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# New Mothers' Networks in the Canadian Context: A Combined Methods Investigation into the Characteristics, Function, and Dynamics of First Time Mothers' Social Networks

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New Mothers' Networks in the Canadian Context: A Combined Methods Investigation into the  
Characteristics, Function, and Dynamics of First Time Mothers' Social Networks

by

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## **Abstract**

In this combined methods study, semi-structured qualitative interview data and quantitative social network survey data were used to describe the characteristics, functions, and dynamics of new mothers' social networks in the Canadian context. The social networks of the mothers who participated were largely composed of a core network of close family and friends who provided a range of social support. First time mothers' networks also included network members who provided support specific to the context of new motherhood, such as daytime companionship during the regular work week, which they found through existing ties when possible. When not, new mothers often sought this companionship through acquaintances or new friends, particularly other new mothers. Comparison of structured social network data with semi-structured interview data led to recommendations for better eliciting and describing these context specific ties in new mothers' networks, including the use of a multi-pronged, context aware approach.

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*For Mike and Ewan, my best guys*

*And to Mum, for your boundless love, patience, and support*

## Table of Contents

Abstract .....	ii
Acknowledgements .....	iii
Dedication .....	iv
Table of Contents .....	v
List of Tables .....	ix
List of Figures and Illustrations .....	x
 CHAPTER ONE: INTRODUCTION, BACKGROUND, AND THEORETICAL CONTEXT .....	
1.1 Introduction: First time motherhood in the Canadian context .....	1
1.1.1 A note on research design, methods and writing .....	2
1.2 First time motherhood .....	3
1.3 Social support, social networks, and first time motherhood .....	6
1.3.1 Social support and first time motherhood .....	7
1.3.2 Social network analysis and first time motherhood .....	9
1.3.2.1 Social network analysis terminology .....	11
1.3.2.2 Types of ties in egocentric networks .....	13
1.3.2.3 Boundary specification in egocentric network analysis: The name generator .....	14
1.3.2.4 Quantitative and qualitative methods in social network analysis .....	15
1.3.2.5 Why use SNA to study the experiences of first time mothers? .....	15
1.4 Social support and social networks across a life transition: The convoy model .....	17
 CHAPTER TWO: REVIEW OF THE LITERATURE .....	
2.1 Social support, social networks and motherhood .....	20
2.1.1 Social support, social networks, and parenthood .....	20
2.1.2 Social support, social networks, and first time mothers .....	22
2.1.3 Social networks and first time motherhood .....	24
2.1.3.1 Samples and methods .....	25
2.1.3.2 Network characteristics and outcomes .....	26
2.1.3.3 Network support and outcomes .....	27
2.1.3.4 Changes in social network relations .....	29
2.2 Methods in social network analysis .....	31
2.2.1 Techniques and issues in egocentric network elicitation .....	32
2.2.1.1 Respondent Burden .....	32
2.2.1.2 Strong vs. weak network ties .....	32
2.2.1.3 Forgetting .....	33
2.2.1.4 Name generator interpretation .....	34
2.2.2 The “important matters” name generator .....	34
2.2.3 Eliciting the social networks of first time mothers .....	38
2.2.3.1 Changing lives, changing networks .....	38
2.2.3.2 Network elicitation: First time mothers .....	40
2.2.4 Combined methods in SNA .....	45
2.3 Gaps in the literature .....	46

CHAPTER THREE: RESEARCH DESIGN, METHODS, AND PROJECT EVOLUTION .....	48
3.1 Research design .....	48
3.1.1 Using a multi-strategy research approach to explore the social networks of first time mothers .....	48
3.2 Participant Recruitment .....	50
3.2.1 In-person social network survey and qualitative interview participants .....	51
3.2.2 Online social network survey respondents .....	52
3.3 Data Collection: Instruments .....	53
3.3.1 In-depth semi-structured qualitative interview guide .....	53
3.3.2 In-person social network survey .....	54
3.3.2.1 Egocentric social network approach .....	54
3.3.2.2 Name generator selection .....	55
3.3.2.3 Name interpreters .....	55
3.3.3 Online social network survey .....	56
3.4 Data Collection: Procedure .....	57
3.5 Ethical Considerations .....	58
3.5.1 Informed Consent .....	58
3.5.2 Risk to Participants .....	59
3.6 Project evolution .....	59
3.6.1 Original research approach .....	59
3.6.2 Modified research approach .....	60
3.6.3 Changes in procedure and data collection instruments .....	61
3.7 Analysis .....	64
3.7.1 Analysis of interview data: .....	64
3.7.2 The hierarchical mapping technique as analytic tool: Comparison of qualitative interview data with in-person social network survey data .....	67
3.7.3 Analysis of online quantitative network survey data .....	68
CHAPTER FOUR: RESULTS .....	70
4.1 Quantitative description of the social networks of 40 first time mothers: Results from the online social network survey .....	71
4.1.1 Characteristics of first time mothers: Online network survey respondents .....	71
4.1.2 Network characteristics .....	72
4.1.3 Bivariate analyses: Tests of significance and Pearson correlations .....	74
4.1.3.1 Differences in network characteristics according to mother's age, education, baby's age, and plans for returning to work .....	74
4.1.3.2 Pearson correlations .....	76
4.2 Qualitative description of the social networks and maternal experiences of 10 first time mothers: In-person interview findings .....	79
4.2.1 Characteristics of in-person interview participants .....	79
4.2.2 Qualitative social network descriptions .....	80
4.3 First time mothers' social networks: Dynamics, function, and context .....	82
4.3.1 Social network dynamics .....	82
4.3.1.1 Changing relationships: The parenthood club and a new commonality of experience .....	83
4.3.1.2 Managing network ties: "Full" networks vs. network gaps .....	86

4.3.2 Social support .....	89
4.3.2.1 Social support: Emotional, instrumental, appraisal, informational .....	89
4.3.2.2 Social support and the relative ages of network members' children .....	102
4.3.2.3 Unhelpful support .....	104
4.3.3 Comparisons to others: Network members as frames of reference .....	107
4.3.4 "During the day": Context specific companions and activities .....	111
4.4 SNA methods: Comparing data collected through structured quantitative and semi-structured qualitative approaches .....	116
CHAPTER FIVE: DISCUSSION AND CONCLUSION .....	120
5.1 What do the social networks of Calgarian first time mothers look like? .....	120
5.1.1 First time mothers' social networks: Comparison of Calgarian mothers to new mothers in other contexts .....	120
5.1.2 Comparison of first time mothers' networks to the networks of GSS respondents .....	121
5.1.3 Factors related to first time mothers' network characteristics .....	123
5.2 Network function, dynamics and the importance of context .....	125
5.2.1 Core and peripheral network members .....	125
5.2.2 Patterns of social support across the network .....	126
5.2.3 Social support experiences: Unhelpful support and the hierarchy of maternal advice-giving .....	129
5.2.4 Network member comparisons .....	132
5.2.5 Social network dynamics .....	133
5.2.5.1 Changing network relations in the transition to motherhood: The importance of network members' parental status .....	133
5.2.5.2 Managing context specific network ties .....	134
5.3 Methodological issues in studying the social networks of first time mothers .....	137
5.3.1 Using the "important matters" name generator to elicit first time mothers' social networks .....	138
5.3.1.1 Online generation of egocentered network data .....	138
5.3.1.2 Comparison of online and in-person social network elicitation .....	138
5.3.1.3 In-person combined interviews: Comparison of the networks elicited by the "important matters" name generator and through qualitative interview data .....	139
5.3.2 Recommendations for eliciting the social networks of first time mothers .....	140
5.3.3 The use of combined methods to study the social networks of first time mothers .....	142
5.4 Contributions of research .....	144
5.5 Limitations of study .....	145
5.6 Suggestions for future research .....	145
5.7 Conclusion .....	146
BIBLIOGRAPHY .....	147
APPENDIX A: INTERVIEW GUIDES .....	164
A.1. Interview Guide V1 .....	164
A.2. Interview Guide V2 and V3 .....	165



