biological, step, and adopted children and multiple partners) or a minimum of 100 items (if they had no children under the age of 18 and no partner). The number of items missing to justify omission was determined for each participant, and the first author was consulted if there ever was an anomaly.

In total, 1450 mothers participated in the study by completing some of or the entire questionnaire, and 1082 finished the questionnaire yielding an overall retention of 75% of participants. As participants who completed most of the survey were included, there was still some missing data resulting from skipped questions as well as questions that a participant was not shown due to skip-logic. Items left blank due to skip-logic were coded “888” to represent “not applicable” whereas items left blank due to participant choosing were coded as “missing” and represented numerically by “999” in SPSS. For all analyses, a filter was applied to select only cases with a response of less than 888 to ensure only answered questions were included, which resulted in different sample sizes across analyses. The sample sizes for the bivariate analyses are reported in the tables. For the regression analyses, a filter was applied with SPSS to ensure that mothers included in the analyses responded to all items included in the regression. The sample size for both regressions was 810 mothers. This sample excluded mothers with step or adopted children, who did not have a current co-parent, or who did not respond to one of the items included.

Statistical Analyses

The database was exported from Qualtrics and housed on SPSS, and that software was be used to complete all subsequent statistical analyses. The cleaned database was assessed for accuracy, and normal distribution, and non-normal variables were forced normalized to create a new normalized variable to be used for statistical testing.

Research Question 1: What is the socio-demographic profile of mothers in NL? To determine the demographic characteristics of mothers, descriptive statistics were used to describe the data and provide a full analysis of the sample. Demographic characteristics

such as ethnicity, age, geographic location, education, employment, and family structure were calculated and presented numerically to indicate the percentage of the sample that met each demographic category. Demographic information were also reported between urban and rural mothers to determine if there are any significant differences in this sample based on geographic location. Comparisons between the current sample of NL mothers and the available census Canada data were made in order to assess the representativeness and generalizability of the motherhood survey. Data on the mean age of mothers in NL was available from the 2011 census and data on the marital status of women in NL and median household income was available from the 2016 Census (Statistics Canada, 2011, 2017). Differences between rural and urban mothers were analyzed using independent samples t-test and chi-square test of independence and effect sizes were calculated using Hedge's *g* due to unequal group samples. Health-related variables including weekly produce consumption, exercise frequency, quality of sleep, personal and child health, and satisfaction with social support were also reported. Finally, the descriptive statistics including mean, standard deviation, and range were reported for the validated measures.

Research Question 2: What are the predictors of parenting sense of competence?

The next part of the data analysis involved predicting maternal sense of competence and the variables that contribute to this outcome. Variables supported by the literature to be potentially significant or related were assessed at the univariate and bivariate level to determine statistical significance. Those variables that were significant and not significantly highly inter-correlated with each other were included in the multivariate analysis to control for multicollinearity. A reliability analysis of the PSOC was conducted to determine if a regression for the entire scale could be conducted or if the two subscales

needed to be independently predicted. The internal consistency of the subscales were checked and the item-total statistics, including Cronbach's alpha with specific items removed were calculated. In following the emphasis placed on maternal mental health in the literature (Haslam, Pakenham, & Smith, 2006; Leahy-Warren, McCarthy, & Corcoran, 2012), mental health was entered into the hierarchical regression separate from demographic variables. In two separate regressions, demographic variables (block 1), maternal mental health (block 2), and relationship variables (block 3) were entered to test our predictive model of maternal sense of parenting competence.

Ethics Approval

This project received ethics approval in June 2017 from the Interdisciplinary Committee on Ethics in Human Research (ICEHR).

Results

Demographic Profile of Motherhood

The recruited sample of mothers was largely homogenous, which is representative of the population of NL. The sample was primarily Caucasian (95.1%), lived in the Avalon region (63%), in an urban setting (75.5%), were married for the first time (63.7%), heterosexual (94.9%), and had only biological children (88.4%). Of note, 40.9% of the sample considered themselves to be part of a mobile relationship. The majority of mothers reported being from the Avalon region (63%), which is known to be the most densely populated part of the province, 15.1% were from Central NL, 14.3% were from Western NL, and 4.1% were from Southern NL. Of note, while Labrador accounts for approximately 9% of NL's population, only 3.3% of participants identified as living in Labrador. It is uncertain from population studies (i.e., census) what proportions of the

province's mothers live in Labrador, and therefore it is difficult to approximate by how much this group is under-represented. See Table 1 for more socio-demographic information.

There were a number of significant demographic differences between urban and rural mothers. All key demographic variables were compared and age, education, involvement in a mobile relationship, and employment status were noted as being significantly different. Urban mothers had statistically significantly higher mean ages ($M = 1.196$, 95% CI [0.080, 2.31], $t(442.44) = -2.09$, $p = .037$) Hedge's $g = 0.149$ and levels of education ($M = 0.54$, 95% CI [0.28, 0.79], $t(1079) = 4.05$, $p < .0005$) Hedge's $g = 0.298$ compared to rural mothers. See Table 2 for the socio-demographic information based on geographic location.

An independent samples t-test determined that there were statistically significant differences between mothers in mobile relationships and mothers not in mobile relationships within the variables measuring household income $t(995.59) = 3.45$, $p = .001$ Hedge's $g = 0.171$, mother's education $t(1043.21) = -2.79$, $p = .005$ Hedge's $g = 0.194$, and duration of relationship $t(865.04) = -2.18$, $p = .03$ Hedge's $g = 0.157$. For all variables, Levene's test of equality of variances was significant and as a result the Welch Satterthwaite correction was employed. Mothers not in a mobile relationship had a significantly higher household income and had a significantly longer duration of relationship compared to mothers in a mobile relationship. However, mothers in a mobile relationship had a significantly higher mean level of education. Mother's age was not significantly different between the two groups.

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There were statistically significant differences in provincial location between mothers in mobile relationships and not in mobile relationships with respect to whether a mother lived in an urban or rural setting $\chi^2 (1, N = 1082) = 37.36, p < .001$. Mothers not in a mobile relationship were more likely to be living in an urban part of the province than mothers in a mobile relationship (OR = 2.42, small/medium effect). Mothers in a mobile relationship were much more likely to be living in a rural part of the province than mothers not in a mobile relationship (OR = 4.93, medium effect). There were also significant differences in whether a mother was employed between mothers in and not in mobile relationships, $\chi^2 (1, N = 1082) = 7.16, p = .01$. Mothers not in a mobile relationship were more likely to be living in an urban part of the province than mothers in a mobile relationship (OR = 1.42, small effect), and mothers in a mobile relationship were more likely to be not working outside the home (OR = 1.41, small effect).

A one sample t-test was used to determine if there was a significant difference between the average age of mothers in NL from the 2011 Canadian census data, $M = 28.90$ years, and from the current motherhood survey, $M = 35.66$ years. Results of the one sample t-test, $t(1081) = 27.58, p < .001$, suggest that there is a significant difference between the average age of mothers from the Canadian census and from the motherhood survey. Effect size could not be reported for this t-test as the census data did not include standard deviation for mean age. A chi-square test of independence was used to determine if there was a difference between marital status reported in the motherhood survey and the marital status reported in the 2016 census data of women in NL. There is a significant chi-statistic when looking at difference in marital status of the motherhood survey and NL census data $\chi^2 (6, N = 407) = 31.17, p < .001$, Cramer's $V = .28$, medium effect. The

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motherhood survey had a significantly higher proportion of married and cohabiting mothers whereas the census data of women in NL had a significantly higher proportion of single, separated/divorced, and widowed women.

The median household income interval reported in the NL motherhood study was between 75, 000 and 89, 999. According to the 2016 census data, the median household income in NL was 83, 589 which is within the same range as the household income captured in this study (Statistics Canada, 2016). It was not possible to directly compare ethnic origin reported on the census with the motherhood survey. The census data allow for individuals to report more than one ethnicity leading to many people reporting multiple ethnicities, whereas the motherhood survey did not have this option and therefore it cannot be directly compared what percentage of women from NL endorsed each ethnicity on the census. Descriptively, on the census the majority of women in NL reported Caucasian (North America or European) origins, followed by Native North American and Asian as the next most frequent (Statistics Canada, 2016), which was also the order of frequency on the NL motherhood survey (95.1% Caucasian, 2.7% Native North American, 1.8% Other, 0.3% Asian).

Variables related to health and wellbeing were also examined. Regarding health, 89.8% of mothers described their personal health as good, very good, or excellent and 95.1% described their child's health as good, very good, or excellent. The majority of mothers (83.4%) described themselves as at least moderately satisfied with their current level of perceived social support (See Table 3 for more information on health-related variables).

Mothers responded to a number of scales about their family relationships, mental health, and parenting sense of competence. On the mental health measure (OQ-45) 69.8% of mothers had a score below the clinical cut-off for psychological distress ($M = 22.92$), suggesting that overall this community sample was mentally healthy. While there are no formal cut-offs for the PSOC, a Canadian validation study reported ranges from 36.38 to 41.00 for maternal satisfaction and 21.53 to 30.50 for maternal efficacy within a Canadian community sample of mothers with children aged 5-12 (Ohan, Leung, & Johnston, 2000). The mean score for maternal satisfaction in this study was 36.60 and the mean score for efficacy was 36.24. In the NL sample, maternal satisfaction fell within the same range as the previously reported Canadian sample, and maternal efficacy was somewhat higher than what was reported in the 2000 study. The mean scores for the clinical and family scales can be found in Table 4.

Independent samples t-tests were conducted comparing the means of the relationship and wellbeing scales for mothers from urban and rural settings (Table 5) and mothers in a mobile relationship and not in a mobile relationship (Table 6). There were no statistically significant differences between these groups.

Predicting Mothers' Parenting Sense of Competence

A reliability analysis was conducted to determine if the Cronbach's alpha for the PSOC matched that of the literature (Ngai, Wai-Chi Chan, & Ip, 2010; Ohan et al., 2000; Rogers & Matthews, 2004). The Cronbach's alpha for the PSOC was 0.53. When the Cronbach's alpha for each subscale were calculated, the alpha for Satisfaction was 0.78, and the alpha for Efficacy was 0.57. Given that the Cronbach's alpha values were better for the subscales than for the overall PSOC scale, the subscales were used for the analyses

and two separate regression models were required to predict maternal parenting competence. Despite the low Cronbach's alpha for the efficacy subscale, the regression was still run in order to compare any relevant predictors to the satisfaction subscale. However, given the lower than expected internal consistency for the efficacy subscale, results from this regression model must be interpreted with caution.

The survey contained a multitude of variables that were thought to relate to maternal sense of parenting competence, and therefore bivariate analyses were conducted to determine which variables were the most correlated. Correlations between variables were considered to ensure minimal overlap in predictors. All included predictors were included based on the literature and their correlations with the PSOC subscales (see Table 7).

To determine the unique contribution of maternal demographics, maternal mental health, and family relationships in predicting parenting sense of competence a multiple regression was conducted. Based on the bivariate results, the following models were chosen for the multiple regression: 1) maternal age, household income, maternal education, personal health, and child health, 2) OQ-45 total score, 3) biological CPRS-closeness, biological CPRS-conflict, QCPC-closeness current partner, QCPC-conflict current partner. For the purpose of the regression, only co-parental communication with current partners and child-parent relationship with biological children could be included due to a lack of power for other types of relationships. In this sample, the number of mothers with step or adopted children, or mothers who identified as co-parenting with a new partner or a former partner's new partner was insufficient to conduct a separate regression. Prior to conducting the multiple regressions, assumptions were checked to

ensure the data met the criteria for the analysis. The data were normalized to ensure the assumption of normality was met, as the majority of the variables were not normally distributed. Linearity was assessed by partial regression plots. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.676 for PSOC-Satisfaction and 1.961 for PSOC-Efficacy. Homoscedasticity was assessed by unstandardized predicted values. There was no evidence of multicollinearity, as assessed by tolerance values greater than 0.1.

Predictors of PSOC-Satisfaction. The first hierarchical multiple regression was conducted to evaluate whether demographic variables, maternal wellbeing, and familial relationships contributed to the prediction of maternal sense of parenting satisfaction. In model 1, maternal age, household income, education, personal health, and child health were entered into the regression equation to account for socio-demographic variables, accounting for 10.8% of the variance in maternal sense of PSOC-Satisfaction. Household income had an independent significant effect on the model ($p = .019$) with higher income indicative of higher PSOC-Satisfaction; however, this did not remain significant in subsequent models. Personal health had a significant effect on model 1 ($p < .0005$); however, this effect did not continue to be significant in later models. Only child health had an independent significant effect on the model ($p < .0005$), which remained continuously significant in each subsequent model, suggesting that mothers PSOC-Satisfaction increased in a positive direction with a mother's reported rating of her child's health, and that this direct relationship is statistically robust.

The mental health measure was the OQ-45 total score, and this was entered into the next block. Block 2 explained 28.7% of the variance. The R^2 change from model 1 to

block 2 was .287 (F change = 380.785, $p < .001$), suggesting that the amount of additional variance predicted by the outcome questionnaire, while controlling for demographics was significant. In this block, maternal age became significant ($p = .023$) and remained slightly significant ($p = .046$) in the final block indicating a positive direction in the relationship between age and PSOC-Satisfaction. The OQ-45 was also significant ($p < .0005$) and remained significant in subsequent blocks. The OQ-45 total score was negatively related to PSOC-Satisfaction. As maternal distress increases, as indicated by a higher OQ-45 score, the PSOC-Satisfaction scores decreased.

In the final block, block 3, the CPRS (biological child, both conflict and closeness scales) and the QCPC scale (current partner, conflict and closeness subscales) were added into the equation to capture familial relationships. Block 3 explained 45.3% of the variance with a large effect size ($R^2_{\text{adjusted}} = .446$). The R^2 change from block 2 to block 3 was .058 (F change = 21.25, $p < .001$), indicating that the amount of additional variance predicted by the family variables was significant. The CPRS-Conflict subscale was significant ($p < .0005$) and the negative coefficient indicated that increased conflict with a biological child resulted in lower satisfaction. The CPRS-Closeness subscale was also significant ($p < .0005$) and the positive coefficient indicated that increased closeness between a mother and child resulted in higher satisfaction. In summary, the regression showed that education, maternal health, and child health were significant predictors in block 1, and only child health remained significant once additional predictors were added to the block. Specifically, maternal mental health was significant when it was added in block 2, and it remained significant in the final block. In the final block, when interpersonal variables were included, quality of co-parental communication was no

longer a significant predictor but both conflict and closeness in the biological child-parent relationship became statistically significant. Overall, child health, maternal mental health, and biological child-parent relationship significantly predicted 45.3% of the variance in maternal parenting sense of competence satisfaction. See Table 8.

Predictors of PSOC-Efficacy. The second hierarchical multiple regression was conducted to evaluate whether demographic variables, maternal wellbeing, and familial relationships were able to predict maternal sense of parenting efficacy. In block 1, maternal age, household income, education, personal health, and child health were entered into the regression equation to account for socio-demographic variables, accounting for 7.3% of the variance of maternal sense of PSOC-Efficacy. Age had an independent significant effect on the block ($p = .002$) indicating older mothers had higher scores on PSOC-Efficacy and this remained significant in subsequent blocks. Education had an independent significant effect on the block ($p = .011$) with higher education indicative of higher PSOC-Efficacy; however, this did not remain significant in subsequent blocks. Personal health had a significant effect on block 1 ($p < .0005$); however, this effect did not continue to be significant when additional variables were entered in subsequent blocks. Child health had an independent significant effect on the block ($p < .0005$), which remained significant in block 2 ($p = .011$), but not block 3 ($p = .099$).

The mental health measure was the OQ-45 total score, and this was entered into the next block. Specifically, block 2 explained 21.3% of the variance in PSOC-Efficacy. The OQ-45 was significant ($p < .0005$) and remained significant in the final block. The R^2 change from block 1 to block 2 was .140 (F change = 142.991, $p < .001$), suggesting that

the amount of additional variance predicted by the outcome questionnaire, while controlling for demographics was significant. The OQ-45 total score was negatively related to PSOC-Efficacy indicating that as maternal distress increases (higher OQ-45 score) PSOC-Efficacy scores decreased.

In the final block, block 3, the CPRS (biological child, both conflict and closeness scales) and the QCPC scale (current partner, conflict and closeness subscales) were added into the equation to capture familial relationships. Block 3 explained 28.1% of the variance with a medium effect size ($R^2_{\text{adjusted}} = .272$). The R^2 change from block 2 to block 3 was .068 ($F \text{ change} = 18.802, p < .001$), suggesting that the amount of additional variance predicted by the family variables was significant. The QCPC-Closeness subscale was significant ($p = .032$) indicating that increase closeness between a mother and her current partner is positively related to PSOC-Efficacy. The CPRS-Conflict subscale was significant ($p < .0005$) and the negative coefficient indicated that increased conflict with a biological child resulted in lower self-efficacy. The CPRS-Closeness subscale was also significant ($p < .0005$) and the positive coefficient indicated that increased closeness between a mother and child resulted in higher self-efficacy. In summary, the regression showed that maternal age, maternal health, maternal education and child health were significant in block 1, and only maternal age remained significant in the final block. Maternal mental health was a significant predictor when it was added in block 2, and it remained significant in the final block. In the final block, quality of co-parental communication closeness reached statistical significance and both conflict and closeness in the biological child-parent relationship were significant. Overall, maternal age, maternal mental health, quality of co-parental communication closeness, and biological

child-parent relationship conflict and closeness significantly predicted 28.1% of the variance in maternal sense of parental efficacy. See Table 9.

Reliability Analysis PSOC-Efficacy. When both items with the lowest inter-item correlation and accounting for the lower Cronbach's alpha, items 1 and 7, are removed the Cronbach's alpha remains low. The alpha including all items is .570 and the alpha with these two items removed is .672. While there is an objective increase in Cronbach's alpha once these items are removed, the subjective label of the Cronbach's alpha remains low. Further, items were not removed from the scale for the purposes of increasing internal consistency because this could limit comparisons with future studies. For the purposes of examining the impact of removing specific items on the results, the hierarchical regression was re-run with items removed from the PSOC-Efficacy subscale. When the PSOC-Efficacy is revised to exclude the first item (yielding a Cronbach's alpha of .628) the final regression model does not change. The hierarchical regression was re-run, and it was determined the same predictors remained significant (maternal age, OQ-45 total score, QCPC-closeness subscales, CPRS-conflict subscale, CPRS-closeness subscale). This model explained 27.9% of the variance with a small/medium effect size ($R^2_{\text{adjusted}} = .269$).

When the PSOC-Efficacy is revised to exclude both items 1 and 7 (yielding a Cronbach's alpha of .672) the final regression model changed slightly, with one additional variable remaining significant in the final block. In this version of the hierarchical regression, maternal education became significant in block 3 ($p = .025$). Maternal age, OQ-45 total score, QCPC-closeness subscales, CPRS-conflict subscale, and CPRS-closeness subscale all remain significant in this block as well, ($p < .001$). This

model explained 26.1% of the variance with a small/medium effect size ($R^2_{\text{adjusted}} = .252$).

Discussion

This dissertation served two main objectives. First, we wanted to create a demographic portrait of motherhood in NL as a means to fill the knowledge gap about this population. A province-wide survey designed to capture different facets of the typical maternal experience was administered to anyone who identified as a mother, and a total of 1082 mothers completed the questionnaire. This sample was the most extensive known collection of demographic information of mothers in Canada, and its specificity to NL was intended to help better understand this culturally and geographically unique group. The second objective was to create a comprehensive predictive model of mothers' parenting sense of competence using demographic, community, health, and family-related variables.

Demographic Profile (Research Question 1)

The health and wellbeing of mothers is largely influenced by the conditions in which they live (Alderdice & Newham, 2016). Socioeconomic, health, and geographic factors can all influence a mother's environment, and subsequently her wellbeing and the wellbeing of her family and children. It is important to better understand the environmental and demographic characteristics of mothers in NL to better appreciate the context, which helps to define their wellbeing and sense of parental competence. The responses of all mothers who completed the survey, including mothers who identified having children over the age of 18, were included in the demographic profile.

Ethnicity. While the sample was ethnically homogenous, with 85.1% of mothers identifying as Caucasian, it is important to note that this accurately represents the provincial demographics. While there is no specific census data for mothers in NL, census data from 2016 found that only 2.3% of the province identified as a visible minority (Statistics Canada, 2016) suggesting that the homogenous ethnic response is consistent with the province's population. There were no significant differences between ethnicity in urban settings compared to rural settings, which may be due to the overall low proportion of ethnically diverse mothers.

Age. The mean age for our sample of mothers was 34.66 years, with 75% of mothers under 40 years old. Urban mothers had a significantly higher mean age than rural mothers, however the effect size in this relationship was small suggesting that the difference is not necessarily clinically meaningful. It is important to note that the survey did not ask mothers at what age they first became a mother, and therefore the age difference between urban and rural cannot be attributed to birthing age. The mean age in this survey was found to be significantly older than the mean age of mothers in the census data. It is important to consider that the census is a population sample, whereas the motherhood study is a self-selected convenience sample. It is also possible that the survey, which was primarily marketed through social media and through a local news-talk radio station VOCM, may have disproportionally targeted older mothers. According to a 2017 report on radio stations in NL, the target demographic of VOCM is adults aged 25-54 (Newfoundland Capital Corporation Limited, 2017) and therefore it is possible that older mothers were more likely to see the survey advertised. While the mean age of this

sample is older than the census data, this may be attributed to recruitment techniques and response tendencies pertaining to online survey research (Heiervang & Goodman, 2011).

Geography. Mothers were asked two questions relating to their geographical location within the province. Mothers identified if they were from the provincial capital region, a city, a town, a small town, or Labrador and this information was used to classify if mothers were from an urban (capital or city) or rural (town, small town, or Labrador) setting. In this survey, 75.5% of mothers lived in an urban setting, and 25.5% resided in a rural area. This closely resembles the actual population dispersion on the island, with a 2006 Statistics Canada report having indicated that 57.8% of the population is urban and 42.2% is rural.

Mothers also indicated what region of the island they were from. It was essential to get a sense of where in the province these mothers live, because 65% of people in NL report a strong sense of belonging to their province, 66% a strong sense of belonging to their country (Canada), and 47% a strong sense of belonging to their local community (Harris Center, 2017). In this study, the majority of mothers were from the Avalon region of the province, specifically from the provincial capital region, which is a more urban center. Despite the high prevalence of participants from the Avalon, mothers from all regions of the province were included which suggests that the demographic profile has captured the motherhood experiences of women from across the province. There was a slight underrepresentation from mothers in more rural areas, which may be due to lack of access to internet or to the specific recruitment media ads in these communities.

Education. Of those surveyed, 80.4% of mothers completed at least one post-secondary education degree (either college or university) with an additional 13.7% having

completed some post-secondary education. This suggests that the sample of NL mothers surveyed has a very high level of education. There was a statistically significant difference between the level of education between urban and rural mothers, with urban mothers reporting significantly higher levels of education, which was a small effect. The Canadian Council on Learning (2006) highlights that educational attainment is lower in rural Canada, possibly due to more impoverished school conditions, challenging economic conditions, premature entry into the workforce, and a lack of educational opportunities in rural settings. The declining population in rural NL has contributed to reduced enrolment, funding, and availability of schooling within rural communities. The allocation of teachers to schools in rural NL is dependant on student enrolment, as is the funding for these small schools, which contributes to strain and limitations on the education system (Mulcahy, 2007). Additionally, rural youth may not see the same relationship between education and income that is found in urban centers, as many of the employment opportunities in rural communities do not require the same extent of formal education (Corbett, 2005). Culturally, in NL there is a dominant cycle of work within industries requiring minimal formal education, such as fishing, agriculture, or construction followed by periods of unemployment funding. Employment opportunities that required higher education break this traditional cycle, and promote out-migration or other communities, threatening the stability of the rural communities (Atkin, 2003). The link between increased education and out-migration from rural communities may contribute to the views of formal education within these populations in NL (Atkin, 2003; Corbett, 2005; Mulcahy, 2007).

It is also necessary to consider that mothers self-selected for this study, therefore

those mothers with lower education may have chosen not to participate. Previous survey research of families in Norway found that web-based, self-selected survey research leads to an over-representation of well-educated, socially privileged participants (Heiervang & Goodman, 2011) and therefore these findings may not represent the province as a whole. An Australian review of the motherhood scholarship found that in the majority of both qualitative and quantitative studies of maternal mental health and the postnatal period, there is an overrepresentation of heterosexual, white, middle-class, and university-educated women (Anderson, Webster & Barr, 2018). This finding is consistent with comments within the feminist scholarship, where these mothers have historically been considered the epitome of ‘good’ mothers (O’Reilly, 2008). While it is unfortunate that the present study contributed to the continued overrepresentation of this demographic, the findings of this study add a unique lens and additional information about the population of mothers on which most of the scholarship is based, increasing and deepening the current understanding of the maternal experience.

In order to improve inclusivity and generalizability of the present study, more targeted recruitment in rural areas, such as Northern NL, Labrador, and communities in more central areas would be of benefit. Due to strong community ties and social relationships in rural populations, including community leaders and groups in developing and promoting research studies would likely serve to increase interest and participation in these areas (Nimegeer, Farmer, Munoz, & Currie, 2016). In future studies within NL, partnering with local physicians or community leaders, or promoting the survey in more local news and media may serve to recruit more mothers from rural communities as well as mothers with lower education within urban centres.

Employment. In this sample, 68.2% of mothers indicated they were currently working, and 31.8% identified as unemployed outside the home. According to a report from Statistics Canada, the number of stay at home mothers has been significantly decreasing in Canada, and as of 2015, 69% of couples with children were dual earners (Uppal, 2015). In the present survey, 68.2% of NL mothers reported employment outside the home, which closely mirrors data from Uppal (2015). However, it is unclear from the report what percent of families have mothers providing the sole income, making it unclear whether mothers are working to independently support their household.

The national 2014 report also found that employed mothers were more likely to be university educated compared to stay at home parents (Uppal, 2015). This may explain why the majority of mothers in the NL survey who reported being employed worked in a professional or office setting (79.1%). Compared to the other occupations identified in the survey, such as a tradesperson or student, since a professional career or office employment is more likely to require a university level education. It is possible that, in NL, mothers who choose to continue working do so because of the level of education and salary associated with their employment. The mean age of the survey mothers in the survey (34 years) may suggest mothers in this survey have completed their formal education, leading to fewer mothers indicating that they are students. Additionally, according to Statistics Canada (2018), only 3.9% of people working in the trades are women, which may also explain why in this survey few mothers identified working as a tradesperson, as this is consistent with Statistics Canada's reporting of these professions being male-dominated across the country.

There is some literature to suggest that mothers in a mobile relationship may have to stop their employment to support their family in their partner's absence (Pini & Mayes, 2012). While the present study cannot infer causality, the finding that mothers in mobile relationships were 1.5 times more likely to not be employed outside the home suggests that perhaps there is a link between a mother's partners employment and her own employment.

Marital Status. The majority of mothers in the survey indicated that they were married (63.9%), or cohabiting (16.4%). According to Statistics Canada (2008), the divorce rate in NL was 17.9 per 10, 000 compared to the national average of 21.1 per 10, 000. A report from the Vanier Institute of the Family (2010) found that NL had the highest proportion of married people (54.3%), and while the NL motherhood survey found a slightly higher proportion, this is likely because the survey focused on mothers rather than couples in general. The high proportion of married mothers in NL may be due to the province having a more traditional view of the family. Further, the low proportion of widowed mothers (1.2%) is likely due to the age of our sample. Interestingly, 7.7% of the sample identified as single and never married which suggest these mothers are parenting in lone-parent families.

The chi-statistic comparing the marital status of mothers from the motherhood survey to women in the 2016 census found that the motherhood survey had a significantly higher proportion of married and cohabiting mothers whereas the census data of women in NL had a significantly higher proportion of single, separated/divorced, and widowed women. However, it is essential to consider that the census includes all women, whereas the current survey pertained to mothers. Therefore, the two cannot be directly compared,

and it does not necessarily imply that the present survey over or under-represented particular marital statuses. Additionally, the motherhood survey had a higher proportion of cohabiting and married mothers than, which is to be expected as the census included women who do not have families and therefore could not be counted as married or cohabiting.

Sexual Orientation. According to the 2014 Canadian Community Health Survey, 1.7% of the Canadian population identified being homosexual (lesbian or gay), and an additional 1.3% identified being bisexual. In the NL motherhood survey, a total of 5.1% identified being homosexual, bisexual, or belonging to another sexual group other than heterosexual (Statistics Canada, 2014). The overrepresentation of this demographic subgroup in this sample is encouraging for the representation of sexual minorities within our findings.

Children. Motherhood was used in a broad sense in this survey to capture all different types of parenting contexts - however the vast majority of participants identified as having only biological children (88.4%). The next most common parenting situation related to parenting biological and stepchildren (4.1%), followed by only adopted children (1.2%). Only three participants (0.3%) had only stepchildren, and only four participants (0.4%) had both biological and adopted children. No mothers reported having both step and adopted children, or having biological, step, and adopted. Understanding the parenting situation of the mothers in the survey allows for a better understanding of what their experience of motherhood may be. Statistics Canada (2016) reported that 10% of children aged 0-14 were living in a stepfamily, which suggests that stepfamilies may be under-represented in this sample.

Produce Consumption. To get an understanding of the health of mothers in NL, the survey inquired about weekly produce consumption, weekly exercise frequency, monthly sleep quality, self-reported person and child health, and mothers' perception of their social support. These variables were selected to capture both the physical and social determinants of health and wellbeing. The majority of mothers (76.2%) identified incorporating fresh fruits and vegetables into their diets more than three times a week. Conversely, 23.8% of women indicated they consumed fresh produce two times per week or fewer. There was no significant difference in weekly produce consumption between rural and urban mothers, suggesting that fresh produce consumption may be related to financial access, personal preference, or education about healthy diet, rather than geographical accessibility. A study from Prince Edward Island, another island province on Canada's East coast, with similar participant demographics to the present study, found that mothers of young children who experience high food insecurity were less likely to consume fresh produce (Holben & Smith, 2016). The amount of weekly fresh produce consumption was significantly and positively correlated with household income ($r = .316$, $p < .001$), which suggests that for mothers in NL income and food security are closely tied.

Exercise. Exercise frequency was included in the survey because exercise is related to improving health-related quality of life and self-esteem in mothers (Haruna et al., 2013). In the motherhood survey, exercise frequency was negatively correlated with scores on the OQ-45 ($r = -.201$, $p < .001$) suggesting that mothers who exercised more reported lower distress and higher wellbeing. Data from the 2016 Canadian health survey found that the vast majority of Canadian adults, 80%, were not meeting the recommended

standard of exercising for 150 minutes per week (Public Health Agency of Canada, 2016). In the motherhood survey, participants were asked how many days per week they get 30 minutes of moderate to vigorous physical exercise, including brisk walking, bike riding, swimming, running, or gardening. The participants reported exercising 3.57 times per week on average, with no significant differences between urban and rural mothers. Only 13.7% of mothers surveyed indicated they exercised for 150 minutes per week (exercising for 30 minutes 5 or more times), which suggests that mothers in NL have similar rates of activity compared to the rest of Canadians.

Sleep. Mothers were asked to rate their overall sleep quality in the past month on a scale from very bad to very good. Of those surveyed, 72.1% rated their sleep quality as either okay, fairly good, or very good. While qualitatively and anecdotally, new motherhood is often associated with poor sleep and feeling drained (Barclay, Schmied, & Wyllie, 1997), it is important to consider that in this sample mothers were not necessarily new mothers and had children in various developmental stages. Therefore, this finding suggests that broadly speaking mothers in NL are relatively satisfied with their sleep.

Social Support. Mothers were asked to rate their satisfaction with their social support, and the majority (83.4%) of mothers identified either moderate (27.1%), some (32.5%), or complete (23.8%) satisfaction with their social support. It is important for all people, including mothers, to feel supported in their lives as this contributes to overall wellbeing (Turner, 1981). In this survey, social support had a significant negative correlation ($r = -.388, p < .001$) with wellbeing (OQ-45), indicating that those with a higher social support satisfaction reported more wellbeing and a lower OQ-45 score.

Social support plays a unique role in NL communities, as the culture of the province suggests closer than average communities, and more value being placed on connection in community. According to the Vital Signs report (2017), in the urban center of St. John's: 94% of people stated that they live in a welcoming community, 87% of people stated that their neighbourhood is a place where people help each other, and 40% stated they know many or most of their neighbours. In Bay Roberts, a small town in the Avalon region with a population of 7, 100, 100% of people stated that they live in a welcoming community, 100% of people stated that their neighbourhood is a place where people help each other, and 80% stated they know many or most of their neighbours. Interestingly, there was no significant difference between social support satisfaction between urban and rural mothers suggesting that mothers in our sample are equally satisfied with their support regardless of the size of their community.

Health. Both personal health and child health were measured in this survey. Eighty-nine percent of mothers described their personal health as good, very good, or excellent and 95.1% described their child's health as good, very good, or excellent. While it is possible that there may be some level of social desirability or personal bias in their responses (Van De Mortel, 2008) overall, this suggests that mothers see themselves and their children as healthy. In the 2016 Canadian health report, 60% of Canadians reported their personal health as very good or excellent (Public Health Agency of Canada, 2016) and in this survey, 61.5% reported the same. This suggests that mothers in NL have a similar perception of their own health compared to the average Canadian. Not surprisingly, personal health was significantly correlated with OQ-45 total, suggesting that mothers with a positive perception of their health indicated lower distress on the OQ-

45. Given that the majority of mothers reported proper nutrition, sleep, some exercise, and positive social support it is not surprising that they also see themselves as generally healthy.

Mental Health. The OQ-45 examines mental health symptoms, interpersonal functioning, and social role functioning, capturing a holistic picture of mental health and wellbeing, without reducing mental health and wellbeing to a collection of symptoms and dysfunction. The OQ-45 was significantly correlated with a number of associated health and wellbeing variables; most strongly PSOC-Satisfaction ($r = -0.586$), maternal health ($r = -0.458$), and mothers' reported sleep quality ($r = -0.420$). These correlations all suggest that maternal mental health is strongly related to a variety of factors contributing to overall wellbeing, and mental health is a prominent factor in understanding the parenting experience.

Summary. While the national portrait of family is changing, in Newfoundland and Labrador, mothers who raise biological children in the context of a heterosexual marriage remains the most common family structure and this was reflected in this study's main findings. Mothers in this sample are primarily Caucasian and middle-aged. The homogeneity of this sample may limit the generalizability of some of the findings, as intersections of diverse race, social class, and family structure could not be included. However, this is not atypical given the typical individuals who self-select to participate in this type of survey research (Heiervang & Goodman, 2011). Despite these limitations, demographic findings create a portrait of a population of mothers that is generally resilient. While the majority of our sample of mothers reside in the Avalon region of the province, or another urban region; there are still a significant number of participants who

live in rural areas. A unique aspect of the family structure in NL is the large proportion of mothers in a mobile relationship. This sample of mothers is well-educated, and those who are employed tend to work office or professional jobs. Overall, mothers in this survey identified as healthy and perceived their children to be healthy as well.

Even though the mothers in this sample were not part of a clinical sample, the strong relationship between mental health (OQ-45) and other key correlates speaks to the importance of understanding a holistic picture of wellbeing, including social and interpersonal functioning. Mental health is an important predictor of parenting competence in this healthy community sample, and it is correlated with other variables in this sample of women who are well-educated and socially advantaged. Since relationships between mental health and social wellbeing exist even in a community sample of mothers who are thriving, we strongly believe that this indicates that attention needs to be paid to maternal mental health even within what have been traditionally labeled ‘well-adjusted’ subgroups of the population. Supporting mothers, even those from an otherwise healthy sample, with their mental wellbeing may have similar benefits to those experienced by mothers with more profound mental health concerns.