APPENDIX B: SOCIAL NETWORK SURVEYS .....	168
B.1. Network Survey V1.....	168
B.2. Network Survey V2.....	173
B.3. Network Survey V3.....	173
B.4. Network Survey V4 – Online survey .....	174
APPENDIX C: CONSENT FORMS .....	181
C.1. Sample qualitative interview consent.....	181
C.2. Sample in-person social network survey consent .....	185
C.3. Online social network survey consent.....	189
APPENDIX D: RESOURCE CARD.....	192
D.1. Resource card front .....	192
D.2. Resource card back .....	193
APPENDIX E: SOCIAL NETWORK DIAGRAMS .....	194

## **List of Tables**

Table 2.1. Name Generators Used to Elicit Maternal Networks .....	42
Table 4.1. Characteristics of online social network survey respondents .....	71
Table 4.2. First time mothers' quantitative social network characteristics: Size, composition and density (N = 40).....	72
Table 4.3. First time mothers' quantitative social network characteristics: Duration of relationship, frequency of contact and alter employment status (N=40) .....	74
Table 4.4. Pearson correlation coefficients for network characteristics (N = 40) .....	78
Table 4.5. Characteristics of 10 first time mothers – in-person sample .....	79

## List of Figures and Illustrations

Figure 1.1 Diagram for mapping a social support network (Antonucci, 1986).....	18
Figure 3.1 Project timeline.....	63
Figure 3.2 Qualitative interview analysis (adapted from Miller & Crabtree, 1992, p.19) .....	65
Figure 3.3 Sample diagram of a first time mother's social network .....	68
Figure 4.1 Combined social network diagram: Joy .....	117
Figure E.1 Combined social network diagram: Sonya .....	194
Figure E.2 Combined social network diagram: Jessica .....	195
Figure E.3 Combined social network diagram: Emily.....	196
Figure E.4 Combined social network diagram: Erica .....	197
Figure E.5 Combined social network diagram: Linda .....	198
Figure E.6 Combined social network diagram: Melanie .....	199

## Chapter One: **Introduction, Background, and Theoretical Context**

### **1.1 Introduction: First time motherhood in the Canadian context**

Becoming a mother for the first time greatly affects many aspects of a woman's physical, mental, and emotional life. Part of coping with this major life transition and demanding new role entails drawing on the resources available through her social environment. For example, she may need help with her new baby, encouragement, or social companionship. However, new motherhood is also a time when most women are rather suddenly removed from the daily settings and relations of their "pre-baby" life – often for an extended period of time, if not permanently. In Canada, most provinces offer working new mothers up to between 52 and 54 weeks of unpaid job-protected maternity leave to care for their baby (Zhang, 2007).<sup>1</sup> Up to 50 weeks of combined paid maternity and parental benefits are offered through the federal Employment Insurance (EI) program (Service Canada, 2012). In 2008, approximately 85% of Canadian mothers with babies less than 13 months old had worked in the past 18 months, and of these 80% received paid maternity benefits (Marshall, 2010). Most new mothers return to work after one year (Zhang, 2007). The first year after a baby's birth is therefore one during which most new Canadian mothers, including the large proportion of those who worked before giving birth and who plan to return to the workforce, have both the potential need and the potential opportunity to modify their social landscape as they transition into their new role; both the composition and the functions of the social networks of new mothers may change dramatically during this time. This study examines the social networks of first time mothers in the first year following the birth of their babies. Through this exploratory study I attempt to answer two research questions pertaining to the characteristics of first time mothers' social networks and the experiences associated with them:

RQ1: What are the social network characteristics of first time mothers in Calgary, and how are these characteristics related to new mothers' education, age, babies' age, and plans for returning to work?

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<sup>1</sup> In Quebec new mothers have up to 70 weeks of maternity leave (Zhang, 2007).

RQ2: What are the experiences of first time mothers in Calgary, particularly as they relate to their social networks?

I also reflect on two additional, methodological research questions:

RQ3: What does qualitative interview data add to quantitative social network data in the study of new mothers?

RQ4: How do we best elicit the social networks of people in the process of major life transitions? In particular, how do we elicit the social networks most salient to the experiences of first time mothers in Canada or other countries offering extended maternity leave?

Information on first time mothers' social networks and their early experiences of motherhood can be useful to health care providers and others interested in harnessing these networks to improve maternal wellbeing, for example by finding potential gaps in new mothers' networks and devising strategies to help fill them. This study was built on several theoretical and empirical foundations pertaining to first time motherhood, social support, and social networks, each of which is described below.

### ***1.1.1 A note on research design, methods and writing***

I conducted this exploratory study using a cross-sectional research design that incorporated both qualitative and quantitative methods within a multi-strategy approach (Bryman, 1988, 2001). One challenge of such an approach is writing in a style that acknowledges both qualitative and quantitative foundations. Because the underlying ethos of my approach was consistent with the qualitative tradition of letting findings from data collected early on in the study guide subsequent data collection and analysis, I have chosen to write primarily in the first person, using the less formal style commensurate with this tradition (Johnstone, 2004).

A second challenge, associated with the iterative nature of the qualitative ethos guiding my overall approach, is writing linearly about this iterative process. This difficulty is compounded by the fact that one of the iterations also resulted in an expansion and layering of research foci such that the substantive topic of interest (i.e., the social networks of first time mothers, RQ1 and RQ2) was explored in conjunction with

reflection on the methods used to elicit social network data; that is, I also explored the use of qualitative and quantitative approaches in a social network study and the use of different methods for generating the social networks of first time mothers (RQ3 and RQ4).

I have dealt with these issues as follows: In Chapter One I describe the background and theory pertaining to first time motherhood, social support, and social networks. The last section of this chapter describes the convoy model, which was selected as an analytic frame based on preliminary study findings. In the first part of Chapter Two I review literature on first time mothers, social support, and social networks, and in the second part I focus on literature that relates to social network analysis methods. In Chapter Three I provide details of my research design and methods with reference, where appropriate, to some of the changes in approach made in the early stages of the project. To capture the many events, discoveries, and decisions that contributed to the final research design, and the use of the convoy model as an analytic frame, I detail the full evolution of my approach in Section 3.6. In Chapter Four I describe and compare various aspects of the new mothers' social networks based on qualitative and quantitative data, and in Chapter Five I discuss the substantive findings of my study as well as the methods used to arrive at these results.

## **1.2 First time motherhood**

The process of becoming a mother starts before the baby is born and continues well beyond the baby's birth (Mercer, 2004; Rubin, 1967a). One theoretical lens through which this transition has been explored has been that of maternal role attainment (MRA), defined as "a process in which the mother achieves competence in the role and integrates the mothering behaviours into her established role set, so that she is comfortable with her identity as a mother" (Mercer, 1985, p. 198). Rubin's (1967) theory of maternal role attainment was based on observations of and unstructured interviews with mothers (first time and otherwise) beginning as early as the 12<sup>th</sup> week of pregnancy and continuing up to the first month postpartum. This theory describes a process involving five operations:

mimicry, role-play, fantasy, introjection-projection-rejection, and grief work.<sup>2</sup> These operations are often carried out in relation to some significant other or others; what Rubin termed “models and referents” (Rubin, 1967b). For example, models – often a woman’s own mother – provide a basis for mimicry, by which mothers-to-be adopt actions and expectations related to each phase of maternal role attainment (childbearing, childbirth, and childrearing). Pregnant women start wearing maternity clothes early on in the pregnancy, and often have expectations for their own labour and delivery experiences that are based on those of their own mothers. Mimicry is generally anticipatory, occurring at the early stages of each phase, and for first time mothers is primarily done in relation to external models.