Understanding the communities in which mothers live, the family structure and prevalence of mobile relationships, the social and occupational functioning, and the physical and mental health of mothers is important because as the Circumplex Model suggests, a parent does not exist alone but rather in a system of the family, which is embedded in a larger community. The model emphasizes the need for both individual and family change when there are challenges in family functioning (Olson, 2000). A first step in understanding the family system is by describing its characteristics, which we have done

here. From a feminist perspective, parenting and motherhood remains a controversial area, as feminist scholarship has adopted a more intersectional and critical lens on parenting, marriage, and nuclear families. While some feminist literature on motherhood has been criticised for exploring primarily white, middle-class, married women (Allen, 2016; Hays, 1996), it is important to acknowledge that this is the main context of motherhood represented in this sample and therefore the current findings may not necessarily be applicable to maternal experiences that fall outside the dominant social discourse. Nevertheless, it also represents the most common maternal context in the province of NL and as such is worthy of attention so as to increase our understanding of the issues and challenges that exist within this dominant social discourse.

Parenting Sense of Competence (Research Question 2)

The second objective of this dissertation was to examine the variables contributing to parenting sense of competence in NL mothers. Parenting competence refers to a parent's objective ability to effectively fulfill the duties required of them to raise their child. Parenting sense of competence is a parent's belief in their own competency, and how effective they subjectively believe themselves to be at this role. The PSOC was used to measure the concept of sense of parental competence, measuring both satisfaction and efficacy with their parenting role. The efficacy subscale refers to the degree of competence and degree of confidence a parent has in their ability to fulfill the duties of parenting, whereas the satisfaction subscale refers to the subjective enjoyment and pleasure a parent gets from this role.

Subscale Reliability. The Cronbach's alpha for the PSOC full scale was 0.53, which is considered low and differs from the Cronbach's alpha reported in the literature

of 0.79 (Ohan et al., 2000). As such, two separate regressions were run, using the subscale of PSOC efficacy and satisfaction. There was a poor Cronbach's alpha associated with the efficacy subscale, and this may have been due to the small number of items on this subscale (Tavakol & Dennick, 2011). Cronbach's alpha for the satisfaction subscale was within the acceptable range. The decision was made to use both the subscales, rather than looking at the PSOC scale as a whole or only using the satisfaction subscale. Although the consistency is low for the efficacy subscale, even when particular items are removed, in this particular sample, the scale has been validated in a Canadian population previously (Ohan et al., 2000); and the scale has also been validated in a normative sample of parents with children aged six to fourteen years (Gilmore & Cuskelly, 2009). The support for this measure in the existing literature remains strong and the lack of significant improvement in Cronbach's alpha even once items are removed supports the hypothesis that this measure still be used as an outcome variable, however, the results of the regression for PSOC-Efficacy must be used with more caution than the results of the regression predicting maternal satisfaction.

In understanding the predictors of maternal parenting self-efficacy in this study, it is important to keep in mind that the efficacy subscale had poor reliability. This indicates that the efficacy subscale did not measure a uniform concept in this sample. The small number of items on the efficacy subscale may in part contribute to the poorer internal consistency, and it is also possible that the efficacy subscale is an not an ideal measure of parental self-efficacy within this group of mothers (Tavakol & Dennick, 2011). The selected predictors explained a larger portion of the variance of PSOC-Satisfaction compared to PSOC-Efficacy. However, despite the poor Cronbach's alpha of the latter

subscale, this does not necessarily mean that the demographic, wellbeing, and interpersonal variables in this model are poor predictors of mothering self-efficacy. It may be the case that in a different sample of mothers the internal consistency of this subscale would have been closer to what has been previously reported in the literature (Ohan et al., 2000), and in that context the same predictors may have served to explain a larger portion of the variance. It is also possible that there may be additional predictors we have not considered that would have helped increase the level of explained variance.

Predictors of PSOC-Satisfaction. The final regression model accounted for a large portion of the variance in maternal satisfaction, indicating that the selected variables explained maternal satisfaction well. Child health, maternal mental health (OQ-45 total score), child-parent relationship closeness, and child-parent relationship conflict were found to be statistically significant predictors after controlling for maternal age, health, education, household income, maternal education, and quality of co-parental communication. Maternal satisfaction was strongly associated with child variables in particular, including child health, and the quality of the child-parent relationship. Interestingly, the model of satisfaction explained a larger portion of the variance than the model of efficacy - and with fewer significant predictors.

There was no objective measure of child illness in this survey, meaning that mothers were reporting broadly on their child's health rather than reporting on whether their child was healthy despite having a diagnosis of a physical or mental health nature. Therefore, it cannot be determined how the mothers in this sample were evaluating their children's health, or if there was any social desirability effects on their responses. Despite the possibility that the present sample did not include mothers with children who were

markedly ill or disabled, the finding that child health predicts maternal satisfaction remains meaningful. When considering the intensive motherhood ideology, which implies a mother is entirely responsible for her children over and above any other (Hays, 1996), it is not surprising that mothers would base their satisfaction in parenting on the health of their children. Even in this sample, where the majority of mothers reported their children as being in good health, child health was a significant predictor of mother's satisfaction. The importance of child health is inherent in and of itself, however, it is especially important when considering how child health may influence mothers. There have been some studies that have investigated the impact of a child's health or ability of parenting self-efficacy, such as a study of parents of children with autism (Kuhn & Carter, 2006) or diabetes (Rodrigue et al., 2010), no known studies have used child health as a predictor of parenting satisfaction within a community sample of mothers. Therefore, the present study's finding that child health remains a significant predictor, even in a community sample, speaks to the universal importance of this variable.

In the study by Rodrigue and colleagues of parents with children who have diabetes, parenting efficacy and satisfaction were lower in the parents of children with diabetes compared to healthy children. One possible explanation raised in this study is that parenting a child with chronic illness may be more demanding and less rewarding due to health complications (Rodrigue et al., 2010). This hypothesis may support the finding that satisfaction was predicted by child health, in that parents in the NL motherhood study who have less healthy children may also find their role more demanding and less rewarding or satisfying. Further investigation into the subset of mothers with children who had poor health may provide more insight into possible

differences in this group. In the present study, child health was measured by a single variable, and therefore future research may want to explore nuances of child health such as specific diagnosis, chronic or acute health concerns, and parents' view of their ability to cope with this health concern. Another Canadian study using the PSOC found that there was a correlation between a child's externalizing behaviour and mother's sense of parenting satisfaction. It was hypothesized that parental satisfaction was linked to the difficulty and stress associated with parenting a child who has behavioural problems (Ohan, Leung, & Johnston, 2000). In the present sample, there was no distinction between child physical and mental health and therefore this would be an additional consideration for future studies. The child's health likely influences parenting satisfaction in a similar way, where parents of healthier children have less stress and fewer demands, which can contribute to feeling more satisfied as a parent.

In the third block of the regression, when family variables were included, an additional 5.8% of the variance of explained by these variables (F change = 21.25, $p < .001$). This indicates that when controlling for demographics and mental health, the quality of child-parent relationship still predicts a unique, albeit modest, portion of the variance in parenting satisfaction. The quality of the child-parent relationship, composed of two constructs (closeness and conflict) was also predictive of maternal satisfaction. This model highlights the strong relation between children and maternal PSOC-Satisfaction as a diverse range of child factors associated with a mother's satisfaction in the parenting role. Previous research from an Australian sample has also shown connection between parenting satisfaction and child variables and parenting wellbeing (Rogers & Matthews, 2004). This Australian study found parental effectiveness is less

related to child factors, which was also observed in our study. The Circumplex Model can also help to make sense of the finding that child-parent relationship is predictive of parenting satisfaction, given that it posits that cohesion (relationships) within a family is a key predictor of overall family stress and satisfaction (Olson, Waldvogel, & Schlieff, 2019). Mothers exist within a family unit, and therefore it is not surprising that their relationships within that unit are associated with role satisfaction.

Predictors of PSOC Self-Efficacy. Our second model accounted for 28.1% of the variance in sense of parental efficacy with a medium effect size ($R^2_{\text{adjusted}} = .272$). Maternal age, maternal mental health (OQ-45 total score), quality of co-parental closeness, child-parent relationship closeness, and child-parent relationship conflict were statistically significant after controlling for household income, maternal education and health, child health, and quality of co-parental conflict.

In the present study, younger maternal age was shown to be predictive of higher sense of parental efficacy. This finding was in contrast to the hypothesis (hypothesis 1) that older mothers would report higher parental efficacy. This finding is contradictory to much of the International literature, such as a survey of Chinese post-partum mothers, where maternal age was the only demographic variable to correlate with maternal parenting competence post-partum, and it was found that younger women felt less competent in their role (Ngai, Wai-Chi Chan & Ip, 2010). Similarly, in a Chilean study of low-income mothers, older mothers reported more competence which the authors proposed was due to the fact older mothers had more life experience to deal with difficult child-rearing situations (Farkas & Valdés, 2010). In one of the only Canadian studies of predictors of parenting self-efficacy, maternal age was not correlated with self-efficacy

(Seigny & Loutzenhiser, 2010). While there are differences between the findings of the present study and these other recent studies, this may be due to cultural and societal differences between the community sample of mothers in NL, and the populations surveyed in China and Chile. In the Chilean sample in particular, mothers from a low socioeconomic status were surveyed, and this is markedly different than the middle-class, well-educated sample in this present sample. This is a challenge for this type of research, as there continues to be few studies about mothers' experiences relating to their sense of parental competence. Thus the existing literature offers few points of comparison.

Similarly, in the study by Ngai and colleagues, the authors proposed that older mothers might have more financial resources, which could contribute to more competence due to financial security. It is possible that this effect is not mirrored in NL, or it is possible that because the present, relatively homogenous sample had a high household income this effect may not have been observed. Younger mothers in NL may be more accepting of help compared to older mothers, and younger mothers may have more support from older living relatives, which would allow them to feel more efficacious. Perhaps younger mothers are more likely to be able to receive help from extended family and friends, which helps contribute to feeling more efficacious. It is also possible that younger mothers have been less exposed to the intensive motherhood ideology, and perhaps because of this they are less biased by the societal expectations of motherhood. While toxic expectations for mothers is still present today, there has been a subtle shift in recent years moving towards better gender equality in parenting (Henderson et al., 2016), and perhaps younger mothers are benefiting with respect to their feelings of self-confidence in parenting.

In the Canadian, community based sample (Sevigny & Loutzenhiser, 2010) only new mothers, with children aged 18-36 months, were used as a basis for determining if age predicted competence. In the present sample, mothers with children across the lifespan were included, and perhaps child age interacts with maternal age to predict maternal parenting self-efficacy. Other factors, beyond maternal age, may explain the differences between these findings. For example, perhaps mothers receive more support when they are parenting infants and younger children, and there is a decline in support over time. There has yet to be a longitudinal study of motherhood and associated factors, such as social support of parenting, to contribute to our understanding of how parenting roles shift over time. While there have been longitudinal studies of child development, there have not been studies of the motherhood experience, and gaps in the present study highlight the importance of this type of research. In future studies, it would be important to assess for the role of tangible parenting support mother's received from their extended family and support network and compare this with maternal age. It would also be interesting to assess qualitatively how different generations of families in NL view their role in the family system.

In the regression model, family variables were added in block three, in order to see if family relationships predicted parenting sense of efficacy over and above the contribution of demographic and mental health variables. While the effect size was quite small (R^2 change = .068), it was still statistically significant (F change = 21.25, $p < .001$), which supported the idea that family variables do in fact contribute to the overall prediction of maternal sense of efficacy.

Co-parental closeness captures the positive interactions between co-parents. This was shown to be a significant predictor of efficacy where a higher quality of close interactions between co-parents (in this case the biological father) was predictive of mothers reporting feeling more efficacious in the parenting role. Co-parenting and co-parental communication have been found to be predictive of marital quality (Schoppe-Sullivan et al., 2004) and maternal wellbeing (Schrodt, 2010), therefore it is not surprising that close interactions in communication between co-parents also contribute to maternal self-efficacy. The Circumplex Model emphasizes the importance of communication between partners and identifies that functional families with balanced cohesion and adaptability tend to have more healthy communication (Olson, Waldvogel, & Schlieff, 2019). Communication is seen in the Circumplex Model as a facilitator between cohesion and flexibility and it may also serve as a facilitator of parenting sense of competence— as our findings would suggest. For example, a study of new mothers in Canada suggested that the co-parenting relationship is imperative for parenting self-efficacy and that if a mother is told by her partner she is a good parent, she is more likely to have higher self-efficacy (Bryanton, Gagnon, Hatem, & Johnston, 2008). Correlational findings from a Dutch study of parents also supported the importance of parental communication, role flexibility, and quality of relationships being important factors of the parental experience (De Graaf, Hoogenboom, De Roos & Bucx, 2018). Our finding would support the notion that external validation by a co-parent further supports maternal sense of parental competence. In other words, feeling supported and validated by communication with their spouse increases mothers' sense of being capable and

efficacious as parents. Perhaps positive communication is what facilitates the feelings of self-efficacy in mothers, and this relationship may be worth exploring further.

The support and parenting style of a co-parent has been identified as one of the strongest predictors of the quality of mothers' parenting experience. For example, in a study of new mothers, parenting competence was directly related to a mother's perception of her parenting alliance with her partner (Ponomartchouk & Bouchard, 2015). While the parenting alliance is conceptually different than quality of co-parental communication, the two constructs are similar and the 2015 study findings parallel our own findings. The present study suggests that not only does maternal satisfaction correlate with the quality of interactions with children, but that mothers' relationships with their children relates to their satisfaction with their maternal role.

Previous work in stepfamilies has shown that positive co-parental communication between non-residential parents and the new couple predicts family satisfaction (Schrodt & Braithwaite, 2011). The present study finds a similar effect where co-parental communication between both biological parents is predictive of a mother's satisfaction in her parenting role. This empirical finding supports what is commonly assumed in the discussion of families, which is that mothers who are happy with their relationship with their children feel good about themselves as parents (Kohlhoff & Barnett, 2013; Leahy-Warren et al., 2012). It is also possible that mothers who have strong communication with their co-parent are less likely to feel the gendered pressure of parenting. Support from and good communication with her co-parent can reduce parenting stress in mothers (Anderson, Webster & Barr, 2018) and perhaps the mothers feel more satisfied when they are less stressed by unequal societal parenting pressures. Given the nature of the current

sample, only mothers of biological children who co-parent with their current parent were included, and therefore it would be interesting to see if this relationship persists across parenting contexts in a Canadian sample.

Both child-parent relationship closeness and conflict were significant predictors of mothers' sense of parental efficacy, with high closeness and low conflict predictive of higher efficacy. Research in parent-child attachment has found that parents with attachment insecurity, particular avoidant attachment, are more likely to have lower parenting self-efficacy (Kohlhoff & Barnett, 2013). Parent-child closeness may be impacted by parental attachment, which helps to explain the relationship between closeness and self-efficacy in our study. If a parent does not feel that they have a close, loving relationship with their child, this could lead to feelings of ineffectiveness or low self-efficacy. Similarly, mothers who perceive the child-parent relationship to involve elements such as a difficult child temperament are more likely to report lower self-efficacy (Porter & Hsu, 2003). It follows that mothers who report higher conflict in their parent-child relationship would feel less effective and efficacious in their parenting role. This finding was also observed in a study of Canadian motherhood, where there was shown to be a negative relationship of parenting competence with depression, anxiety, and attachment anxiety and avoidance. This Canadian study highlighted the link between maternal wellbeing, attachment with child, and parenting competence, which further supports the link between these variables (Gosselin, 2018). According to the Circumplex Model, the emotional, supportive bond between parent and child is referred to as family cohesion, and this has been identified as one of the key components of family functioning and wellbeing. Our finding that parent-child closeness and conflict are predictive of

parenting competence fits with the Circumplex Model, which lends further support for the relevance of this model to understand the specific experiences of mothers (Olson, Waldvogel, & Schlieff, 2019).

It is also interesting that external relationship variables (QCPC, CPRS) were strongly predictive of the efficacy dimension, more so than the satisfaction dimension, of mothers' sense of parental competence. There is evidence to suggest that mothers base their self-evaluation on social comparisons, or estimates of their own ability to handle problems with their children (Johnston & Mash, 1989; Ohan et al., 2000). Therefore, the significance of co-parental closeness and the quality of the child-parent relationship suggests that mothers base their judgement of themselves as parents on their relationships with others in the family unit. The predictive models for PSOC-Efficacy and satisfaction consisted of different categories of predictors (from the individual to the systemic). We noted a difference in the amount of variance predicted for each outcome, which suggests that while parenting sense of competence is often used as a catch-all to understand both self-efficacy and satisfaction in the parental role, these two concepts might be best studied as separate constructs.

When considering Bandura's theories of self-efficacy (1977), it is not surprising that good communication between co-parents is predictive of maternal parenting self-efficacy. If mothers are able to communicate closely with their co-parent, especially if there is an element of support or learning from one another, they are more likely to feel efficacious in the mothering role. It has been previously established that parenting self-efficacy is predicted, in part, by relational functioning, such as marital satisfaction and communication (Sevigny & Loutzenhiser, 2010) and perhaps this reciprocal relationship

between parenting self-efficacy, relationship functioning, and co-parenting communication is represented in the current findings. Similarly, Mouton and Roskam (2015) found that parents feel less confident about their abilities when they have a child that is behaviourally challenging or difficult to connect with. They hypothesised that the challenges of parenting are mediated by parenting self-efficacy and a parent's lower perceived competence in situations where the parent-child relationship is strained. It is therefore not surprising that mothers who have a closer, non-conflictual relationship with their children are more likely to report higher parenting self-efficacy. This fits with Bandura's theory that self-efficacy is task dependant, and that parenting confidence is increased when parent-child relationships are positive.

The unique predictive models, where maternal satisfaction was best predicted by child variables and maternal self-efficacy was best predicted by relationship variables, suggest that while both sets of factors are important to family and motherhood, they have distinct relationships with specific aspects of the motherhood experience.

Maternal Mental Health As a Predictor of Parenting Sense of Competence

The OQ-45 total score was used in our two regression analyses as a measure of maternal mental health. It is important to note that 69.8% of mothers had a score below the clinical cut-off for psychological distress ($M = 22.92$). The present sample is not a clinical population and consists of mothers from the community who come from a mid to high socio-economic status, and who generally report a high level of psychosocial adjustment. As such, the finding that maternal mental health (OQ-45) was such a strong predictor of PSOC-Satisfaction and efficacy is significant, as this is an otherwise mentally healthy population. While typically research looks at maternal mental health from a

deficit approach, it is important to recognize that even in this healthy, well-educated, and affluent sample mental health is still a key predictor of the maternal experience. It was expected that maternal mental health would predict parenting sense of competence (hypothesis 2) and this finding was observed. In the regression model predicting parenting sense of self-efficacy, the addition of the results from the OQ-45 contributed to an R^2 change of .140 (small/medium effect size). This suggests that when controlling for demographic variables, the mental health of mothers accounted for a significant additional portion of the variance. Similarly, in the model predicting parenting satisfaction, the block including the OQ-45 had an R^2 change of .287 (medium effect), which indicated a significant and unique contribution, after socio-demographic variables had been taken into account.

The relationship between maternal mental health, particularly depression, is well established in the literature with depression being a predictor of poorer maternal sense of competence and parental satisfaction (Ngai, Wai-Chi Chan, & Ip, 2010; Ohan et al., 2000; Porter & Hsu, 2003). When a person experiences stress during a task, their self-efficacy is likely to decrease (Bandura, 1977). This is especially relevant when considering mental health concerns, such as depression or anxiety, which are known to shift a person's perception of themselves and their experiences. Poor mental health can lead to negative self-appraisal, which in turn may lead a person to experience less resilience or persistence during a difficult task (Reck, Noe, Gerstenlauer & Stehle, 2012).

Farkas and Valdés (2010) found that mothers who reported high stress, commonly associated with poorer mental health, in their role had the highest correlation with poor maternal self-efficacy. The authors discussed that a high level of stress can negatively

impact both maternal perception of self-efficacy, maternal role competence, and a mother's ability to respond effectively to her child (Farkas & Valdés, 2010). Similarly, in a Canadian sample, women who reported higher stress and lower support (factors also measured by the OQ-45) have reported lower PSOC (Ohan et al., 2000). This suggests that mothers who have higher stress, lower socio-economic status, and lower social support satisfaction may be more likely to report worse parenting sense of competence.

A more in depth-look into these variables across a population where there is a greater range of self-reported social support satisfaction and socio-economic status may be beneficial. However, the centrality of this predictor and its links to many other aspects of the maternal experience within this sample of generally healthy mothers suggest that mental health matters for the normative mothering experience, and not simply for those mothers who have issues in the clinical range.

Expectations and Results Specific to the NL Motherhood Experience

The findings of the present study, including the non-significant findings, allow for a more thorough understanding of the maternal experience in NL. While these findings are correlational and causation cannot be assessed, the study contributes to our understanding of the maternal experience in this province. Overall, regardless of their specific demographic characteristics, mothers generally reported a similar experience relating to the health, wellbeing, and relationship scales. This suggests that the NL maternal experience is related more to maternal mental health and relationship quality factors, rather than regional demographic characteristics such as location or mobile relationship status.

Urban vs Rural Newfoundland. It has been proposed that resilience and culture may vary between urban and rural communities in East coast Canada (Ungar, Clark, Kwong, Makhnach, & Cameron, 2005); however, this does not appear to be the case for this sample. Bivariate analyses found few statistically significant differences between mothers living in rural NL compared to those living in urban settings. Alderdice and Newham (2016) have pointed out that there is a lack of research on the perinatal mental health needs of mothers in rural areas of high-income countries, such as Canada. They have acknowledged that there needs to be more research understanding maternal mental health in these smaller communities, and NL's population allows for this type of analysis.

As can be seen in the results of the independent samples *t*-tests (Table 5) there were no significant differences between the scores of urban and rural mothers on most indicators. Despite the small community size and potential barriers in a rural setting, such as difficulty accessing healthcare, economic instability, and employment difficulties (Simms & Greenwood, 2015) mothers in rural NL did not report significantly different maternal experiences from urban mothers. This might be because our sample reported on average a high level of parental sense of competence, thus this may simply be a generally resilient sample.

Future research may want to examine both qualitative and quantitative experiences of mothers from different sized communities. Given that there are cultural similarities between urban and rural NL, it may be beneficial to contrast these experiences with those of mothers in other parts of rural Canada, and those whose identity falls outside the dominant social discourse (e.g., white, married for the first time and living with their own biological children) to decipher what factors are consistent across

populations, and which may be due to NL's uniqueness as an isolated, largely homogenous island population.

Mobile Relationship Status. Another surprising feature of this sample was the lack of impact of mobile relationship status on any of our key indicators. This variable was not correlated with parenting sense of competence, nor was there a significant statistical difference observed across the major relationship scales (see Table 6). While mobile work and mobile relationships have been found to be frequent within the province of NL (Long 2016; Newhook et al., 2011), little quantitative investigation into the dynamics of job-related mobility on families has been conducted to date. It may be assumed that having a partner who works away would result in poorer quality of the co-parental relationship, or reduced maternal wellbeing, however, our results suggest otherwise. It was the aim of this study to create a portrait of mothers whose partner is a mobile worker and to compare them to mothers whose partner is not. We found no significant statistical differences on maternal sense of self-efficacy, parenting satisfaction, maternal wellbeing, family life satisfaction, mother-child relationship quality, or mother-partner relationship quality between mothers with and without a partner who is a mobile worker. These findings suggest that despite the difference in family structure in these parental dyads, there are no measurable differences in familial, maternal, or personal well-ness for this sample. The lack of difference in mean scores on the measures of co-parental communication and child-parent relationship suggests that, on average, mothers in mobile relationships have comparable levels of conflict and closeness than their peers. Similarly, the lack of difference on the PSOC suggests that these mothers feel equally satisfied and efficacious. While there is some literature to suggest that family disruption

and personal distress occurs when one partner engages in mobile employment (Thomas & Bailey, 2009) the lack of significant difference between mothers reported family life satisfaction and overall mental health suggests this may not be the case in the present sample. The similar scores between groups on the OQ-45 may speak to the resilience of mothers in mobile relationships, as well as the normalized nature of this arrangement in NL.

To better understand the differences and similarities in the experiences of mothers in and not in a mobile relationship, more thorough questioning about this family dynamic should be completed with a larger more diverse sample of families involved in mobile work. For this study, there were few questions targeting the impact of mobile work on family relationships, however, it is important to understand the nuances of how this parenting situation does or does not influence a mother's experience as a parent and partner. As such, qualitative inquiries into the lived experience of mothers whose partner is a mobile worker may help to elucidate the challenges that are salient to their motherhood experience and the factors that may contribute to maternal resilience for this subgroup of mothers.

Maternal Education. Based on previous findings from the literature (Gilmore & Cuskelly, 2009; Sevigny & Loutzenhiser, 2010) it was unclear whether maternal education would predict parenting sense of competence. It was hypothesized that there would be a predictive relationship, given that mothers with higher education may feel more equipped to parent (hypothesis 1).

A study of, single African American mothers in the United States found that maternal education and income were predictive of maternal self-efficacy (Jackson, 2000).

However, it has been suggested that this finding is more common in families with lower socioeconomic status or mothers who are considered marginalized (Umberson et al., 2013). Similarly, in an Australian non-clinical sample, education was a predictor of parenting satisfaction with women with a Bachelor's degree reporting significantly more parenting satisfaction (Rogers & Matthews, 2004). In the case of the NL sample, mothers were, on average, well-educated and reported financial stability with 80% of mothers reporting at least some post-secondary education. It is possible that because the NL study used a well-educated community-based sample, rather than a clinical or marginalized sample, the same effects were not observed. For example, in the Chinese study of parental competence, the sample was predominantly middle-class and income was not found to be correlated with competence (Ngai, Wai-Chi Chan & Ip, 2010). This suggests that perhaps in a more affluent sample, without significant socio-economic challenges, the predictors of maternal sense of parental competence may be less influenced by education and income, once a certain level of both is reached.

Our finding that education was not a significant predictor of self-efficacy or satisfaction adds to the literature about this correlate, as non-significant findings are relevant to furthering our understanding of parental sense of competence. While there can be no casual conclusions drawn from this finding, the implication is that there may be other factors influencing the relationship between education and parenting sense of competence that better explain this finding, and that there may be a point where education loses its significant correlation with maternal sense of parental competence, especially in the higher range of educational attainment.

Social Support. Finally, we were surprised that social support was not significantly correlated with parenting sense of competence (satisfaction) ($p > .05$) and was not strongly correlated with parenting sense of competence (efficacy) ($r = .140$). It was expected (hypothesis 1) that social support would be a significant predictor of parenting sense of competence but based on correlational findings it was not included in the final models. This contradicted what was indicated in the literature, where social support satisfaction has been linked to parenting sense of competence (Angleley et al., 2015; Leahy-Warren et al., 2012; Ponomartchouk & Bouchard, 2015). However, it is important to note that in our sample, mothers overall reported a high degree of satisfaction with social support, with 83.4% reporting completely, moderately, or somewhat satisfied. The homogeneity of this sample's social support satisfaction perhaps speaks to the close ties of NL, as well as the resilience of these mothers. It is likely that social support was not found to be predictive of parenting competence because there was insufficient variance in the reported social support. Future research may benefit from obtaining a more heterogeneous sample to better ascertain the potential relationship between social support and PSOC.

Significance of Community Research in NL

New research from the Canadian Survey of Maternal Health provided details about the experience of new, first time mothers in 2018/2019 (Statistics Canada, 2019). The rate of postpartum depression or anxiety among new mothers in Canada was 23%, and this was statistically significantly higher in NL with a prevalence of 28%. In addition to those mothers who reported mental illness, 33% of mothers reported some concern about their mental health. When asked to rate their mental health, 70% of the mothers

who did not experience post-partum depression or anxiety said their mental health was excellent or very good (Statistics Canada, 2019). While the questions asked on the Canadian Survey of Maternal Health were asked only of new mothers, and were somewhat different than the current survey, the overall findings seem to be similar. Specifically, mothers seem to be reporting some challenges with their mental health however overall they appear to be functioning well. Interestingly, the mothers from NL are reporting more mental health symptoms than the rest of the country. This national finding highlights the importance of better understanding the experience of mothers in NL, as the reported rates of mental illness here were the second highest in the country. The national survey did not speculate as to why post-partum maternal mental health is poorer here, however these findings seem to justify the current investigation into the nuances of motherhood experiences in NL. Further investigation into access to mental health services in NL, as well as the cultural views towards mental health and motherhood would be warranted based on both this dissertation and these recent national findings.

The present study has taken a non-judgmental, strengths-based approach to understanding motherhood in NL. The resilience of NL families has been previously studied, however this was primarily in the context of the cod-moratorium and the changing workforce in the 1990s (Murray et al., 2005). It is important to understand the population and experience of mothers in NL in order to conceptualize the more complicated system of parenting and what predicts its resilience. Even though the majority of participants were from the provincial capital region, this is a unique study in that it takes place outside a major urban center. This community sample allows for a

closer look at a population of individuals who are not typically studied, and can serve as a case study for mothers in Canada.

While it was expected that there might have been differences between urban and rural mothers, or differences between mothers who are in a mobile relationship and those who are not – this was not the dominant finding. The overall homogeneity of the sample suggest that the common factors of relationship quality, co-parental communication, and mental wellbeing are more important than where one lives or the employment situation of their partner. The correlates that were significant in predicting parenting sense of competence exist across parenting contexts, and perhaps these factors are where the focus of future research should be. Too often, assumptions can be made about the functioning or wellbeing of rural communities and families or about mothers whose parenting situation is outside of the dominant social discourse. In this case, reflecting on the resilience of this under researched population allows for a less stigmatized and more holistic understanding of the maternal experience.

Clinical Implications

The majority of parenting support programs aim to improve child outcomes, and maternal outcomes such as improve self-efficacy are seen as a means of improving child outcomes rather than as important independent goals (Small, Taft, & Brown, 2011). From a feminist perspective, we believe that positive outcomes for mothers should be considered important in their own right. The relationship between family relationships, maternal mental health and parenting sense of competence indicates the importance of targeting maternal wellness directly and proactively, to maximize the benefits for mothers early on in the post-partum period and beyond.

Early investigation into the role of parenting satisfaction and relationships highlighted the reciprocal path of influence between marital happiness and parenting satisfaction through structural equation modeling (Rogers & White, 1998). The role that parental role satisfaction plays on marital happiness suggests that role satisfaction in turn influences the family dynamic more broadly. Collective family efficacy, including efficacy between co-parents and between parents and their children, has been shown to contribute to increased family satisfaction and functioning. Because the family system is highly interdependent, high perceived maternal self-efficacy may lead to positive outcomes in family functioning and child development (Bandura, Caprara, Barbaranelli, Regalia, & Scabini, 2011), and thus needs to be understood, valued and nurtured.

A review of 23 studies examining parenting self-efficacy found strong evidence linking perceived parenting self-efficacy to actual parenting competence (Jones & Prinz, 2005). This is important to consider as it suggests raising parenting self-efficacy may actually improve parenting competence, and that parenting self-efficacy is an accurate measure of quality of parenting. Further, parenting self-efficacy has been related to child socio-emotional functioning, academic performance, and child-behaviour, with significant evidence indicating the benefits of high parental efficacy on child wellbeing (Jones & Prinz, 2005).

Clinically, parenting sense of competence has been identified as a mechanism of change for parenting programs. A group based intervention for parents of children with conduct disorder identified increasing parenting competence as a key outcome in improving functioning (Landy & Menna, 2006). Further, the Positive Parenting Program, Triple P, focuses on empowering families and building on strengths to meet the needs of

families and parents, as the program recognizes that parents with high self-efficacy have more positive expectations of change (Sanders, Markie-Dadds, & Turner, 2003).

Mental Health. In both the regression for parenting efficacy and satisfaction, maternal mental health (OQ-45) predicted a significant amount of variance above what was predicted by demographic variables. This predictor was one of the only variables that remained significant across both regression analyses, and it is well established in the literature that maternal mental health is related to actual parenting competence as well as parenting sense of competence (Ngai, Wai-Chi Chan & Ip, 2010; Ponomartchouk & Bouchard, 2015; Vance & Brandon, 2017). Often times, it is proposed that mothers with poor mental health require parenting training in order to better support their children (Rizzo, Schiffrin, & Liss, 2013), however this finding suggests that perhaps it would also be of benefit to improve maternal sense of competence by helping mothers with their mental health more broadly, through psychoeducation and a larger focus on mental wellness after childbirth and beyond.

Relationship Variables. From the regression analyses, it is apparent that child-parent relationship (high closeness, low conflict) has an impact on both parenting sense of competence efficacy and satisfaction. Parent-child relationships contributes uniquely to the variance in mother's sense of parenting competence even once demographic variables and maternal mental health is controlled for, which speaks to the important of this relationship. Most parenting programs focus on skill building, and working with parents to develop techniques for behaviour management or deal with interpersonal challenges with their children (Sanders et al., 2003; Sanders & Sanders, 2003). The findings of this

study indicate that parenting programs may best serve families by considering the parent-child relationship in a more interconnected manner.

While behavioural skill-based groups are important for the improvement of psycho-social and parenting outcomes for mothers, parenting training programs are more effective when they include components such as emotional communication, positive interactions with child, and improving responsiveness and sensitivity (Graf, Grumm, Hein, & Fingerle, 2014) it is likely that because there is unique variance accounted for by maternal mental health and child-parent relationships, skill-based programs without these components are not meeting all of the needs of mothers and their sense of parenting competence. If this is the case, then adding relationship skills training or psychotherapy that focuses on building maternal affective attachment and child parent relationships may help sustain parenting program benefits over the longer term.

It is also important to consider that parenting programs have been shown to have a lower effectiveness in low-income or with socially disadvantaged families (Graf et al., 2014). In the present study, mothers were primarily middle-class, which makes it difficult to ascertain whether factors we identified here as significant predictors would be relevant to samples of mothers from less socially-advantaged backgrounds. Future studies may want to recruit from more diverse samples of mothers (including a range of socio-economic status) which could help clarify whether socio-economic status serves as a moderator for many of the predictors we identified here.

Family Functioning. It is important parenting programming and family therapy focuses on communication, such as empathic responding, reflecting feelings, and offering support, as well as strengthening emotional bonds, through quality time (Perosa & Perosa,

2001). In line with the Circumplex Model, improving either facet of family functioning, cohesion and communication, often works to improve the other as well (Olson, 2000; Schrod, 2005). Given that co-parental communication was a significant predictor of efficacy and child-parent relationship was a predictor of both efficacy and satisfaction, working to improve these components of family through a focus on communication and cohesion is likely to aid with parental sense of competence. Communication is a key aspect of family functioning, both in terms of fostering relationships and by increasing cohesion and flexibility (Olson, Waldvogel, & Schlieff, 2019). Focusing therapeutic parenting interventions on improving communication will likely serve to improve wellness, cohesion, and competence. When a mother has a strong sense of parenting competence, the quality of her parenting will also improve, as will her relationship with her child as the child reinforces the positive interactions (Perosa & Perosa, 2001). Given the present findings, it is suggested that the relationship is bi-directional, and that positive interactions with child and partner also contribute to increased parenting competence. In this case, parenting competence may be improved by improved family cohesion. The Circumplex Model suggests that families with balanced cohesion, adaptability, and communication have higher functioning (Olson, Waldvogel, & Schlieff, 2019; Schrod, 2005) and given the relation between these factors and parenting competence, the importance of attending to these variables to improve wellbeing overall for mothers is clear. As such, involvement of other family members, such as partners and children, within parenting programs, may benefit the family as a whole.

Therapy with Mothers. Along with improving mothers' parenting competence, it is also important to consider their individual wellbeing. The beliefs of intensive

motherhood ideology, and the belief that parenting is challenging, are detrimental to a women's mental health, and subsequently their parenting (Rizzo et al., 2013). As noted by Tummala-Narra (2009), mothers in today's society face challenges such as changing family structure, economic and work stress, the myth of motherhood and intensive motherhood ideology, and the identity changes of motherhood. Therefore, therapeutic interventions for mothers must focus not only on fulfilling the parenting role, but also on meeting their needs as a partner, a family member, employee, and their personal goals as an individual. Further, if a mother focuses solely on her child, then she can experience negative mental health outcomes including lower levels of satisfaction with her life (Tummala-Narra, 2009).