The introjection-projection-rejection (I-P-R) operation is similar to mimicry but generally takes place later in the process of maternal role attainment. At this later stage, the mother-to-be or new mother now has her own experience to draw from, and so external models serve not simply as sources of behaviours or expectations to be taken on “seriously but slavishly” (Rubin, 1967a, p. 242), but now serve as examples with which to compare her own experience. As described by Rubin, I-P-R involves the mother-to-be or new mother starting with herself, then finding an external model experiencing a similar behaviour or event. A good “fit” between herself and the model serves to reinforce a particular behaviour or event, while an unsatisfactory fit results in the mother-to-be or new mother rejecting what she sees in the model. According to Rubin (1967a), “I-P-R [is] the sum and substance of the bulk of the apparently casual woman-talk. It include[s] clothing, cooking, walking, talking, childrearing, childbearing, and personal relationships. It [is] the substance and the essence, in detail, of what was involved in ...becoming or being a mother” (p. 243). Grief work involves letting go of former role identities that are not compatible with the assumption of the role of new mother.

Rubin (1967b) observed that the mother of the mother-to-be or new mother served as a model in the early stages of the childbearing, childbirth, and childrearing phases of

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<sup>2</sup> In later work Rubin does not use the term MRA, and replaces the terms “mimicry” and “role-play” with “replication”, and introjection-projection-rejection” with “dedifferentiation” (Mercer, 2004). Subsequent theoretical and empirical inquiries inspired by Rubin’s work, however, continued to employ the term MRA for a time (e.g., Mercer, 1985; Walker, Crain, & Thompson, 1986; Mercer and Ferketich, 1994).

the maternal role, but was soon replaced by peer models in later stages. First time mothers tended to use neighbours and acquaintances as peer models who provided “the reflected appraisals of what-I-am, who-I-will-be, and what-I-once-was of body-image, ideal-image, and self-image” (*Ibid.*, p. 343), but these relationships with similar others were “tentative”, and tended to dissolve once the experience of similarity passed (Rubin, 1967b). Although Rubin’s (1967a, 1967b) theory was developed several decades ago in the United States, it continues to inform research conducted with new parents (e.g., Holditch-Davis, Shandor-Miles, Burchinal, & Davis-Goldman, 2011).

More recent work to develop a theory of early motherhood describes categories and stages of “realizing”, “unready”, “drained”, “loss”, “aloneness”, and “working it out” through which a new mother progresses on her way to “becoming a mother” (Barclay, Everitt, Rogan, Schmied, & Wyllie, 1997; Rogan, Schmied, Barclay, Everitt, & Wyllie, 1997). The last category of “working it out” refers to the stage in which new mothers develop skills and gain confidence in being mothers (Barclay et al., 1997; Rogan et al., 1997). As with many of the stages described in MRA theory, role models are important at this stage of early motherhood. Barclay et al. (1997) described how in the process of “working it out”, new mothers observed other mothers to see what worked for them, compared and judged their own abilities relative to other mothers, and compared their own baby to other babies. Barclay et al. (1997) also described the “aloneness” or isolation experienced by new mothers, and contrasted this with a new mother’s sense of feeling supported. They described social support from various sources (e.g., partner, family, friends, other mothers, health care professionals) as a mediating factor in a woman’s experience of becoming a mother (whether that support is perceived as helpful or unhelpful).

Nelson’s (2009) Canadian study provides a more up-to-date – and, for this study, geographically relevant – lens through which to examine the “intrinsically social” (p. 15) process of becoming a mother and entering what she terms “the culture of motherhood”. As described by Nelson, the social character and social exigencies of new motherhood are evident in the rituals, rules, and relationships that new mothers must navigate during



their entry into a community of mothers, as well as in the support, information and advice that new mothers receive from other mothers.

The importance of role models and social support to becoming a mother highlights the salience of the social context within which this process takes place. It is this social context with which I am concerned, and in the next section I describe ways in which the social aspects of first time motherhood can be studied.

### **1.3 Social support, social networks, and first time motherhood**

The theories on motherhood described above emphasize the importance of a new mother's social context; this context is often described and analyzed in terms of social support or social network theories. The term "social support theory" is perhaps misleading, as it implies a unified approach to a clearly defined concept that can be consistently operationalized and measured. This is far from being true, and indeed it seems that the most consistent element in the social support literature is the reference to the lack of a clearly defined concept (e.g., Barrera, 1986; Hupcey, 1998; Hutchison, 1999; O'Reilly, 1988; Tardy, 1985). Regardless of the theoretical fuzziness, empirical evidence indicates that social support (however defined) is an important part of a new mother's experience (e.g., Cutrona and Troutman, 1986; Leahy-Warren, 2005; Oakley, 1992; Tarkka, 2003; Wandersman, Wandersman, & Khan, 1980). While often conflated, the terms "social support" and "social network" are not synonymous, although many social support studies use a network approach to studying social support (e.g., Walker, Wasserman, & Wellman, 1993; Wellman, 1981; see also Gottlieb, 1981; Hupcey, 1998; Marsden, 1990; O'Reilly, 1988). As indicated by Kaplan, Cassel, and Gore (1977), the presence of a social *network* is necessary but not sufficient for social *support*: rather, any given network "creat[es] an opportunity structure for meeting whatever supportive needs exist" (Kaplan et al., 1977, p. 54). Further discussion of the difference between "social support" and "social network" and reasons for treating them as distinct entities continues below. Given, however, the importance of the supportive function of a new mother's social network, I first briefly describe one way in which social support has been conceptualized in relation to the transition to motherhood, followed by the approach I

have taken with regard to social support in my study. I then discuss in more detail the social network perspective upon which much of my study is based.

### ***1.3.1 Social support and first time motherhood***

Although much empirical work has investigated how new mothers' social support and social networks relate to their early experiences (see Chapter Two), recent theoretical developments are lacking. Frameworks for how social networks interact with the parenting experience have been proposed, but these were developed to apply to both first time mothers and fathers in the American context (Cronenwett, 1985a) or to both parents at various stages of parenthood with child development as their ultimate theoretical goal or "endpoint" (Belsky, 1984; Cochran and Brassard, 1979). Although many of these frameworks are not entirely appropriate for my particular study, I did nonetheless draw from much of the same theory and literature on social support and social networks upon which these frameworks were based. The social support framework used in this study is one that has previously been used to study the social support of first time mothers (Leahy-Warren, 2005, 2007). Alongside this framework, the model proposed by Power and Parke (1984) provides a useful lens through which to consider the support experiences of first time mothers.

Power and Parke (1984) developed a "tentative" model of social support in which they described four types of support (relational, ideological, physical, and informational) from six types of agents (husband, relatives, friends, neighbours, work associates, and institutions) that they deemed to be important during the transition to motherhood. Relational supports are those types of support generally present in close emotional relationships, and consist of both emotional support (e.g., providing comfort) and recreational support (e.g., sharing leisure activities). According to Power and Parke, relational support is important throughout the transition to motherhood, but most important during the early postpartum phase (the first two months after baby's birth). Ideological support reflects the extent to which the ideological basis of the new mothers' role decisions (e.g., whether to return to the workforce) is consistent with the perspectives of other network members. This type of support is important during pregnancy and late

postpartum (three months to one year after baby's birth), but is most important in the late postpartum period. Physical support, important during late pregnancy and the entire postpartum period, comprises material elements such as financial assistance or help with tasks such as childcare. Informational support consists of information or advice related to the transition to motherhood, such as information on feeding the baby, and is considered important throughout the transition to motherhood, with particular salience during the early postpartum phase.