Therapeutic interventions with mothers must acknowledge and work through the feelings of guilt, shame, self-judgment, and negative self-evaluation that stem from the responsibilities of parenting (Sutherland, 2010). When working with mothers, a social constructivist framework may help to allow mothers to explore the meaning she applies to motherhood, question the origin of these beliefs, and explore sources of meaning for her life. Similarly, a feminist theoretical approach may empower a mother to consider more choices and alternatives in her life, and to nurture herself as well as her family (Medina & Magnuson, 2009). Any therapeutic intervention with mothers must also consider the socio-cultural perspective that influences maternal wellbeing as well as a mother's personal responses to parenting ideals (Pedersen, 2012). A recent finding from a study of self-compassion intervention with parents has found that self-compassion is an effective way to reduce feelings of guilt and shame, and increase self-kindness in parenting (Sirois, Bogels & Emerson, 2019). Given the guilt and shame that mothers experience due to the

high expectations placed on them, self-compassion may help mothers challenge this intensive ideology, reduce their feelings of guilt, and increase their wellbeing.

Limitations and Future Directions

There are several limitations associated with this study, including representativeness of our sample, study design, and measurement issues. First, while all attempts were made to recruit a representative sample of mothers, the present sample was rather homogenous and under-represented some sub-groups of the population of interest, such as mothers from Labrador, mothers with adopted and/or stepchildren, and mothers from diverse socio-economic or ethnic backgrounds. While this survey was advertised using various recruitment methods, such as online ads, snowball recruitment, and posters at daycare centers across the province, mothers self-selected to participate in this research. If the survey advertisements included the mean completion time (approximately 30 minutes) or offered a briefer version of the survey to mothers with limited time or capacity to participate, this may have improved recruitment from some groups of mothers. For example, mothers who are single may have been unrepresented because of the increased daily demands these women face compared to mothers who have a co-parent. These are potential recruitment and survey development biases associated with this study that may have contributed to some of the limitations in more diverse participation, however these limitations can be difficult to avoid given budgetary and time-based barriers to psychological research. Further, our sampling method did not allow for a determination of how many mothers saw the survey in total and chose not to participate. It is possible that mothers who were more educated, or from more supportive families decided to participate, which would explain our homogenous sample, a finding

that is typical in survey research (Heiervang & Goodman, 2011). This overall lack of diversity in this sample may limit the generalizability of these findings, as it is possible there may have been more observable differences between rural and urban populations, or across family structure, if a more diverse sample was obtained. Future research into Canadian families would benefit from more targeted recruitment of diverse family structures and mothers from remote communities.

While there were some variables omitted from the study due to oversights at the survey development, this was primarily done in efforts to decrease the length of the survey for participants and to avoid erroneous information. The study from which the present survey was based was the Canadian Survey on Parenthood, which was more than double the length of the present survey and obtained 300 participants, only three of whom were from NL (Gosselin, 2018). In efforts to increase participation and relevancy by focusing on the maternal experience solely, rather than the family more broadly, many questions related to child wellbeing or maternal attachment were omitted. Unlike in the initial national survey, mothers were asked to report only on the child with the next birthday rather than to report about all of their children separately. Despite our intention to increase participation, this practice resulted in some oversights, including: failure to ask how many children a mother had (total), asking about child age and gender of all children (rather than just the child with the next birthday), and asking about mother's age when she first became a mother (in addition to current age).

While some of this information would have contributed to the demographic profile of motherhood in NL, it is not known whether this would have dramatically changed regression models. In a recent study of predictors of parenting self-efficacy,

child characteristics (including age, behaviour, and gender) were found not to be predictive of parenting self-efficacy (Sevigny & Loutzenhiser, 2010). In a similar Australian study, child gender was shown to have no relation to parenting efficacy or satisfaction and child age was only slightly correlated with PSOC and only in very young children (Rogers & Matthews, 2004). There are mixed findings within the literature regarding the influence of maternal age on parenting sense of competence (Ngai, Wai-Chi Chan, & Ip, 2010; Tarkka, 2003) and therefore it may have been beneficial to be able to control for both mother's age when she first became a mom and mother's current age. However, given the variance already accounted for in the model by demographic variables, it is unlikely this would have significantly changed the percentage of variance accounted for by the overall model.

The inability to understand possible lifespan or developmental effects, or the ways in which having multiple children impact maternal sense of parenting competence in NL is a significant limitation. Despite the recognition that age may not have significantly changed the models, it remains important to understand the ways in which inclusion of this variable could have shifted the results. Mother's age, number of children, and age of children would be the most important variables to include in future research. First-time mother's sense of competence has been more widely examined compared to sense of parental competence across the various stages of child and family development, and it has been posited that sense of parental competence does vary across these developmental stages (Ponomartchouk & Bouchard, 2015). As the majority of the literature looks at parenting within a specific age group, it is a limitation of this study to not be able to assess how parenting varied across the lifespan. It is expected that there may be

differences between mothers who were parenting young children compared to adolescents, however this remains unexplored. Parenting programs such as Triple P have varying age-specific programs for improving parental competence across development (Sanders, Kirby, Tellegen & Day, 2014) suggesting that while the relational variables likely underly satisfaction there may be differences between groups.

With respect to the possible effects of number of children, it is possible that mothers with more than one child may have greater parenting self-efficacy. Previous studies of parenting self-efficacy have found that more exposure to other people's children prior to becoming a parent allows for generalized increase in parental sense of competence (Coleman & Karraker, 2000). This follows Bandura's theory of self-efficacy and social learning (1977) and it is likely that mothers with more than one child feel continuously more efficacious as their time as a parent increases. Longitudinal studies measuring parenting sense of competence over time in a normative sample, or the inclusion of number of children in future studies would allow for a better understanding of whether parenting satisfaction, self-efficacy, or both change with the number of children a mother has or the length of time she has been a parent.

While some questions regarding the demographic characteristics of children were omitted, the emphasis of the study was on understanding the maternal experience, and understanding women as individuals. Therefore, given the purpose of the study was to take a feminist approach to understanding motherhood, as inspired by the work of Hays (1996), we do not believe that the lack of focus on children takes away from the study's overall contribution and significance.

The present study was a cross-sectional sample, and therefore, all results are correlational, and causality cannot be assumed. Consequently it cannot be said that good maternal mental health and positive communication in the family structure cause an increase in parenting sense of competence, only that there appears to be a relation between these factors. Similarly, as the sample is cross-sectional, it is a snapshot in time of the individuals who chose to participate, and these findings may not be replicated with a different sample of mothers in the province at a later date. Additionally, where some comparisons were made between the motherhood study and the Canadian census, data from different years (2011, 2016) was used. This was due to varying ability of specific census reports for particular variables, and thus unfortunately not all data could be compared with the most recent (2016) census. A replication study of these findings within the NL population, or within other provinces in Atlantic Canada may be beneficial to ensure the interpretations of this study reflect the true relationship between these factors.

From a measurement perspective, some issues or improvements could have strengthened this study. The Cronbach's alpha for parenting sense of competence (efficacy) was 0.57, suggesting low internal consistency between items. The Cronbach's alpha for the overall scale was .53, which is why the subscales were selected as main separate outcomes. The obtained alpha value differs from the literature, where the subscale has been reported to have an alpha level of .80 (Ohan, Leung, & Johnston, 2000) and .76 (Johnston & Mash, 1989). It seems that within this sample of mothers, sense of parental efficacy was a more heterogeneous concept, in that the manner in which a participant responded to one item of the subscale was not highly correlated to the manner in which they responded to other items of the same subscale. Perhaps this is because

mothers who participated had children of various ages, as opposed to the majority of participants completing the PSOC for its validity study, which was limited to only new mothers. One notable difference between the subscales is that the items on the efficacy scale are worded in the positive direction, whereas the items on the satisfaction scale are worded in the negative direction. It has been acknowledged in the literature that this may influence responding and may be a limitation of this scale (Ohan et al., 2000). Replication studies would be of benefit to determine if a different cross-sectional sample of mothers obtains a similarly low Cronbach's alpha.

Given that the model does not significantly change with the removal of specific items, and given that the Cronbach's alpha remains low despite the removal of two-items (25% of the scale) it does not appear that altering the scale allows for a better understanding of maternal self-efficacy in this sample. Of note, even in the version of the regression with two items removed, where the Cronbach's alpha value was higher, the addition of education as a significant predictor was associated with less variance explained and a smaller effect size than the original model with the entire PSOC-Efficacy subscale. Further, while education became significant in this model of the regression, the p-value was .025 compared to the other variable's p-values of less than .001, suggesting that education did not reach the same level of statistical significance than the other predictors in the final regression model.

Questions of the PSOC scale are most applicable to mothers who have children under the age of 18, therefore only these mothers were included. While it is important to note that mothering does not end once a child turns 18, these mothers were excluded for the purposes of assessing parenting satisfaction and efficacy within this sample. Despite

this exclusion, much of the literature of parenting self-efficacy and competence primarily looks at new mothers, or mothers of young children (Ahlborg, Berg & Lindvig, 2013; Leahy-Warren, McCarthy & Corcoran, 2012, Porter & Hsu, 2003; Tarkka, 2003) and therefore the present study is more inclusive and generalizable than some past research. Considering the wide range of mothers included in the study compared to prior studies it is possible that the poor reliability was driven by the NL sample, rather than the scale itself. Our sample including mothers of children aged 0-18 and perhaps mothers across the lifespan have a more heterogenous definition of what constitutes sense of parental self-efficacy. In future studies, additional measures of sense of parental self-efficacy should be included to allow for comparisons across age ranges. Similarly, due to the omission of child age we could not analyze whether there was variance in how mothers of children in different age ranges responded to items, however this would be an important consideration for future study. For example, the Perceived Maternal Parental Self-Efficacy Scale has been used in previous studies for new mothers (Leahy-Warren, McCarthy & Corcoran, 2012; Jones & Prinz, 2005) and adding another validated scale could help to better understand parenting self-efficacy in a more developmentally-specific way.

In the literature, one of the most commonly used measures of maternal mental health, specifically depression, is the Edinburgh postnatal depression scale (EPDS). This scale has been validated in the use of studying non-postnatal women with older children and it is commonly used in motherhood research (Cox, Chapman, Murray, & Jones, 1996). While the OQ-45 is less commonly used than the EPDS in motherhood research, the OQ-45 was selected because it is a broadband measure of mental health. The OQ-45

captures a variety of symptoms including stress-related mental health, and is not a formal diagnostic tool (Lambert, Hansen, & Harmon, 2010). The OQ-45 total score was seen as an effective way to measure general mental health, rather than focusing specifically on maternal mental health. While we are interested in the mental health of mothers, it was important for the focus to be on the mother as a person, rather than for all items to focus around her experience specific to motherhood. In contrast to the intensive motherhood ideology (Hays, 1996) we wanted to understand the general wellness of mothers from a broader lens than just her motherhood experience. A main objective was to look at motherhood from a holistic perspective, and not to pathologize women. Using the OQ-45 total score allowed for a wider perspective of mental wellbeing including social and interpersonal functioning. Due to the strength of the relationship with its main outcomes, future studies may benefit from using the sub-scales of the OQ-45 to get a more in depth understanding of the relationship between these factors and various aspects of parenting sense of competence.

Notably, social support is an established predictor of parenting self-efficacy and satisfaction (Angle et al., 2015; Leahy-Warren et al., 2012), however it was not included in the present models of sense of parental competence due to a lack of correlation with the parenting measures.

The question pertaining to mobile work was somewhat ‘double barreled’ and thus there is a possibility that mothers who were previously, but not currently, in a mobile-relationship may have endorsed this item. Mothers were asked to respond to the questionnaire about their current functioning, therefore if mothers who were previously in a mobile relationship were reporting current satisfaction with their relationship

communication or mental health they may have erroneously been included as a mother in the mobile work category. Given the prevalence of mothers in mobile relationships and the relative novelty of this research area, further investigating into the mobile relationship is required. Questions that ask more specifically about the timeline of mobile relationship, such as whether the partner's schedule is variable or fixed, the amount of communication during absence, and the adjustment period for the mothers will allow for a better understanding of this population.

Future Directions. In future research, the results of this study should be replicated with specific attention placed on some of the omissions of this survey. In particular, as the findings relating to mother's age and parenting sense of competence in this study were contrary to what is seen in other research, future studies using the PSOC should pay close attention to the measurement of age and relationship between mother's age and her sense of parental efficacy. As the demographic profile of this survey found a high prevalence of mobile work in NL, more research into the experience of families of mobile workers appears essential. Qualitative analysis of mobile relationships and the influence of this parenting context may be of benefit to help normalize this experience for mothers and inform future research. Finally, as it was observed that family relationship variables and maternal mental health were the main predictors of parenting sense of competence, future experimental designs may benefit from the inclusion of additional family members, such as partner and children, to better elucidate the role of couple communication, parent-child relationships, and how actor-partner effects may influence the maternal experience.

Conclusion

This study used a cross-sectional community sample to better understand the maternal experience of mothers in NL, and to create a model for the prediction of parental sense of competence, specifically efficacy and satisfaction. The demographic profile suggests that typical motherhood in NL still resembles a traditional family structure of a heterosexual, married or cohabiting couple, with biological children. The presence of mobile work is a common phenomenon in the province, however it does not appear that mothers in this type of a relationship differ greatly from mothers whose partner lives locally. Overall, the mothers in this survey reported feeling healthy, with healthy children, were satisfied with their social support, and were functioning well with their parenting, co-parental communication, and general mental health. This suggests that this sample of NL mothers is resilient and generally doing well.

In the model predicting sense of parental efficacy, mothers' younger age, better mental health, close co-parental communication, and close, non-conflictual relationships with children predicted better maternal efficacy. This suggests that a mother's positive relationship with the people in her family, and her own mental wellbeing are reflected in feelings of maternal efficacy. Given what is known about the Circumplex model of the family and the intensive motherhood ideology, it is not surprising that mothers with good relationships feel more effective and self-efficacious. Similarly, child health, maternal mental health, and close, non-conflictual relationships with children predicted better satisfaction. These variables are very child-focused, suggesting that perhaps a mother's satisfaction in her role as a parent is more heavily dependent on the perception of her child's wellbeing. The relevance of maternal mental health and wellbeing, even in this community sample of women living a largely normative maternal experience, highlights

the importance of proactively targeting maternal mental health prior to the onset of more serious psychopathology. Even when mothers are functioning well in their social environment and are not seriously impaired by mental health symptoms, their mental wellbeing still contributes significantly to their parenting sense of competence. Mothers who are relatively resilient without marked illness in themselves or their children are still motivated and influenced by the same variables (mental health, relationship functioning, communication) as mothers with clinical levels of distress. As such, a proactive approach to optimizing mental health is likely to impact both the mother and her family.

As much of the emphasis on family research is placed on the importance of mothers for the sake of their children's optimal development, it is important to see here that mothers' own mental health is a key predictor of their sense of parental competence. As such, fostering good relationships within the family, and acknowledging maternal mental health may serve to help improve family resilience and functioning overall.

Mothers undoubtedly have an impact on the family system, and mothers who feel competent, confident, and satisfied in their role will be better able to play their role within their family and for themselves. Most mothers reported some distress, whether with respect to their relationships with children or partners, or with their own mental health, self-efficacy and wellbeing. Despite this, this sample of mothers is resilient and reported a high degree of wellbeing. The toxic narrative of intensive motherhood does not allow for a self-compassion approach to parenting, however the current findings on parenting sense of competence and the demographic profile will hopefully serve to normalize the experience of motherhood as a potentially challenging experience that most women appear to manage well. Approaching the study of motherhood from a non-deficit

approach allowed for a number of strengths about NL mothers to be highlighted and these findings illustrate that it is not perfection that is the path to a successful, competent, and satisfying maternal experience, but rather one based on the wellness of their children and the support of their partner.

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Table 1. The socio-demographic data for the sample of mothers who completed the Newfoundland and Labrador Motherhood survey.

Characteristics	<i>n</i>	%
Race/ethnicity	1082	
Caucasian	1029	95.1
African	0	0.0
Asian	2	0.3
Arab/Middle Eastern	0	0.0
Latino/Hispanic	0	0.0
Native North American	29	2.7
Other	20	1.8
Mothers Age ($M = 34.66$, $SD = 8.06$)	1082	
18 - 25	77	7.1
26 - 33	414	38.3
34 - 40	322	29.8
41 - 47	173	16.0
47 - 55	75	6.9
Over 55	21	1.9
Region of NL	919	
Avalon	581	63.2
Central	139	15.1
Western	131	14.3
Southern	38	4.1
Labrador	30	3.3
Urban or Rural	1082	
Urban	817	75.5
Rural	265	24.5
Household Income ($M = 6.57$, $SD = 2.57$)	1082	
0-14,999 (1)	29	2.7
15,000-29,999 (2)	78	7.2
30,000-44,999 (3)	79	7.3
45,000-59,999 (4)	76	7.0
60,000-74,999 (5)	81	7.5
75,000-89,999 (6)	95	8.8
90,000-99,999 (7)	110	10.2
100,000-149,999 (8)	286	26.4
150,000-199,999 (9)	155	14.3
200,000-249,999 (10)	58	5.4
250,000+ (11)	33	3.0
Missing Data	2	0.2
Education ($M = 5.30$, $SD = 1.890$)	1082	
Some High School (1)	13	1.2

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High School Diploma (2)	50	4.6
Some College (3)	72	6.7
College Diploma (4)	330	30.5
Some Undergraduate studies (5)	76	7.0
Undergraduate Degree (6)	320	29.6
Some Masters studies (7)	46	4.3
Masters Degree (8)	142	13.1
Some Doctoral studies (9)	9	0.8
Doctoral Degree (10)	15	1.4
Some PostDoc studies (11)	1	0.1
Post Doctoral Degree (12)	7	0.6
Missing Data	1	0.1
Currently Working	1082	
Yes	738	68.2
No	344	31.8
Current Occupation	738	
Professional	320	43.3
Office Employee	264	35.8
Tradesperson	22	3.0
Self Employed	37	5.0
Student	4	0.5
Stay at Home Parent	5	0.7
Other	86	11.7
Marital Status	1082	
Married	689	63.7
Cohabiting	192	17.7
Single, never married	81	7.5
Separated/divorced	59	5.5
Remarried after divorce/separation	20	1.8
Cohabiting after divorce/separation	33	3.0
Widowed	5	0.5
Remarried after being widowed	3	0.3
Cohabiting after being widowed	0	0.0
Mobile Relationship (1082)	1082	
Yes	443	40.9
No	639	59.1
Sexual Orientation	1082	
Heterosexual	1028	94.9
Homosexual	6	0.6
Bisexual	41	3.8
Asexual	1	0.1
Transgender/transsexual	2	0.2
Other	4	0.4
Type of Child(ren)	1082	
Biological	956	88.4

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Stepchild	3	0.3
Adopted child	13	1.2
Biological and step	51	4.7
Biological and adopted	4	0.4
Step and adopted	0	0.0
Biological, step, and adopted	0	0.0
No children under age 18	54	5.0

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Table 2. The socio-demographic data of urban and rural mothers for the Newfoundland and Labrador Motherhood survey.