This model provides some useful orienting ideas for thinking about how social support figures into a new mother's experience: Different people may provide different types of support; the temporal aspect of a new mother's experience is important (i.e., not all types of support are equally important at all times during the transition to parenthood); and, related to the first point, support is not only provided by "close" network members but can come from outside of emotionally close relationships. Power and Parke's (1984) proposed model does not explicitly address support in the form of feedback from others on how a mother is performing; this leaves out an important supportive element for new mothers adapting to a demanding new role, given their frequent concerns about "doing it right" (Wilkins, 2006). Power and Parke referred to a new mother's social network, but they did not explicitly refer to network concepts characteristics such as size, composition, and density, although their description of ideological support is consistent with the notion of homophily (described below).

The social support framework used in this study is that put forth by House (described in Tardy, 1985) and used by Leahy-Warren (2005, 2007) in her study on first time mothers' social support and confidence in infant care. Within this framework, social support is divided into four categories: *informational* support (information specific to caring for the baby, such as information on feeding); *emotional* support (for example, encouragement, commiseration, listening); *instrumental* support (tangible support in the form of money, supplies, childcare, etc.); and, *appraisal* support (feedback, explicit or implicit, from others on performance as a mother). This framework was selected because not only does it recognize the specific kinds of support that are especially salient during the transition to motherhood, it is also consistent with a network approach where it is

important to acknowledge that different network members might provide different kinds of support (Cronenwett, 1984, 1985; Leahy-Warren, 2007; Power & Parke, 1984; Walker et al., 1993). While it does not explicitly address the “recreational” dimension of relational support described by Power and Parke (1984), this type of interaction was expected to be subsumed under emotional support and also reflected in network measures of frequency of contact (described below).

### ***1.3.2 Social network analysis and first time motherhood***

As described by Wellman (1981), “[m]any researchers have already taken steps to situate supportive ties within broader social networks by using research designs that gather information about ties defined initially by criteria *other than support*” (p. 183, emphasis in original). Similarly, Haines and Hurlbert (1992) made a distinction between social network structure and social support, describing social networks as “interpersonal environments that allocate resources differentially” (p. 254), and viewing social support as a conceptually and empirically distinct entity; that is, as one of the resources that might flow between individuals in a social network structure. While it is difficult, particularly when considering the situation of new mothers, to separate the idea of social “support” from social “network”, the question does arise as to how a social network is beneficial beyond strict functions of support: are there characteristics of a network that contribute to the maternal experience beyond the explicit provision of support? For example, does having a tightly interlocked social network contribute to wellbeing even if network members are not perceived as regularly providing support? A network approach allows for the exploration of the explicitly supportive – and unsupportive – aspects of ties within a new mother’s social network while also taking into account the way in which other characteristics of her social network contribute to her experience of first time motherhood. Emphasis on these “other characteristics” is what shifts the theoretical foundation for this study from a strictly social support approach to a social network perspective.

There are many approaches to studying how the social world shapes and interacts with individuals’ lives, experiences, choices, opportunities, resources, and health. Many

of these, such as social resource, social capital, social support and social exchange theories focus on how an individual's social relations, and the resources and opportunities flowing through them, are both constrained and enabled by an individual's particular type of social embeddedness (Fushe & Mützel, 2011; Marsden, 1990). The social identity perspective, a social psychological approach, focuses on how aspects of an individual's self-concept are derived from group membership and how individual emotions, attitudes and behaviours are influenced by identification with a particular group (Hogg & Reid, 2006; Hornsey, 2008). Cutting across these theories is the social network perspective, which "encompasses theories, models, and applications that are expressed in terms of relational concepts and processes" (Wasserman & Faust, 1994, p. 4). According to this perspective:

- actors and actions are interdependent;
- ties between actors are conduits for the flow of material and non-material resources;
- networks provide opportunities for and constraints on individual action; and,
- different types of structure (e.g., social, political) are conceptualized as lasting patterns of relations among actors (Wasserman & Faust, 1994).

Social network analysis (SNA) involves the study of patterns of social relations and how these patterns interact with phenomena such as social behaviour and the flow of resources between individuals (Hawe, Webster, & Shiell, 2004; Marsden, 1990; Wellman, 1982). As described further below, what constitutes a network "relation" or "tie" varies according to the broader context of the investigation such that even among the same set of individuals, several social network relations exist (arguably, an infinite number of relations exist). For example among a group of coworkers, the network depicting work-related ties will likely appear very different from the network showing friendship ties.

Wasserman and Faust (1994) present SNA as a broad research perspective distinct from method, as do others (e.g., Fuhse & Mützel, 2011; Wellman, 1982), but SNA has also been denied "theoretical status" by some who refer to it primarily as a method for

studying social relations (Boissevain, 1979; Knox, Savage, & Hardy, 2006; Scott, 1996). Social network analysis is undoubtedly heavily methods-infused, but the use of SNA as a method for investigating the social world is bound up with a particular perspective, or, as Wellman (1982) described it, a “broad intellectual approach” (p. 156) that emphasizes the interdependence of individuals – and the consequences of this interdependence – beyond formally defined social roles or structures, and in ways that may not always be intuitive or immediately apparent. For example in his well-known “strength of weak ties” paper Granovetter (1973) suggested a theoretical framework based on network theory and his own empirical work, within which the importance of weak ties for diffusion processes and community organizing could be considered, and which could be used to predict outcomes in other contexts. Social network analysis provides a way of framing our thinking about the social world and the function of different social relations as well as a way of measuring them more concretely.

#### 1.3.2.1 Social network analysis terminology

Like any field of study, SNA comes with a specific set of terms and definitions; I briefly describe those relevant to my study.

A *social network* consists of a set of actors and the ties among them that cut across pre-existing social categories and bounded groups (Wasserman & Faust, 1994; Wellman, 1982). The specific types of networks under investigation in my study were the “*egocentric*” or “*personal*” networks of first time mothers. These networks consist of all ties of a focal actor (“*ego*”) to other local network members (“*alters*”), plus the view that ego has of ties among his or her alters (Hawe et al., 2004; Marsden, 1990). These are distinct from “*whole*” or “*complete*” networks, which consist of relational ties among all members of a bounded population (Hawe et al., 2004; Wellman, 1981). Differences in the methods used to study these types of networks are described in Section 3.3.2.1.

*Network size* refers to the number of alters named by ego, and is considered a reasonable measure of social integration (Marsden, 1987). *Tie strength* is usually measured (singly or in combination) as the duration of relationship between ego and alter, their frequency of contact, or ego’s perception or feeling of closeness with alter

(Marsden, 1990). While relationships are the central focus in SNA, individual actor attributes also have a place. These attributes, such as sex, age, and educational status, are usually discussed in relation to *network composition*, which refers to the make-up of an individual's personal network in terms of different types of network members (e.g., percentage kin, percentage friends, percentage females; Wasserman & Faust, 1994).

*Network density* is a commonly used network measure (Marsden, 1990), which for whole networks refers to the number of actual connections between network members relative to the maximum number of possible connections in a network. The density of an individual's egocentric network is defined by the number of actual connections between the alters in his or her network relative to the number of possible connections between them; the focal person by definition is connected to all of the people in his or her personal network, and is not included in the calculation. In general, dense networks are associated with well-coordinated, readily mobilized aid (Wellman, 1981), increased emotional aid and companionship for men (Haines & Hurlbert, 1992), and in some situations with reduction in stress (Burt, 1984). Alternatively, loosely-knit networks have been associated with better access to new ideas or information (Granovetter, 1973; see also Fingerman, Bradford-Brown, & Blieszner, 2011). Previous studies, however, have demonstrated that dense networks are not always associated with increased support or increased satisfaction with support – in some cases the opposite holds true (Walker et al., 1993). Density also “measures the potential strength of normative pressures toward conformity by indicating the capacity of alters to collectively influence the respondent” (Marsden, 1987, p. 124).

The extent to which an individual's social network is comprised of similar others is called network *homophily*. The degree of homophily in a network can affect discussion and confiding patterns among network members (Marsden, 1988), how resources such as information and support flow within a network (McPherson, Smith-Lovin, & Cook, 2001; Walker et al., 1993), and psychological outcomes such as depression in the face of undesirable important life events (Lin, Woelfel, & Light, 1985). Sutor, Pillemer, and Keeton (1995) used the term “experiential similarity” to describe the circumstance of having experienced a similar status transition, such as becoming a caregiver to an elderly

parent or losing a job. They identified this particular type of network homophily as an important factor in patterning emotional support.

#### 1.3.2.2 Types of ties in egocentric networks

“The defining feature of a tie is that it establishes a linkage between a pair of actors” (Wasserman & Faust, 1994, p. 18). Types of linkages described by Wasserman and Faust include: transactions or transfer of material and non-material resources (e.g., lending or borrowing things, information exchange); association or affiliation (e.g., jointly attending a social event, or belonging to the same social club); behavioural interaction (talking together, sending messages); and, biological relationship (kinship). Others describe relations in terms of exchange, where a tie is defined as “an interdependence between two actors where the actions of each directly affects the outcomes (rewards or punishments) of the other” (McCallister & Fischer, 1978, p. 135; see also Bernard, Johnsen, Killworth, McCarty, Shelley, & Robinson, 1990; Milardo, 1989, 1992). Relations can also be defined by affective content; that is, “a subjective orientation, or feeling” (McCallister & Fischer, 1978, p. 136). These networks of “intimates” or “significant others” are characterized by relationships described in terms of importance, closeness, or significance (Bernard et al., 1990; Milardo, 1989, 1992). Milardo (1989) labelled exchange and affective networks jointly as “psychological networks”, which he distinguished from “interactive networks”, which are defined by episodic social interactions (e.g., all social episodes over a given period of time, including brief interactions with people such as neighbours and shopkeepers). “Global networks” have been used to describe the entire set of relations within which the other types of networks are embedded (Bernard et al., 1990; Milardo, 1992).

Although the exact nomenclature differs from author to author, two main categories of social network members that overlay the specific types of personal network relations described above are consistently differentiated. “Core” network members are those network members generally considered close or important to ego (e.g., family, close friends), who have the most influence on ego’s attitudes, behaviour, and wellbeing, and whose presence in the network tends to be relatively stable over time (McAllister &



Fischer, 1978; Hammer, 1983; Morgan, Neal, & Carder, 1996; Straits, 2000).

“Peripheral” network members are those network members perceived as having weaker ties to ego and whose network membership might be less stable over time, but who are still potential sources of social interaction, feedback, advice, and information (e.g., neighbours, coworkers, acquaintances; Antonucci, Akiyama, & Takahashi, 2004; Brewer & Webster, 1999; Fingerman et al., 2011; Fischer, 1982b; Hammer, 1983; McCallister & Fischer, 1978; Milardo, 1989; Morgan et al., 1996; van der Poel, 1993). The distinction between core and peripheral network members can be said to roughly parallel the distinction between affective and exchange relations (psychological networks) and those relations based primarily on more superficial interactions (interactive networks), respectively (Milardo, 1989), but this may not always be the case. For example, there will be some overlap between these networks in cases where core network members are seen daily – such as when ego works with a close friend.

#### 1.3.2.3 Boundary specification in egocentric network analysis: The name generator

The preceding section highlights the different types of relations that comprise an individual’s social environment and implies a key challenge for social network researchers: Personal social networks cannot be described in general, all-encompassing terms. As Butts (2008) asserted, “it is highly misleading (at best) to speak of ‘the’ social network in which a person or other entity resides” (p. 36). Individuals participate in a variety of (often overlapping) social networks, and the choice of what type of relationship to study (e.g., friendship, support, work) is both a theoretical question (what relations are of importance and why?) and a question of method (how should a network be bounded?) (Laumann, Marsden & Prensky, 1983; Marsden, 1990). Egocentric network boundary specification is accomplished by using one or more *name generators* to elicit a set of alters for each ego surveyed by asking ego questions about whom he or she is connected to in a specific way (Hawe et al., 2004). *Name interpreters* are then used to elicit information about characteristics of each alter, his or her relationship to ego, and his or her relationships to other alters (Hawe et al., 2004). Different name generators will tap different aspects of individuals’ egocentric networks, and the types of ties to be studied

(e.g., affective, exchange, or interactive) are bound up in the choice of name generator used to elicit network members with whom the focal person shares these ties. Asking the “right” name generator question for an egocentric study is therefore an extremely important - if not the most important - aspect of any egocentric network study. The “wrong” name generator can result in important and relevant names being excluded, thus distorting the picture of the network created and bringing any associated results into question (Bernard et al., 1990; Campbell & Lee, 1991; Marsden, 1987, 1990; McCallister & Fisher, 1978; van der Poel, 1993). For example, name generators based on criteria of “closeness” or “importance” are likely to elicit “core” network members, but may not capture those ties considered peripheral. Conversely, name generators based on the criteria of daily interaction may successfully capture peripheral ties, but may not elicit core affective ties with network members not seen frequently (Milardo, 1992). To ensure that the most germane network is being explored it is important to specify network boundaries correctly by asking the most relevant name generator question(s) (Marsden, 1990). This issue is discussed further in Chapter Two.

#### 1.3.2.4 Quantitative and qualitative methods in social network analysis

Social network analysis is usually described as a quantitative method in which social network data is elicited through structured social network surveys (Fuhse & Mützel, 2011; Hawe et al., 2004). Researchers have, however, used qualitative interview data to generate and describe social networks (e.g., Bidart & Lavenue, 2005; Degenne & Lebeaux, 2005), or to supplement structured social network survey data (e.g., Bellotti, 2008; Crossley, 2010). The particular approach used depends on the needs and inclinations of the researcher. The use of combined qualitative and quantitative methods in social network analysis is discussed in Chapter Two.

#### 1.3.2.5 Why use SNA to study the experiences of first time mothers?

As evidenced by the extensive research in this area, it is undeniable that social support plays a part in how a first time mother experiences her new role. It is possible, however, that other exchanges, interactions, or network characteristics that are not

directly related to or perceived as social support – or that are in fact experienced as being unsupportive – are important to a new mother’s experience (Cronenwett, 1984; Richardson & Kagan, 1979; Walker et al., 1993; Wellman, 1981). For example just how are new mothers’ networks composed in terms of, for example, family, friends, other new mothers, and health care professionals? Are these network members connected to one another? Are affective and exchange relations of primary importance? To what extent do more superficial “interactive” networks (Milardo, 1989) appear? An advantage of using a social network approach instead of a social support approach to study the social aspects of new mothers’ experiences is that in addition to mapping social support, SNA can be used to identify and gain insight into the patterning of other aspects of a first time mother’s early motherhood experiences; further empirical work or additional theories might then be used to deepen understanding of how or why these network characteristics are important. For example, MRA theory might be used to link network properties such as homophily to new mothers’ experiences by discussing them within the context of models and refractors (Rubin, 1967b); the I-P-R process might look different for mothers with different types of refractors (e.g., relatives vs. friends, other new mothers vs. experienced mothers) in their networks.