Characteristics (<i>Mean, SD</i>)	Urban n	Urban %	Rural n	Rural%
Race/ethnicity	817		264	
Caucasian	781	95.6	249	93.9
African	0	0.0	0	0.0
Asian	3	0.4	0	0.0
Arab/Middle Eastern	0	0.0	0	0.0
Latino/Hispanic	0	0.0	0	0.0
Native North American	22	2.7	14	5.3
Other	11	1.3	1	0.4
Mothers Age	817		265	
<i>(Urban: M = 35.95, SD = 8.01,</i>				
<i>Rural: M = 34.75, SD = 8.13)</i>				
18 -25	28	6.3	26	9.8
26 - 33	193	43.6	114	43.0
34 - 40	117	26.4	67	25.3
41 - 47	63	14.2	37	14.0
47 - 55	33	7.4	16	6.0
Over 55	9	2.0	5	1.9
Region of NL	691		228	
Avalon	511	74.0	70	30.7
Central	84	12.2	55	24.1
Western	91	13.2	40	17.5
Southern	5	0.7	33	14.5
Labrador	0	0.0	30	13.2
Missing	60		37	
Household Income	815		265	
<i>(Urban: M = 6.60, SD = 2.62,</i>				
<i>Rural: M = 6.50, SD = 2.40)</i>				
0-14,999 (1)	25	3.1	4	1.5
15,000-29,999 (2)	62	7.6	16	6.0
30,000-44,999 (3)	56	6.9	23	8.7
45,000-59,999 (4)	56	6.9	20	7.5
60,000-74,999 (5)	58	7.1	23	8.7
75,000-89,999 (6)	72	8.8	23	8.7
90,000-99,999 (7)	78	9.6	32	12.1
100,000-149,999 (8)	209	25.6	77	29.1
150,000-199,999 (9)	122	15.0	33	12.5
200,000-249,999 (10)	51	6.3	7	2.6
250,000+ (11)	26	3.2	7	2.6
Missing	2		0	
Education	816		265	

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Some High School (1)	11	1.3	2	0.8
High School Diploma (2)	32	3.9	18	6.8
Some College (3)	52	6.4	20	7.5
College Diploma (4)	236	28.9	94	35.5
Some Undergraduate (5)	59	7.2	17	6.4
Undergraduate Degree (6)	240	29.4	80	30.2
Some Masters (7)	33	4.0	13	4.9
Masters Degree (8)	121	14.8	21	7.9
Some Doctoral (9)	9	1.1	0	0.0
Doctoral Degree (10)	15	1.8	0	0.0
Some PostDoc (11)	1	0.1	0	0.0
Post Doctoral Degree (12)	7	0.9	0	0.0
Missing Data	1		0	
Currently Working	817		265	
Yes	588	72.0	150	56.6
No	229	28.0	115	43.4
Current Occupation	588		150	
Professional	253	43.0	67	25.3
Office Employee	217	36.9	47	17.7
Tradesperson	14	2.4	8	3.0
Self Employed	27	4.6	10	3.8
Student	3	0.5	1	0.4
Stay at Home Parent	4	0.7	1	0.64
Other	70	11.9	16	6.0
Marital Status	817		265	
Married	552	63.9	167	63.0
Cohabiting	134	16.4	58	21.9
Single, never married	63	7.7	18	6.8
Separated/divorced	48	5.9	11	4.2
Remarried after divorce/separation	14	1.7	6	2.3
Cohabiting after divorce/separation	31	3.8	2	0.8
Widowed	3	0.4	2	0.8
Remarried after being widowed	2	0.2	1	0.4
Cohabiting after being widowed	0	0.0	0	0.0
Sexual Orientation	817		265	
Heterosexual	771	94.4	257	97.0
Homosexual	6	0.7	0	0.0
Bisexual	33	4.0	8	3.0
Asexual	1	0.1	0	0.0
Transgender/transsexual	0	0.0	0	0.0
Other	4	0.5	0	0.0
Type of Child(ren)	816		265	
Biological	772	88.4	234	88.3
Stepchild	3	0.4	0	0.0
Adopted child	9	1.1	4	1.5

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Biological and step	39	4.8	12	4.5
Biological and adopted	2	0.2	2	0.8
Step and adopted	0	0.0	0	0.0
Biological, step, and adopted	0	0.0	0	0.0
No children under age 18	41	5.0	13	4.9

Table 3. Descriptive statistics of the health related variables of the sample of mothers who completed the Newfoundland and Labrador Motherhood survey

Variables	<i>n</i>	%	Mean (SD)
Weekly Produce Consumption	1082		2.70 (0.594)
Never (0)	6	0.6	
Once (1)	60	5.5	
Twice (2)	192	17.7	
More than three times (3)	824	76.2	
Weekly Exercise Frequency	1082		3.57 (1.978)
Less than one time (0)	238	22.0	
One time (1)	118	10.9	
Two times (2)	170	15.7	
Three times (3)	223	20.6	
Four times (4)	141	13.0	
Five times (5)	112	10.4	
Six times (6)	33	3.0	
Seven times (7)	47	4.3	
Sleep Quality (past month)	1082		3.09 (1.033)
Very bad (1)	69	6.4	
Fairly bad (2)	233	21.5	
Okay (3)	398	36.8	
Fairly good (4)	290	26.8	
Very good (5)	92	8.5	
Personal Health Rating	1082		3.67 (0.897)
Poor (1)	13	1.2	
Fair (2)	97	9.0	
Good (3)	306	28.3	
Very Good (4)	486	44.9	
Excellent (5)	180	16.6	
Child Health Rating	1072		4.38 (0.872)
Poor (1)	10	0.9	
Fair (2)	43	4.0	
Good (3)	92	8.6	
Very Good (4)	314	29.3	
Excellent (5)	613	57.2	
Social Support Satisfaction	1079		3.58 (1.121)
Completely dissatisfied (1)	55	5.1	
Somewhat dissatisfied (2)	124	11.5	
Moderately satisfied (3)	292	27.1	
Somewhat satisfied (4)	351	32.5	
Completely satisfied (5)	257	23.8	

Table 4. Descriptive results include mean, standard deviation, and range, for the psychometric measures of the sample of mothers who completed the Newfoundland and Labrador Motherhood survey

Scale	n	Mean (SD)	Range
Quality of Co-Parenting Communication Scale Current Partner	868	34.319 (4.481)	10 - 47
Closeness Subscale		9.005 (2.766)	4 - 20
Conflict Subscale		25.315 (4.590)	6 - 30
Quality of Co-Parenting Communication Scale Former Partner	142	30.880 (4.756)	10 - 50
Closeness Subscale		11.880 (4.083)	4 - 20
Conflict Subscale		19.000 (5.019)	6 - 30
Child Parent Relationship Scale (Short Form) Biological	1008	47.682 (7.423)	23 - 75
Closeness Subscale		16.040 (6.492)	3 - 40
Conflict Subscale		31.640 (3.620)	16-35
Child Parent Relationship Scale (Short Form) Step-Child	53	45.453 (8.900)	31 - 75
Closeness Subscale		18.029 (8.505)	8 - 40
Conflict Subscale		27.434 (6.090)	11 - 35
Child Parent Relationship Scale (Short Form) Adopted	17	51.177 (7.552)	37 - 64
Closeness Subscale		20.412 (8.071)	9 - 38
Conflict Subscale		30.765 (4.549)	20 - 35
Kansas Family Life Satisfaction Scale	1051	5.726 (1.059)	1 - 7
Brief Dyadic Adjustment Scale	1071	2.532 (1.041)	1.25 - 6.25
Outcome Questionnaire	1013	54.462 (22.920)	5 - 144
Parenting Sense of Competence Scale (PSOC)	1063	72.834 (11.153)	36 - 102
PSOC-Satisfaction		36.598 (7.394)	9 - 54
PSOC-Efficacy		36.235 (5.508)	20 - 48

Table 5. Results of independent samples t-tests of urban mothers and rural mothers and the mean scores on relationship and wellbeing scales.

Scale	Group						95% CI for Mean Difference	t	df
	Urban			Rural					
	M	SD	n	M	SD	n			
CPRS Closeness	31.53	3.95	609	31.29	4.38	208	-0.39 - 0.88	0.62	815
CPRS Conflict	16.11	6.58	609	15.79	6.58	208	-0.70 - 1.34	0.74	815
QCPC Closeness	25.34	4.79	609	24.73	5.24	208	-0.16 - 1.38	2.01	815
QCPC Conflict	9.09	2.88	609	8.62	2.72	208	0.02 - 0.91	1.54	815
PSCS Satisfaction	36.39	7.31	609	36.16	7.42	208	-0.91 - 1.40	0.07	815
PSCS Efficacy	36.21	5.33	609	36.19	5.34	208	-0.81 - 0.89	0.41	815
OQ Total Score	53.03	22.38	609	51.16	23.43	208	-1.61 - 5.36	1.05	815

* $p < .05$; the lack of asterisk indicates that none of the t-statistics were significantly different
N = 817

Table 6. Results of independent samples t-tests of mothers in mobile relationships and mothers not in mobile relationships and the mean scores on relationship and wellbeing scales.

Scale	Group						95% CI for Mean Difference	t	df
	Mobile Relationship			No Mobile Relationship					
	M	SD	n	M	SD	n			
CPRS Closeness	31.67	3.51	411	31.62	3.95	597	-0.40 - 0.51	0.23	1006
CPRS Conflict	16.05	6.24	411	16.04	6.67	597	-0.80 - 0.83	0.03	1006
QCPC Closeness	25.19	4.47	366	25.40	4.67	502	-0.83 - 0.41	-0.66	866
QCPC Conflict	9.09	2.84	366	8.94	2.70	502	-0.22 - 0.52	0.80	866
PSCS Satisfaction	36.91	7.23	437	36.78	7.50	626	-0.36 - 1.44	1.17	1061
PSCS Efficacy	36.43	5.60	437	36.09	5.44	626	-0.34 - 1.01	0.97	1061
OQ Total Score	51.71	21.79	414	53.08	23.74	599	- 4.27 - 1.51	-0.94	1003

* $p < .05$; the lack of asterisk indicates that none of the t-statistics were significantly different
N = 1008

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Table 7. Correlations between parenting sense of competence efficacy and satisfaction and the predictor variables collected from the sample of mothers who completed the Newfoundland and Labrador Motherhood survey.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. PSOC-Satisfaction	1																
2. PSOC-Efficacy	.525**	1															
3. Age	.074*	-.085**	1														
4. Income	.171**	-.012	.312**	1													
5. Difficulty Paying	-.174**	-.088*	-.170**	-.550**	1												
6. Education	.085**	-.045	.216**	.468**	-.349**	1											
7. Child Health	.203**	.162**	-.053	.089**	-.180**	.112**	1										
8. Personal Health	.277**	.175**	.092**	.282**	-.348**	.239**	.334**	1									
9. Produce Consumption	.142**	.106**	.086**	.316**	-.288**	.325**	.122**	.274**	1								
10. Exercise Frequency	.415**	.086**	.031	.077*	-.081*	.079*	.078*	.275**	.225**	1							
11. Sleep	.217**	.156**	.127**	.165**	-.239**	.098**	.156**	.346**	.164**	.212**	1						
12. Social Support Satisfaction	.233	.140**	-.005	.157**	-.235**	.092**	.104**	.179**	.148**	.077*	.207**	1					
13. Conflict Bio- CPRS	-.396**	-.256**	.130**	-.120**	.102**	-.051	-.132**	-.166**	-.042	-.009	-.070*	-.118**	1				
14. Closeness Bio-CPRS	.194**	.242**	.241**	.022	-.039	-.011	.101**	.091**	.069*	.073*	.128**	.105**	.139**	1			
15. Conflict QCPC Current	-.138**	-.107**	.092**	-.126**	.148**	.036	-.109**	-.160**	-.108**	-.056	-.094**	-.085**	.189**	-.009	1		
16. Closeness QCPC Current	.185	.169	.031	.040	-.132**	.135**	.066*	.075**	.086**	.045	.098**	.098**	-.070*	.136**	.258**	1	
17. OQ-45 Total	-.596**	-.385**	-.079**	-.281**	.373**	-.099**	-.218**	-.458**	-.207**	-.201**	-.420**	-.388**	.304**	-.208**	.261**	-.210**	1

** Correlation is significant at the .001 level (two tailed)

* Correlation is significant at the .05 level (two tailed)

Table 8. Regression Analysis of Parenting Sense of Competence Satisfaction

Independent Variables	Model 1		Model 2		Model 3	
	β	t	β	t	β	t
Age	- 0.076	1.370	0.074	2.284*	0.063	2.003
Household Income	0.097	2.343*	-0.020	-0.569	-0.013	-0.404
Education	-0.540	-1.398	0.009	0.286	0.013	0.423
Maternal Health	0.231	5.887***	-0.032	-0.917	-0.036	-1.073
Child Health	0.182	4.232***	0.126	3.436***	0.101	2.945**
OQ-45			-0.596	-19.514***	-0.498	-15.156***
Current Partner QCPC Conflict					0.005	0.136
Current Partner QCPC Closeness					0.017	0.474
Biological CPRS Conflict					-0.254	-8.381***
Biological CPRS Closeness					0.114	3.744***

N = 108

 β = unstandardized regression coefficient* $p < .05$. ** $p < .01$. *** $p < .0005$

Table 9. Regression Analysis for Parental Sense of Competence Efficacy

Independent Variables	Model 1		Model 2		Model 3	
	β	t	β	t	β	t
Age	-0.122	-3.151*	-0.108	-3.035**	-0.128	-3.701***
Household Income	0.032	0.792	-0.046	-1.219	-0.042	-1.154
Education	-0.097	-2.534*	-0.054	-1.524	-0.054	-1.566
Maternal Health	0.178	4.618***	0.001	0.21	0.006	0.163
Child Health	0.138	3.255**	0.100	2.556*	0.062	1.650
OQ-45			-0.403	-11.958***	-0.286	-7.857***
Current Partner QCPC Conflict					-0.002	-0.049
Current Partner QCPC Closeness					0.087	2.144*
Biological CPRS Conflict					-0.183	-5.477***
Biological CPRS Closeness					0.206	6.090***

N = 108

 β = unstandardized regression coefficient* $p < .05$. ** $p < .01$. *** $p < .0005$

Appendix A.
Promotional Poster



Are You A NL Mom?

Researchers of the Family Resilience Laboratory at MUN, under the supervision of Dr. Julie Gosselin, are conducting a study to understand the factors that influence **maternal wellbeing** and the unique characteristics of motherhood in Newfoundland and Labrador. This includes parents of step children and adoptive children. It also includes those who are alone currently with a partner. Both heterosexual and same-sex mothers are eligible for the survey.

As part of the study, you will be asked to complete a survey. For more information about the study you can scan the barcode above, or go to <http://goo.gl/YI2dTt> or email slb154@mun.ca.

The proposal for this research has been reviewed by the provincial Health Research Ethics Board and found to be in compliance with national standards for the ethical conduct of research involving humans. If you have ethical concerns about the research (such as the way you have been treated or your rights as a participant), you may contact the provincial ethics office at info@hrea.ca or by telephone at 709-777-8

<http://goo.gl/YI2dTt>

NL Motherhood Survey

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Appendix B.
Facebook Groups where promotional poster was shared

1. Adoption Option Newfoundland and Labrador
2. Baie Verte Classifieds
3. Bay Roberts Area Buy and Sell
4. Bay Roberts and Area Children Buy and Sell
5. Bay Roberts Kool Deals
6. Buchans Junction Group
7. Buy and Sell Harbour Grace
8. Carbonear Buy and Sell
9. Carbonear Classifieds
10. Cloth Diapering Parents - Newfoundland & Labrador
11. Corner Brook Mom's Buy and Sell
12. Fogo Island Buys
13. Gander Mommy Network
14. Gander Buy and Sell and Trade
15. Grand Falls - Windsor Moms Swap/Buy
16. Grandfalls Windsor Mom Buy and Sell
17. Harbour Grace and Carbonear Buy and Sell
18. Mommy Board NL
19. New Deer Lake Classifieds
20. New Grandfalls Windsor Buy and Sell
21. NL Moms Buy & Sell
22. Nain Labrador Virtual Flea Market
23. Offensive Moms - NL
24. Paradise, CBS and Surrounding Area Swap / Buy / Give Away
25. Parents helping Parents with Everyday Questions about Parenting – NL
26. Port Aux Basques Buy and Sell
27. Port Aux Basques Classifieds
28. Southlands Mommas
29. St. John's & Area Classifieds
30. St. John's Children's Stuff Swap Trade and Buy
31. Stephenville Classifieds
32. Stephenville Buy and Sell Group
33. "Thrifty Mama's"--New Hr/Whitbourne
34. The Avalon Club - NL Marketplace
35. Your Newfoundland

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Appendix C.

Community Centers, Daycare Centers, and Organizations that were contacted regarding the study and asked to promote the survey amongst their patrons.

1. A child's place preschool and daycare
2. ABC Preschool
3. Active Time Preschool and Daycare
4. After School Zone
5. Aquatic Centre *
6. Astros Infant Care Center
7. Bay Arena
8. Bay Roberts Swimming Pool
9. Bayshore Daycare Inc
10. Building Blocks Child Care Center
11. Care-A-Lot Daycare
12. Chatter Box Preschool and Daycare Center
13. Children's Choice Learning Center *
14. Churchill Falls Community Center
15. Community Action Committee for Southwest Newfoundland
16. Community Center – Wabush
17. Community Center – Labrador
18. Corner Brook Arts and Culture Center
19. Creative Beginnings Daycare
20. Creative Learning Child Care Center
21. Daybreak Childcare Center
22. Dr. Heidi Kravitz (Gynaecologist) *
23. Dr. Tim Strand (Gynaecologist)
24. Exploits Valley Community Coalition
25. Family and Child Care Connections
26. First Steps Childcare INC
27. First Steps Family Resource Center
28. Fisher Children's Center *
29. Foster Families Association
30. Frances Little Friends Daycare
31. Fundamental Childcare Center
32. GB Cross Memorial Hospital
33. Gander Arts and Culture Center
34. Gander Community Center
35. Gander Daycare Center
36. Grand-Falls Windsor Community Center *
37. Happy Times Preschool
38. Happy Tots Nursery School
39. Humberwood Centre
40. Jack & Jill Preschool *
41. James Paton Memorial Hospital
42. Karnik Centre
43. Kid Kare
44. Kidcorp Learning Center

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45. Kiddie City Inc
46. Killbride Children's Center
47. Labrador Grenfell Health
48. Labrador Straits Family Resource Centre
49. Labrador West Arts and Culture Center
50. Little Darling's Daycare *
51. Little Jewel Preschool Program
52. Little People's Workshop
53. MAX Arts, Athletic, and Wellness
54. Merry Care Daycare
55. Mes Amis Daycare and Preschool
56. New Fun Land
57. New Fun Land IV *
58. New Fun Land X *
59. Nursery Time Preschool and Daycare Center
60. Panda Bear Daycare
61. Paradise Daycare and Preschool
62. Peter Pan Preschool II
63. Pinset Center for the Arts
64. Play N Learn Preschool
65. Play, Learn, & Grow Child Care Centre
66. Precious Peoples Playland
67. Pumpkin House Day Care
68. Rainbow Daycare Center
69. Rec Centre Wabush
70. Robins Nest Child Care Center
71. Rockcliffe Children's Center
72. Single Parent Association of NL
73. Southern Labrador Family Center
74. Special Additions Child Care Center
75. Stay and Play Daycare *
76. Stephenville Arts and Culture Centre
77. Stephenville High School Infant Centre
78. Stepping Stones Daycare *
79. The Children's Center
80. Tiny Hands Childcare Center
81. Toybox Preschool
82. Wedgewood OB/GYN
83. Wee Gems Preschool
84. West Rock Community Center *
85. Wilbur Sparkes Recreation Complex
86. YMCA Bay George
87. YMCA After School Program
88. YMCA Children's Learning Center
89. YMCA Connections – Afterschool and Lunch
90. Young Explores

* Denotes organizations that did not respond or declined participating

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Appendix D. Informed Consent Form (Online)

Title: Newfoundland and Labrador Survey on Motherhood
Researcher(s): Dr. Julie Gosselin, R.Psych., Associate Professor, Psychology Department
Memorial University, Psychology Department, jgosselin@mun.ca
Shannon Bedford, Psy.D Student, Psychology Department Memorial University,
(709) 864 – 2161, slb154@mun.ca
Sandrine Jean, Ph.D, Assistant Professor, Anthropology Department Memorial
University, sjean@mun.ca

You are invited to take part in a research project entitled “Newfoundland and Labrador Survey on Motherhood.” This survey is voluntary, and will take approximately 30 minutes of your time.

This form is part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. It also describes your right to withdraw from the study. In order to decide whether you wish to participate in this research study, you should understand enough about its risks and benefits to be able to make an informed decision. This is the informed consent process. Take time to read this carefully and to understand the information given to you. Please contact the research coordinator, Shannon Bedford, if you have any questions about the study or would like more information before you consent.

It is entirely up to you to decide whether to take part in this research. If you choose not to take part in this research or if you decide to withdraw from the research once it has started, there will be no negative consequences for you, now or in the future.

Introduction:

As part of my Psy.D dissertation I am conducting research under the supervision of Dr. Julie Gosselin.

Purpose of Study:

The purpose of the study is to examine the experience of motherhood in Newfoundland and Labrador in different family contexts, more precisely biological, adoptive and step-parent relationships including hetero and homosexual married, single, divorced, widowed, cohabiting and remarried mothers as well as the influence of mobile and distance work on family life.

What You Will Do in this Study:

Participation will consist essentially of completing an online survey and providing socio-demographic information as well as answering questions. There will be an opportunity for participants to express interest to participate in future research projects surrounding these areas if consent is given at the end of this survey. Desire to participate in future studies will not influence eligibility for the current study.

Length of Time:

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The approximate amount of time required to complete the questionnaire is approximately 20-30 minutes, however some individuals may complete the study in a longer or shorter amount of time. Therefore, participation can be expected to take participants 20-30 minutes.

Please note that the survey must be completed all at once. Participants cannot partially complete the questionnaire and return to it later.

Withdrawal from the Study:

- You can stop and/or end participation during the data collection by closing the survey. Any partially completed data will be discarded.
- If you withdraw consent after the data collection is complete, data cannot be removed because it will be anonymous.

Possible Benefits:

- The study will contribute to the scientific/scholarly community and society as a whole. Findings will allow us to have a better understanding of the experience of mothers in Newfoundland and Labrador, which may be used to facilitate change and improvements to maternal and community health and services.

Possible Risks:

- I understand that my participation in this study implies that I will answer questions concerning my personal experience as a mother. While it is possible that this may lead to some emotional discomfort, the researchers have assured me that everything has been done in attempt to diminish these risks.
- Should you require services to help with distress which may be elicited by the study questions, please refer to the following resources:

Mental Health Crisis Line, 24-hour Toll-Free - 1-888-737-4668

Health Line 1-888-709-2929

Paediatric Advice Line 1-888-722-1126

Confidentiality:

- The ethical duty of confidentiality includes safeguarding participants' identities, personal information, and data from unauthorized access, use, or disclosure.
- Names will not appear on any document related to an individual's participation in the study. Your participation is anonymous and once the data is uploaded for analysis, it will be aggregated with the rest of the participants' information.

Anonymity:

- Anonymity refers to protecting participants' identifying characteristics, such as name or description of physical appearance.

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- Every reasonable effort will be made to ensure your anonymity. You will not be identified in publications because your participation remains anonymous and your data will be aggregated with the rest of participants' information for analysis.

Use, Access, Ownership, and Storage of Data:

- The data collected will be kept in a secure manner. Data will be password protected and kept under key, in Dr. Gosselin's research laboratory for a period of five years following the end of the data collection.
- Only Dr. Gosselin, Dr. Sandrine Jean and the project coordinator Shannon Bedford will have access to the raw data during the initial data collection. Secondary data analyses performed by additional research team members are possible once the initial data collection is complete, such as students completing their honours thesis or Master's thesis.
- Data will be kept for a minimum of five years, as required by Memorial University's policy on Integrity in Scholarly Research.

Third-Party Data Collection and/or Storage:

Data collected from you as part of your participation in this project will be hosted and/or stored electronically by *Qualtrics Survey Software* and is subject to their privacy policy, and to any relevant laws of the country in which their servers are located (Canada). Therefore, anonymity and confidentiality of data may not be guaranteed in the rare instance, for example, that government agencies obtain a court order compelling the provider to grant access to specific data stored on their servers. If you have questions or concerns about how your data will be collected or stored, please contact the researcher and/or visit the provider's website for more information before participating. The privacy and security policy of the third-party hosting data collection and/or storing data can be found at: <https://www.qualtrics.com/privacy-statement/>.

Reporting of Results:

- The data may be published in subsequent journal articles or as presentations at conferences or both, as well as through student dissertations.
 - Upon publication, these dissertations will be available at Memorial University's Queen Elizabeth II library, and can be accessed online at:
<http://collections.mun.ca/cdm/search/collection/theses>.
- **The data will only be reported** in an aggregated and/or summarized form. No individual's personal data will be presented independently.

Sharing of Results with Participants:

After the study is complete and results are analyzed, participants will have access to the results of the research should they be interested. If you are interested in reading the final research report, please contact the researchers and we can contact you when the study is complete.

Questions:

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You are welcome to ask questions before, during, or after your participation in this research. If you would like more information about this study, please contact: Shannon Bedford (Psy.D student) at slb154@mun.ca.

The proposal for this research has been reviewed by the Interdisciplinary Committee on Ethics in Human Research and found to be in compliance with Memorial University's ethics policy. If you have ethical concerns about the research, such as the way you have been treated or your rights as a participant, you may contact the Chairperson of the ICEHR at icehr@mun.ca or by telephone at 709-864-2861.

Consent:

By completing this questionnaire you agree that:

- You have read the information about the research.
- You have been advised that you may ask questions about this study and receive answers prior to continuing.
- You are satisfied that any questions you had have been addressed.
- You understand what the study is about and what you will be doing.
- You understand that you are free to withdraw participation from the study by closing your browser window or navigating away from this page, without having to give a reason and that doing so will not affect you now or in the future.

Regarding withdrawal after data collection:

- You understand that this data is being collected anonymously and therefore your data **cannot** be removed once you submit this survey.

By consenting to this online survey, you do not give up your legal rights and do not release the researchers from their professional responsibilities.

Please retain a copy of this consent information for your records.

Clicking 'continue' below and submitting this survey constitutes consent and implies your agreement to the above statements.

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Appendix E.

Newfoundland and Labrador Survey on Motherhood

Please be aware that you may skip any question that you do not wish to answer. The survey will alert you that a question has been left blank, however you may still continue throughout the survey without answering a question.

Q1 Please indicate your gender

- ☐ Male
- ☐ Female
- ☐ Transgender/MTF
- ☐ Transgender/FTM
- ☐ Gender neutral
- ☐ I choose not to answer

Q2 Please indicate your ethnic background

- ☐ Caucasian
- ☐ African
- ☐ Asian
- ☐ Arabic
- ☐ Latino
- ☐ Native North American
- ☐ Other, please specify _____

Q3 Please indicate your age

Q4 Please indicate your citizenship

- ☐ Canadian born in Canada
- ☐ Canadian born outside of Canada (please indicate your country of origin):
- ☐ Permanent Resident (please indicate your country of origin):
- ☐ Canadian currently living out of the country (please indicate where):
- ☐ Other (please specify):

Q5 Please indicate how long you have lived in Canada

Q124 In what part of Newfoundland and Labrador do you live?

- ☐ In the provincial capital region (e.g. St. John's, Mount Pearl)
- ☐ A city in Newfoundland (e.g. Paradise, Corner Brook)
- ☐ A town in Newfoundland (e.g. Clarenville, Gander, Grand Falls-Windsor)
- ☐ A small town in Newfoundland (e.g. Bay De Verde, Robert's Arm, St. Lawrence)
- ☐ Labrador (please specify)

Q129 In what region of Newfoundland and Labrador do you live?

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- ☐ Avalon
- ☐ Central
- ☐ Western
- ☐ Southern
- ☐ Labrador

Q6 Please indicate the average income of your household

- ☐ \$0 - \$14, 999
- ☐ \$15, 000 - \$29, 999
- ☐ \$30, 000 - \$44, 999
- ☐ \$45, 000 - \$59, 999
- ☐ \$60, 000 - \$74, 999
- ☐ \$75, 000 - \$89, 999
- ☐ \$90, 000 - \$99, 999
- ☐ \$100, 000 - \$149, 999
- ☐ \$150, 000 - \$199, 999
- ☐ \$200, 000 - \$249, 999
- ☐ \$250, 000 or more

Q7 At what frequency do you (or your family) have difficulty paying for substantial needs such as food, clothing, housing, ect.

- ☐ Never
- ☐ Rarely
- ☐ Sometimes
- ☐ Often
- ☐ Almost Always
- ☐ I do not know

Q8 Please indicate your highest level of educational attainment

- ☐ Some High School
- ☐ High School Diploma
- ☐ Some College Studies
- ☐ College Diploma
- ☐ Some Undergraduate Studies
- ☐ Undergraduate University Degree
- ☐ Some Masters Studies
- ☐ Masters Degree
- ☐ Some Doctoral Studies
- ☐ Doctoral Degree
- ☐ Some Post-Doctoral Studies
- ☐ Post-Doctoral Degree

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Q9 Please indicate if you are currently working

- ☐ Yes
- ☐ No

Q10 Please indicate how many hours a week you are currently working: ____

Q11 Please select the option that most closely reflects your current or most recent occupation

- ☐ Professional (doctor, lawyer, engineer, scientist, teacher, nurse, etc)
- ☐ Office Employee (manager, director, salesperson, etc)
- ☐ Tradesperson (construction worker, factory worker, manual work, etc)
- ☐ Self Employed
- ☐ Student
- ☐ Stay-at-home parent
- ☐ Other (please specify)

Q12 Please indicate your marital status Please read all options before answering

- ☐ Married
- ☐ Cohabiting (never married)
- ☐ Single (never married)
- ☐ Separated/Divorced
- ☐ Remarried after divorce
- ☐ Cohabiting after divorce/separation
- ☐ Widowed
- ☐ Remarried after being widowed
- ☐ Cohabiting after being widowed

Q13 Please indicate how many years you have been in your current relationship

Q14 Please indicate the marital status of your current partner

- ☐ Married (for the first time)
- ☐ Cohabiting (never married)
- ☐ Remarried after divorce
- ☐ Cohabiting after divorce/separation
- ☐ Remarried after being widowed
- ☐ Cohabiting after being widowed

Q15 Please indicate your sexual orientation

- ☐ Heterosexual
- ☐ Homosexual
- ☐ Bisexual
- ☐ Asexual

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- ☐ Transgender
- ☐ Other (please specify): _____

Q16 Please indicate the gender of your current or most recent partner

- ☐ Male
- ☐ Female
- ☐ Transgender/MTF
- ☐ Transgender/FTM
- ☐ Gender neutral
- ☐ Choose not to answer

Q92 Have any of your children been conceived through assisted reproductive technology? E.g. fertility drugs, intrauterine insemination (IUI), in vitro fertilization (IVF), etc.

- ☐ Yes
- ☐ No

Q93 Are you currently, or have you ever, considered yourself to be living in a “mobile” relationship? E.g. Either you or your partner is/has commuted long-distances and/or is/has worked away from home for weeks/months/years at a time?

- ☐ Yes
- ☐ No

Q94 Has “mobile” work, in any way, impacted family planning? E.g. Decisions to have/not to have a child or children?

- ☐ Yes
- ☐ No

Q95 Has “mobile” work impacted the conception process itself? This may include, but is not limited to, delayed, suspended, or advanced TTC [trying to conceive]; difficulty matching ovulation periods with mobile work schedules, among others.

- ☐ Yes
- ☐ No

Q72 Of all the children in your care, who are under age 18, please indicate all categories of children that apply to your parental situation.

- ☐ Biological children
- ☐ Step-children
- ☐ Adopted children
- ☐ Biological and step-children
- ☐ Biological and adopted children
- ☐ Step-children and adopted children
- ☐ Biological, step, and adopted children
- ☐ I have no children under the age of 18

Q111 Child & Family Health

We are trying to get a sense of the overall child health needs in your family. For the next few questions, please consider all the children in your household (at least one week per month) and choose the response that represents the greatest level of care. For example, if one child's health is good and another is poor, please answer poor.

Q109 In general, how would you say your child's current health is?

- ☐ Excellent
- ☐ Very Good
- ☐ Good
- ☐ Fair
- ☐ Poor
- ☐ I do not know

Q110 In the last 12 months, have you used any of these services for your child

- ☐ Child/youth health and wellbeing information from phone or internet
- ☐ Hospital emergency ward
- ☐ Hospital outpatient clinics
- ☐ General practitioner/family doctor
- ☐ Disability services
- ☐ Speech therapy
- ☐ Dental services
- ☐ Paediatrician
- ☐ Guidance counsellor
- ☐ Other psychiatric or behavioural services
- ☐ Other medical specialists
- ☐ None the above

Q112 In the last 12 months, have there been any of the following services listed that the child needed but could not get.

- ☐ Child/youth health and wellbeing information from phone or internet
- ☐ Hospital emergency ward
- ☐ Hospital outpatient clinics
- ☐ General practitioner/family doctor
- ☐ Disability services
- ☐ Speech therapy
- ☐ Dental services
- ☐ Paediatrician
- ☐ Guidance counsellor
- ☐ Other psychiatric or behavioural services
- ☐ Other medical specialists
- ☐ None the above

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Q113 In the last 12 months, has anyone in your family used any of these services

- ☐ Parenting education courses or programs
- ☐ Relationship education courses
- ☐ Relationship counselling (family, couple)
- ☐ Other counselling services
- ☐ Parent support groups
- ☐ Parent information from phone or internet
- ☐ Drug or alcohol services
- ☐ Problem gambling services
- ☐ Adult mental health services
- ☐ Migrant or ethnic resource services
- ☐ Housing services
- ☐ Disability services
- ☐ Financial management services
- ☐ Charities (e.g. salvation army)
- ☐ Emergency relief services
- ☐ Church or religious group
- ☐ Other family support services
- ☐ None of the above

Q114 In the last 12 months have there been any of the services listed that anyone in the family has needed but could not get?