Social network analysis, of course, can also be used to learn more about how new mothers’ social networks provide (or do not provide) support. Although different *types* of network members are often specified in studies that treat the relationship between social support and motherhood (e.g., Leahy-Warren, 2005, 2007), what is often presented is still what Burt (1984) refers to as “summary data” – data that “describe neither respondent relations with specific people, nor relations between people in contact with the respondent” (p. 301). Having a new mother name individual network members rather than provide aggregate information may yield information or patterns of social support that might otherwise not emerge and of which she is not consciously aware, and which may in fact be counterintuitive or unexpected (Granovetter, 1973).

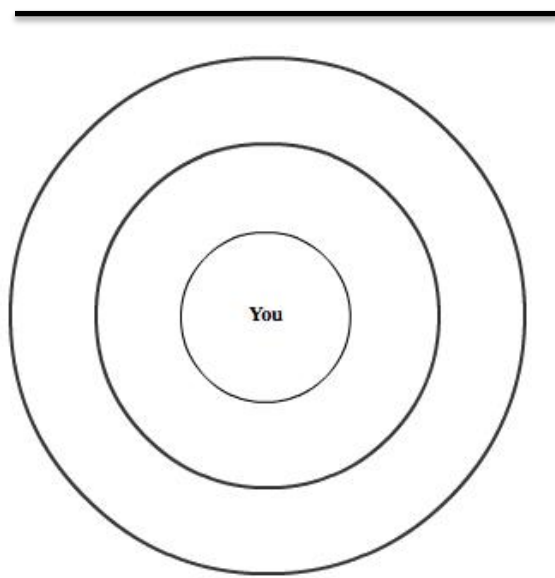
#### **1.4 Social support and social networks across a life transition: The convoy model**

To unite the different perspectives described in the preceding sections under one theoretical umbrella, it is helpful to consider the experience of first time motherhood within a framework that explicitly acknowledges the changes that occur in people's relationships when they are undergoing major life transitions. The "convoy model", as developed by Kahn and Antonucci (1980, cited in Levitt, 2005), is rooted in attachment theory but draws on the life course perspective to situate an individual's social relations within the changes that occur across the life span (Antonucci et al., 2004; Levitt, 2005). Although social relations are central, personal characteristics (e.g., age, gender, education) and situational characteristics (e.g., the groups to which an individual belongs – including family – and the expectations associated with his or her role in a group) also form part of an individual's convoy. These characteristics change across the life span, and help shape the social relations in the convoy (Antonucci, Birditt, & Ajrouch, 2011).

The convoy model situates the individual within a hierarchical set of social relations that are defined in terms of importance and closeness, and that may change over time. The term "convoy" was employed by Kahn and Antonucci to emphasize both the changeability of a person's relations as well as their protective function: "The convoy, as the term implies, moves with the individual through time, circumstances, and events either helping or hindering the individual's ability to cope with life's challenges" (Antonucci et al., 2004, p. 354). The hierarchy of relations starts with central close attachment relationships – those relationships which provide an individual a secure base from which to explore and experience the world (e.g., parents, spouse) – and moves outward toward relationships with people who are less close (e.g., other relatives, friends) but who still provide support to the individual in dealing with life's challenges (Antonucci et al., 2004). Figure 1.1 shows the concentric circles used to visually describe the convoy model concept.

This diagram was proposed by Antonucci (1986) as an empirical tool for mapping individuals' social support networks. At the centre of the diagram, the label "you" represents the individual. Using this technique involves first asking individuals to look at the diagram and telling them that the circles should be considered to include "people who

are important in your life right now, but who are not necessarily equally close” (Antonucci, 1986, p. 10). They are then asked to assign to the innermost circle “those people to whom you feel so close that it is hard to imagine life without them” (*Ibid.*). To the middle circle are assigned “people to whom you may not feel quite that close but who are still important to you” (*Ibid.*, p. 11), and to the outer circle, “people whom you haven’t already mentioned but who are close enough and important enough in your life that they should be placed in your personal network” (*Ibid.*).



**Figure 1.1 Diagram for mapping a social support network (Antonucci, 1986).**

A key element of the convoy model and its application is the assumption that the close, important relations contained within the convoy (even at the periphery) are also characterized by support transactions (Antonucci, 1986; Antonucci et al., 2004; Haines & Henderson, 2002). That is, there is no separation of network characteristics and support provision described in preceding sections. Additionally, because of the

intimacy constraint imposed by the repeated use of the terms “important” and “close”, weaker network ties that provide

only certain types of support (e.g., companionship or instrumental aid) are not well represented by this model (Haines & Henderson, 2002). Despite this, the convoy model and its associated hierarchical mapping technique make it an attractive analytic lens through which to explore and compare network relations obtained using other network eliciting techniques. The use of the term “convoy” captures the idea that network relations are not static and can change across time and situation (Levitt, 2005). Despite the relative stability in convoy membership predicted by the model (given its core composition of close, supportive relationships), changing circumstances throughout the life cycle will likely bring about changes in convoy membership, particularly within the

periphery of “less, but-still-close” relationships (Antonucci et al., 2004; Antonucci et al., 2011; Levitt, 2005). Consideration of how network relations change across a life transition, and how particular situational characteristics – i.e., context – shape these relations is important when studying the social networks of first time Canadian mothers in their first year of motherhood, during which many of these mothers are undergoing a major life transition while inhabiting a specific situation and time: the year of maternity leave.

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

### **2.1 Social support, social networks and motherhood**

As described in Chapter One, it is difficult when treating the social networks of first time mothers to completely separate the concept of a social network from that of social support. In what follows I first provide a brief overview of some of the literature that describes the social support and social networks of parents of one or more young children and how social support and networks relate to various maternal outcomes. I then narrow my focus to social support and social network literature pertaining specifically to first time mothers during the first year of their babies' lives.

Note that most of the articles selected for this review are those whose parent samples most closely reflect most of my study participants: e.g., adult, married, educated. I also focused the review on parents of babies who reflected those of the mothers in my study: singleton babies with no major health issues.

#### ***2.1.1 Social support, social networks, and parenthood***

The importance of social support to an individual's physical and psychological health and wellbeing, especially under stressful conditions, has long been established (Cassel, 1975; Cobb, 1976; Cohen & McKay, 1984; Kaplan et al., 1977). The importance of social support during a stressful life transition such as new parenthood was highlighted in 1972 by Nuckolls, Cassel and Kaplan, who found that when experiencing high life change, first time mothers with high psychosocial assets ("any psychological or social factors which contribute to a woman's ability to adapt to her first pregnancy" [p. 433]) were less likely to experience pregnancy complications than those with low psychosocial assets. Interest in how social support from both lay and professional sources influences various physical and psychological aspects of pregnancy, childbirth, and motherhood for mothers in different social and economic situations is very evident in the literature (e.g., Canuso, 2003; Crnic, Greenberg, Ragozin, Robinson, & Basham, 1983; Navaie-Waliser, Martin, Tessaro, Campbell, & Cross, 2000; Oakley, 1985; Oakley, 1988; Oakley, 1992; Surkan, Peterson, Hughes, & Gottlieb, 2006; Zachariah, 1994). Social support has been

related to a variety of outcomes: birth weight; neonatal health status; psychosocial outcomes (e.g., anxiety, depression, problems in mother-baby relationship) (Oakley, 1985; Oakley, 1988; Surkan et al., 2006); satisfaction with parenting; parenting behaviour (e.g., gratification from interaction, responsiveness, and affective tone); infant responsiveness (Crnic et al., 1983); security of mother-infant attachment (Crockenberg, 1981); and, postpartum depressive symptoms (Cutrona, 1984; Cutrona & Troutman, 1986). In addition to informal support from, for example, friends, family, and neighbours, pregnant women and new mothers benefit from the support provided by professionals and organized mothers' groups and programs (Börjesson, Paperin, & Lindell, 2004; Canuso, 2003; Marshall, Godfrey, & Renfrew, 2007; Navaie-Waliser et al., 2000; Zachariah, 1994), and websites (Herman, Mock, Blackwell, & Hulse, 2005).

Parents' social support and social context have been explored from a network perspective for some time. Abernethy (1973) found that dense (or "tight") networks were significantly and positively associated with mothers' sense of competence in the mothering role, controlling for socioeconomic, demographic, and life stage (e.g., marital history and age of child(ren)). Belsky and Rovine (1984) explored changes in parents' social networks during the transition to parenthood (first time and otherwise) using a longitudinal social network approach, from which they determined that contact with extended family increased with the birth of a child, as did contact with other network members who were also parents of young children (although they did not discuss details of whether or how network composition changed). Using network concepts and measures to varying extents, other researchers have explicitly incorporated a social network approach into studies of maternal and child outcomes, behaviours, and attitudes such as the experience of postpartum depression (PPD) (O'Hara, Rehm, & Campbell, 1983; Surkan et al., 2006), maternal sensitivity (Zarling, Hirsch, & Landry, 1988), warmth and intrusiveness of maternal behaviour (Donahue-Jennings, Stagg, & Connors, 1991), security of child attachment (Crittenden, 1985; Levitt, Weber, & Clark, 1986), infant feeding attitudes and knowledge (Dungy, McInnes, Tappin, Wallis, & Oprea, 2008), and maternal support and wellbeing (Levitt et al., 1986). In these studies, mothers' networks were largely situated within the context of social support, except in the study



conducted by Dungy et al. (2008), which treated network members relative to how their knowledge and attitudes regarding infant feeding corresponded with those of the mothers studied, and not in terms of support provision to mothers. Donahue-Jennings et al. (1991) included social support as one among several measures of network-related variables, but also examined direct relationships between network characteristics (e.g., size and density) and maternal behaviour.

### ***2.1.2 Social support, social networks, and first time mothers***

The above literature collectively examines the social world of mothers and fathers of more than one child, often beyond the first year of parenthood. Of particular relevance to my study is previous research on the social networks and related social support experiences of first time mothers during the first year of their babies' lives: specifically, what types of support are being provided during that first year? by whom? to what effect?

Narrowing the focus to first time mothers does not drastically change patterns in the ways in which support plays into mothers' experiences. Decreased postpartum depressive symptoms in first time mothers have been associated with greater social support in the form of: "relationships where the person can count on others for assistance under any circumstance" (Cutrona, 1984, p. 379); "feeling a part of a group of friends with whom one shares common concerns and recreational activities" (*Ibid.*, p. 387); informational support; and, availability of people who could provide emotional support (Séguin, Potvin, St-Denis, & Loisele, 1999). Wandersman et al. (1980), found that social support in the form of marital cohesion and network support ("the perception of network members as available, willing, and able to help" [p. 334]) were significantly associated with maternal wellbeing (fullness of life, energy, relaxation, and positive mood) and positive marital interaction. Leahy-Warren (2005, 2007) reported that appraisal and informational support were positively and significantly related to confidence in infant care.

Common to the social support studies mentioned immediately above and to many of those in the introductory section is a relatively fine-grained approach to the definition and measurement of social support. Although no two authors use precisely the same

definition and dimensions, there appears to be consensus around the idea that support is a multidimensional concept, and as such must be measured in a way that captures this. For example, Cutrona's (1984) study incorporated six relational provisions: attachment, social integration, opportunity for nurturance, reassurance of worth, reliable alliance, and guidance. Séguin et al. (1999) defined five functions of social support: instrumental, emotional, informational, positive feedback, and companionship. Although these researchers drew distinctions between *types* of support, the *sources* of potential support were aggregated. Wandersman et al. (1980) explored two types of support (instrumental and emotional) from three different sources (parenting group, spouse, and the social network). The latter source (i.e., social network) was operationalized as "the perception of network members as available, willing, and able to help" (p. 334). In their study, Wandersman et al. attempted to relate each type of support to different aspects of parental adjustment. Their finding that only certain types of support were significantly associated with parental adjustment emphasized the multidimensional nature of support and the sources from which it originated, although the sources of support remained aggregated by group (i.e., "network" support was not broken down into categories of family, friends, neighbours, etc.).

As alluded to in Chapter One, a network approach can be used to more finely granularize the sources of different types of support. This kind of network orientation was distinctly visible in Leahy-Warren's (2005, 2007) investigation into the relationship between first time mothers' social support and their maternal confidence at six weeks postpartum, but she stopped short of a true social network study. She referred to a new mother's "social network" as part of her theoretical framework and reported quantitative information on the four types of support (informational, emotional, instrumental, and appraisal) received from different types of network members in relation to infant care tasks, but did not provide explicit details on the size and composition of the respondents' social networks, on the attributes of network members, the strength of ties between the new mother and her network members, or the links among alters. Name generator type questions appeared to be embedded, along with role relationship information, in items asking about the four types of support, for example: "My husband/partner has taken

turns with me in bathing my baby' (instrumental)" (2005, p. 482); or "'I received positive feedback from professionals about the care I gave my baby' (appraisal)" (*Ibid.*).

According to the results presented, support providers included husband/partner, mother, father, mother-in-law, father-in-law, sister(s), brother(s), friend(s), neighbour(s), public health nurse(s), local doctor, and midwife(s) (Leahy-Warren, 2005, 2007) and others (e.g., aunts, grandmother) (Leahy-Warren, 2007). Information about these network members was limited to the types of support they provided (e.g., 77% of the mothers in the study reported receiving informational support from their own mothers). Support was provided by a variety of informal (e.g., family, friends) and formal (e.g., nurse) support persons. Instrumental, emotional, and appraisal support were most often received from husbands/partners, followed by respondents' own mothers, friends (emotional and appraisal support) and sisters (instrumental support). Informational support was most often (and equally) received from respondents' own mothers and public health nurses, followed by friends and midwives. Leahy-Warren (2007) also reported gaps in support received; for example, many first time mothers indicated that they would have liked more information on infant settling, sleeping, and feeding from health care professionals.

### ***2.1.3 Social networks and first time motherhood***

A fine-grained, social network approach to studying first time mothers' social support and networks during the first year of motherhood has been employed by several researchers to different ends. Researchers who have incorporated a social network perspective and used SNA techniques have provided descriptive information on new mothers' social networks at one point in time (Richardson & Kagan, 1979), or as they change over the transition to motherhood (Bost, Cox, Burchinal, & Payne, 2002; Cronenwett, 1984, 1985a, 1985b; Gameiro, Canavarro, Moura-Ramos, Boivin, & Soares, 2010; Gameiro, Moura-Ramos, Canavarro, & Soares, 2011; Goldstein, Diener, & Mangelsdorf, 1996; Tarkka, 2003; Tarkka, Paunonen, & Laippala, 1999), but have also correlated network characteristics – including and sometimes limited to support provision – with various outcomes (Bost et al., 2002; Cronenwett, 1985a; Goldstein et al., 1996; Richardson & Kagan, 1979; Tarkka, 2003; Tarkka et al., 1999).