- ☐ Parenting education courses or programs
- ☐ Relationship education courses
- ☐ Relationship counselling (family, couple)
- ☐ Other counselling services
- ☐ Parent support groups
- ☐ Parent information from phone or internet
- ☐ Drug or alcohol services
- ☐ Problem gambling services
- ☐ Adult mental health services
- ☐ Migrant or ethnic resource services
- ☐ Housing services
- ☐ Disability services
- ☐ Financial management services
- ☐ Charities (e.g. salvation army)
- ☐ Emergency relief services
- ☐ Church or religious group
- ☐ Other family support services
- ☐ None of the above

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Q102 Overall, how satisfied are you with the availability of family health services in your community:

	Extremely satisfied (1)	Somewhat satisfied (2)	Neither satisfied nor dissatisfied (3)	Somewhat dissatisfied (4)	Extremely dissatisfied (5)
Family physician					
Nursing					
Psychological Counselling or other Mental Health Services					
Other allied health professions (e.g. physiotherapy, occupational therapy, dietician, kinesiologist, etc.)					
Support groups or education programs					

Q115 Personal Health and Experiences

Q116 In general, how would you rate your own health?

- ☐ Excellent
- ☐ Very good
- ☐ Good
- ☐ Fair
- ☐ Poor

Q117 How often in a given week do you include fresh produce (fruits and vegetables) in your daily meals?

- ☐ Once a week
- ☐ 2-3 times
- ☐ More than 3 times
- ☐ Never

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Q118 About how many days each week do you do at least 30 minutes of moderate or vigorous physical exercise? For example, walking briskly, riding a bike, gardening, tennis, swimming, running, ect.

☐ Less than one

☐ 1

☐ 2

☐ 3

☐ 4

☐ 5

☐ 6

☐ 7

Q119 Over the past month, how would you rate your overall sleep quality?

☐ Very good

☐ Fairly good

☐ Okay/adequate

☐ Fairly bad

☐ Very bad

Q120 In the last 12 months, have any of the following happened to you or your current partner

☐ Birth of a child or pregnancy

☐ You or your partner suffered a serious illness, injury, or assault

☐ A serious injury, illness, or assault has happened to a close relative

☐ A parent, partner, or child has died

☐ A close family friend or another relative has died

☐ You have been separated from a spouse or partner

☐ Broken off a steady romantic relationship

☐ Started living with a new partner

☐ Had someone new (other than partner or child) move into the household. IE. relative, friend, or boarder.

☐ Had a serious problem with family, close friend, or neighbour

☐ Had a major financial crisis

☐ Had a crisis or serious disappointment in work career

☐ Thought you would soon lose your job

☐ Lost your job, not by choice

☐ Sought work unsuccessfully for more than one month

☐ Had problems with the police or court appearance

☐ Had something you value lost or stolen

☐ Someone in your household had an alcohol or drug problem

☐ Changed job or returned to work

☐ Increased work hours

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- ☐ Decreased work hours
- ☐ Moved house
- ☐ Been away from home a lot
- ☐ Had your home or local area affected by bushfire, flooding, or severe storm

Q121 How often do you see, talk to, or email following people Answer for the most frequent contact, e.g., if you talk to your mother everyday but your father once a week, select everyday.

	No contact (1)	Rarely (2)	At least every month (3)	At least every week (4)	Every day (5)	Not applicable (6)
Your parents						
Your partners parents						
Other family members						
Your friends						
Your neighbours						

Q122 In general, how satisfied are you with the social support you are receiving.

- ☐ Completely dissatisfied
- ☐ Somewhat dissatisfied
- ☐ Moderate satisfaction
- ☐ Somewhat satisfied
- ☐ Completely satisfied

Q126 Have you ever received a diagnosis of a mental health disorder?

- ☐ No
- ☐ Yes, please specify _____
- ☐ Prefer not to disclose

Q18 For the following questions, please answer with regards to the child with the next birthday who is your BIOLOGICAL CHILD. Please indicate the age of the child with the next birthday.

Q19 Please indicate the gender of the biological child with the next birthday

- ☐ Male
- ☐ Female
- ☐ Transgender/MTM
- ☐ Transgender/FTM
- ☐ Gender neutral
- ☐ I choose not to answer

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Q20 Please indicate your relationship with the biological child with the next birthday

- ☐ My biological child conceived in the context of my current relationship
- ☐ My biological child conceived in the context of a former relationship
- ☐ My biological child conceived while single

Q21 Please indicate the custody arrangement of this biological child

- ☐ I have sole custody
- ☐ The child lives primarily with me
- ☐ The child lives with both biological parents
- ☐ The other parent and I have joint custody
- ☐ The child lives primarily with the other parent
- ☐ The other parent has sole custody

Q22 Is the biological child's biological (or adoptive) father or legal mother involved in the child's life?

- ☐ Yes
- ☐ No

Q73 For the following questions, please answer with regards to the child with the next birthday who is your STEP CHILD. Please indicate the age of the child with the next birthday.

Q24 Please indicate the marital status of the biological (or adoptive) father or legal mother of this biological child

- ☐ Married
- ☐ Cohabiting
- ☐ Single (never married)
- ☐ Separated/Divorced
- ☐ Remarried after divorce
- ☐ Cohabiting after separation/divorce
- ☐ Do not know
- ☐ Other, please specify _____

Q27 Is the partner of this child's biological (or adoptive) father or legal mother involved in this biological child's life?

- ☐ Yes
- ☐ No

Q76 Please indicate the gender of the step-child with the next birthday

- ☐ Male
- ☐ Female
- ☐ Transgender/MTF
- ☐ Transgender/FTM

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- ☐ Gender neutral
- ☐ I choose not to answer

Q77 Please indicate your relationship with the step-child with the next birthday

- ☐ Child is my partner's biological child with a former partner
- ☐ Child is my partner's adopted child with a former partner
- ☐ Other

Q79 Please indicate the custody arrangement of this step-child

- ☐ I have sole custody
- ☐ The child lives primarily with me
- ☐ The child lives with both biological parents
- ☐ The other parent and I have joint custody
- ☐ The child lives primarily with the other parent
- ☐ The other parent has sole custody

Q81 Is the step-child's biological (or adoptive) father or legal mother involved in the child's life?

- ☐ Yes
- ☐ No

Q89 Is the partner of this child's biological (or adoptive) father or legal mother involved in this step-child's life?

- ☐ Yes
- ☐ No

Q74 For the following questions, please answer with regards to the child with the next birthday who is your ADOPTED CHILD. Please indicate the age of the child with the next birthday.

Q75 Please indicate the gender of the adopted child with the next birthday

- ☐ Male
- ☐ Female
- ☐ Transgender/MTM
- ☐ Transgender/FTM
- ☐ Gender neutral
- ☐ I choose not to answer

Q78 Please indicate your relationship with the adopted child with the next birthday

- ☐ I adopted this child in the context of my current relationship
- ☐ I adopted this child in the context of a former relationship
- ☐ I adopted this child while single

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Q80 Please indicate the custody arrangement of this adopted child

- ☐ I have sole custody
- ☐ The child lives primarily with me
- ☐ The other parent and I have joint custody
- ☐ The child lives primarily with the other parent
- ☐ The other parent has sole custody

Q82 Is the adopted child's biological (or adoptive) father or legal mother involved in the child's life?

- ☐ Yes
- ☐ No

Q84 Please indicate the marital status of the biological (or adoptive) father or legal mother of this adopted child

- ☐ Married
- ☐ Cohabiting
- ☐ Single (never married)
- ☐ Separated/Divorced
- ☐ Remarried after divorce
- ☐ Cohabiting after separation/divorce
- ☐ Do not know
- ☐ Other, please specify _____

Q90 Is the partner of this child's biological (or adoptive) father or legal mother involved in this adopted child's life?

- ☐ Yes
- ☐ No

Q29 CHILD-PARENT RELATIONSHIP SCALE: SHORT FORM Please reflect on the degree to which each of the following statements currently applies to your relationship with the child who IS UNDER 18, A BIOLOGICAL CHILD, AND HAS THE NEXT BIRTHDAY. Using the scale below, select the appropriate number for each item.

	Definitely does not apply (1)	Does not really apply (2)	Neutral/unsure (3)	Sometimes applies (4)	Definitely applies (5)
I share an affectionate, warm relationship with this child					
This child and I always seem to be struggling with each other					
If upset, this child will seek comfort from me					

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This child is uncomfortable with physical affection or touch from me					
This child values his or her relationship with me					
When I praise this child, he or she beams with pride					
This child spontaneously Shares information about himself/ herself					
This child easily Becomes angry at me					
It is easy to be in tune with what this child is feeling					
This child remains angry or is resistant after being disciplined					
Dealing with this child drains my energy					
When this child wakes up in a bad mood, I know we are in for a long and difficult day					
This child's feelings towards me can be unpredictable or can change suddenly					
This child is sneaky or manipulative with me					
This child openly shares his or her feelings and experiences with me					

Q103 CHILD-PARENT RELATIONSHIP SCALE: SHORT FORM Please reflect on the degree to which each of the following statements currently applies to your relationship with the child who IS UNDER 18, A STEP-CHILD, AND HAS THE NEXT BIRTHDAY. Using the scale below, select the appropriate number for each item.

	Definitely does not apply (1)	Does not really apply (2)	Neutral/unsure (3)	Sometimes applies (4)	Definitely applies (5)
I share an affectionate, warm relationship with this child					
This child and I always seem to be struggling with each other					
If upset, this child will seek comfort from me					
This child is					

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uncomfortable with physical affection or touch from me					
This child values his or her relationship with me					
When I praise this child, he or she beams with pride					
This child spontaneously Shares information about himself/ herself					
This child easily Becomes angry at me					
It is easy to be in tune with what this child is feeling					
This child remains angry or is resistant after being disciplined					
Dealing with this child drains my energy					
When this child wakes up in a bad mood, I know we are in for a long and difficult day					
This child's feelings towards me can be unpredictable or can change suddenly					
This child is sneaky or manipulative with me					
This child openly shares his or her feelings and experiences with me					

Q104 CHILD-PARENT RELATIONSHIP SCALE: SHORT FORM Please reflect on the degree to which each of the following statements currently applies to your relationship with the child who IS UNDER 18, AN ADOPTED CHILD, AND HAS THE NEXT BIRTHDAY. Using the scale below, select the appropriate number for each item.

	Definitely does not apply (1)	Does not really apply (2)	Neutral/unsure (3)	Sometimes applies (4)	Definitely applies (5)
I share an affectionate, warm relationship with this child					
This child and I always seem to be struggling with each other					
If upset, this child will seek comfort from me					
This child is uncomfortable with physical affection or touch from me					
This child values his or her					

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relationship with me					
When I praise this child, he or she beams with pride					
This child spontaneously Shares information about himself/ herself					
This child easily Becomes angry at me					
It is easy to be in tune with what this child is feeling					
This child remains angry or is resistant after being disciplined					
Dealing with this child drains my energy					
When this child wakes up in a bad mood, I know we are in for a long and difficult day					
This child's feelings towards me can be unpredictable or can change suddenly					
This child is sneaky or manipulative with me					
This child openly shares his or her feelings and experiences with me					

Q108 Kansas Family Life Scale

For each of the following three questions please indicate your satisfaction by recording your answer in the space to the right of the item.

	Extremely Dissatisfied (1)	Very Dissatisfied (2)	Somewhat Dissatisfied (3)	Mixed Feelings (4)	Somewhat Satisfied (5)	Very Satisfied (6)	Extremely Satisfied (7)
How satisfied are you with your family life?							
How satisfied are you with your relationship with your partner							

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How satisfied are you with your relationship with your child(ren)?							
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Q52 Brief Dyadic Adjustment Scale This questionnaire deals with your own perception of you and your partner's life together. Your responses will therefore reflect your personal opinion. Don't be concerned with what your partner's responses may or might be. For each question, please indicate your response by selecting the most appropriate description .

	All of the time (1)	Most of the time (2)	More often than not (3)	Occasionally (4)	Rarely (5)	Never (6)
1. How often do you discuss or have you considered divorce, separation or terminating your relationship?						
2. In general, how often do you think that things between you and your partner are going well?						
3. Do you confide in your mate?						

4. The following descriptions represent different degrees of happiness in your relationship. The middle point, "happy" represents the degree of happiness of most relationships. Please select the number, which best describes the degree of happiness, all things considered, of your relationship.

- ☐ Extremely unhappy
- ☐ Fairly unhappy
- ☐ A little unhappy
- ☐ Happy

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- ☐ Very happy
- ☐ Extremely happy
- ☐ Perfect

Q54 Quality of Co-Parental Communication. Concerning the children in my care, I communicate with the following people: Please check all that apply to your situation

- ☐ My current partner
- ☐ My former partner

Q56 Quality of Co-Parental Communication By completing this form, we will be able to more accurately assess areas in which you experience difficulty in your co-parenting relationship with your child(ren)'s other parent. Please add any details which can clarify either your responses or comments about an item. When answering the following questions, please think about your CURRENT PARTNER:

	Never (1)	Rarely (2)	Sometimes (3)	Usually (4)	Always (5)
1. When you and your co-parent discuss parenting issues, how often does an argument result?					
2. How often is the underlying atmosphere one of hostility or anger?					
3. How often is the conversation stressful or tense?					
4. Do you and your co-parent have basic differences of opinion about issues related to child rearing?					
5. If your co-parent has needed to make a change in visiting/ time-sharing arrangements, do you go out of your way to accommodate?					
6. Does your co-parent go out of the way to accommodate any changes you need to make?					
7. Do you believe that your co-parent understands and is supportive of your special needs as a custodial (or non-custodial) parent?					
8. When you need help regarding the children, do you seek it from your co-parent?					
9. Would you say that your co-parent is a resource to you in raising the children?					
10. Would you say that you are a resource to your co-parent in raising the children?					

Q58 Quality of Co-Parental Communication By completing this form, we will be able to more accurately assess areas in which you experience difficulty in your co-parenting relationship with your child(ren)'s other parent. Please add any details which can clarify either your responses or comments about an item. When answering the following questions, please think about your FORMER PARTNER with whom

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you have at least one child (if you have more than one former partner with whom you have had children, please refer to the partner with whom you had your eldest child):

	Never (1)	Rarely (2)	Sometimes (3)	Usually (4)	Always (5)
1. When you and your co-parent discuss parenting issues, how often does an argument result?					
2. How often is the underlying atmosphere one of hostility or anger?					
3. How often is the conversation stressful or tense?					
4. Do you and your co-parent have basic differences of opinion about issues related to child rearing?					
5. If your co-parent has needed to make a change in visiting/ time-sharing arrangements, do you go out of your way to accommodate?					
6. Does your co-parent go out of the way to accommodate any changes you need to make?					
7. Do you believe that your co-parent understands and is supportive of your special needs as a custodial (or non-custodial) parent?					
8. When you need help regarding the children, do you seek it from your co-parent?					
9. Would you say that your co-parent is a resource to you in raising the children?					
10. Would you say that you are a resource to your co-parent in raising the children?					

Q66 Parenting Sense of Competence Scale Please rate the extent to which you agree or disagree with each of the following statements. Click to write the question text.

	Strongly Disagree (1)	Somewhat Disagree (2)	Disagree (3)	Agree (4)	Somewhat Agree (5)	Strongly Agree (6)
1. The problems of taking care of a child are easy to solve once you know how your actions affect your (step)child(ren), an understanding I have acquired.						
2. Even though being a parent could be rewarding, I am frustrated now while my (step)child(ren) is/are at his/her/their present age.						
3. I go to bed the same way I wake up in the morning, feeling I have not						

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accomplished a whole lot.						
4. I do not know why it is, but sometimes when I'm supposed to be in control, I feel more like the one being manipulated.						
5. My mother was better prepared to be a good mother than I am.						
6. I would make a fine model for a new mother to follow in order to learn what she would need to know in order to be a good parent.						
7. Being a parent is manageable, and any problems are easily solved.						
8. A difficult problem in being a parent is not knowing whether you're doing a good job or a bad one.						
9. Sometimes I feel like I'm not getting anything done.						
10. I meet by own personal expectations for expertise in caring for my (step)child(ren).						
11. If anyone can find the answer to what is troubling my (step)child(ren), I am the one.						
12. My talents and interests are in other areas, not being a parent.						
13. Considering how long I've been a mother, I feel thoroughly familiar with this role.						
14. If being a mother were only more interesting, I would be motivated to do a better job as a parent. (14)						
15. I honestly believe I have all the skills necessary to be a good mother to my (step)child(ren).						
16. Being a parent makes me tense and anxious.						
17. Being a good mother is a reward in itself.						

Q71 Outcome Questionnaire Looking back over the last week, including today, help us to understand how you have been feeling. Please read each item carefully and select the circle under the category which best describes your current situation. For

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this questionnaire, work is defined as employment, school, housework, volunteer work, and so forth.

	Never (1)	Rarely (2)	Sometimes (3)	Frequently (4)	Almost Always (5)
1. I get along with others.					
2. I tire easily.					
3. I feel no interest in things.					
4. I feel stressed at work/school.					
5. I blame myself for things					
6. I feel irritated					
7. I feel unhappy in my marriage/relationship					
8. I have thoughts of ending my life.					
9. I feel weak					
10. I feel fearful					
11. After heavy drinking, I need a drink the next morning to get going. (If you do not drink, mark never).					
12. I find my work/school satisfying.					
13. I am a happy person					
14. I work/study too much					
15. I feel worthless					
16. I am concerned about family troubles					
17. I have an unfulfilling sex life.					
18. I feel lonely					
19. I have frequent arguments					
20. I feel loved and wanted					
21. I enjoy my spare time					
22. I have difficulty concentrating					
23. I feel hopeless about the future					
24. I like myself					
25. Disturbing thoughts come into my mind that I can't get rid of					
26. I feel annoyed by people who criticize my drinking (if not applicable, mark never)					
27. I have an upset stomach					
28. I am working/studying less than I am used to					
29. My heart pounds too much.					
30. I have trouble getting along					

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with friends and close acquaintances					
31. I am satisfied with my life					
32. I have trouble at work/school because of my drinking or drug use (if not applicable, mark never)					
33. I feel that something bad is going to happen.					
34. I have sore muscles					
35. I feel afraid of open spaces, or of driving, or being on buses, subways, etc.					
36. I feel nervous					
37. I feel my love relationships are full and complete					
38. I feel that I am not doing well at work/school					
39. I have too many disagreements at work/school					
40. I feel something is wrong with my mind					
41. I have trouble falling asleep or staying asleep					
42. I feel blue					
43. I am satisfied with my relationships with others					
44. I feel angry enough at work/school to do something I might regret					
45. I have headaches					