Congruent with the network studies described in Section 2.1.1, and despite explicit referral to network concepts and techniques, much of the work referred to in this section essentially used a network approach to describe how social support was distributed among the people in a first time mother's life, and to what effect vis à vis various outcomes. Network characteristics such as size, composition, and frequency of contact were not always reported or directly related to outcomes. Notable exceptions are Cronenwett (1984, 1985a, 1985b) and Richardson and Kagan (1979). Cronenwett (1984, 1985a, 1985b) explicitly and deliberately separated the concepts of social network and social support in her longitudinal exploration into how social network characteristics and social support were related to each other and to other psychological outcomes across the transition to parenthood.<sup>3</sup> Richardson and Kagan (1979) provided information about how network characteristics such as size and density related to various psychological outcomes separate from support, although they often referred to networks as "social support systems" (p. 2) and to network characteristics as "social support variables" (p. 5).

#### 2.1.3.1 Samples and methods

Several of the studies described here (Bost et al., 2002; Cronenwett, 1984, 1985a, 1985b; Gameiro et al., 2010; Gameiro et al., 2011; Richardson & Kagan, 1979) included both first time mothers and fathers, but in these cases data was collected from mothers and fathers individually, and couples were instructed not to discuss their responses with each other prior to submitting their completed questionnaire. Except where otherwise noted, only the results pertaining to new mothers' networks are discussed here. Gameiro et al. (2010) compared the networks of 28 mothers who conceived spontaneously to 24

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<sup>3</sup> Cronenwett measured social network characteristics during the third trimester of pregnancy (Phase I) and related these to social support at that time and to social support and other psychological outcomes at six weeks postpartum (Phase II) (Cronenwett, 1984, 1985a). Perceived changes in need for support were measured at five months postpartum (Phase III). Social network characteristics were measured again at eight months postpartum (Phase IV) (Cronenwett, 1985b) and these are the characteristics referred to in this review. Cronenwett (1985b) did not report all social network characteristics at eight months postpartum; she instead focused on significant changes in network composition that had occurred since Phase I.

mothers who used assisted reproductive technologies. The results described here pertain to the 28 spontaneously conceiving mothers.<sup>4</sup>

Overall, study participants tended to be married/partnered, over 27 years of age, educated, and of middle class or higher. Sample sizes ranged from 28 (Gameiro et al., 2010) to 248 (Tarkka, 2003). In the majority of the studies (Cronenwett, 1984, 1985a, 1985b; Gameiro et al., 2010; Goldstein et al 1996; Richardson & Kagan, 1979; Tarkka, 2003; Tarkka et al., 1999) social network data was collected via self-administered structured questionnaires, and the data was analyzed quantitatively. Bost et al. (2002) administered structured questionnaires in person. Richardson and Kagan conducted qualitative pilot interviews, but the subsequent data collection and analysis was largely quantitatively oriented.

#### 2.1.3.2 Network characteristics and outcomes

Across studies, new mothers' average network size ranged from six to just over ten network members.<sup>5</sup> These social networks were in most cases dominated by family, with friends comprising the second largest group (Bost et al., 2002; Cronenwett, 1984, 1985b; Gameiro et al., 2010; Tarkka, 2003; Tarkka et al., 1999)<sup>6</sup>, although other network members such as coworkers, neighbours, and clergy were also reported (Bost et al., 2002; Cronenwett, 1984, 1985b; Richardson & Kagan, 1979). The networks of first time mothers described by Richardson & Kagan (1979) were dominated by friends and other parents with small children, followed by family members.

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<sup>4</sup> Note that what is not addressed in this section are the specific name generators used to elicit the networks studied by these researchers; this topic is treated in Section 2.2.3.

<sup>5</sup> Gameiro et al. (2010) use the hierarchical mapping technique (Antonucci, 1986) as a name generator, and report network size based only on family and friends in the inner two circles of the diagram.

<sup>6</sup> Cronenwett (1984) reports only prenatal network composition, but indicates that this composition did not change substantially postpartum (Cronenwett, 1985b); Tarkka et al. (1999) and Tarkka (2003) report network size and then discuss network composition only in terms of network members who are considered "important support persons" (Tarkka, 2003, p. 236) – the assumption made here is that these reflect overall network composition to an extent, given that the name generator used (see Table 2.1) was likely to elicit network members who provide support.

Larger networks were associated with increased maternal sensitivity (Goldstein et al., 1996), better adjustment to motherhood (Bost et al., 2002), and higher network satisfaction and higher general and role-related psychological functioning (Richardson & Kagan, 1979). Additionally, Richardson and Kagan (1979) found that the number of friends in a new mother's network was positively related to positive affect, marital performance, marital satisfaction, and parent performance; the number of people in the work associates category was positively associated with marital and parental performance, and the number of other parents with small children was positively associated with marital performance. Network density was positively associated with network satisfaction (Richardson & Kagan, 1979).

#### 2.1.3.3 Network support and outcomes

The supportive element of new mothers' social networks was evident (and often dominant) in the studies reviewed, and was treated in different ways: how different types of support were distributed among network members, how support provision from network members changed over the transition to motherhood, or how different types of support were related to various outcomes.

Across studies, different combinations of informational, emotional, instrumental, appraisal, and general socializing support were studied, although not one study included all types of support. When details of which types of network members provided specific types of support were reported, family members (including spouses) were named most often as support providers, followed by friends (Cronenwett, 1984; Gameiro et al., 2011; Tarkka, 2003; Tarkka et al., 1999).<sup>7</sup> Where spouses were considered separately from other family members they were listed as the most important support providers (Richardson & Kagan, 1979; Tarkka, 2003; Tarkka et al., 1999), although spousal relationships were also a source of stress (Cronenwett, 1985b; Richardson & Kagan, 1979). The friend-dominated networks of the new mothers in Richardson and Kagan's

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<sup>7</sup> The sources of support by role relationship reported by Cronenwett (1984) include data from husbands.

study provided more support in the form of socializing experiences than emotional support or useful advice or information.

At five months postpartum Cronenwett (1985b) reported a significant increase in the amount of informational support received from all network members since the birth of their babies, with friends with children, spouse, mother, relatives of own age, and health professionals perceived as providing increased overall support. Gameiro et al. (2010) noted a perceived increase in emotional and instrumental support from parents and siblings across the transition to motherhood, and a perceived decrease in emotional support from in-laws and other relatives.

A greater variety of prenatal or postpartum support from a larger number of sources was associated with greater maternal sensitivity (Goldstein et al., 1996), increased network satisfaction, and better psychological outcomes (Richardson & Kagan, 1979) postpartum. At three months postpartum, affirmation (e.g., support for decision-making) from network members, as well as aid (e.g., instrumental help), affirmation, and affect (e.g., feeling liked or loved) from public health nurses were positively related to successful breastfeeding (Tarkka et al., 1999). At eight months postpartum, aid, affirmation and affect support from all support persons was positively correlated with maternal competence, while maternal competence was weakly positively correlated with affect and affirmation support received from public health nurses (Tarkka, 2003). Bost et al. (2002) reported that lower family and spousal network support reciprocity and satisfaction was associated with higher levels of depression. Cronenwett (1985a) reported that greater access to emotional support prenatally was associated with greater confidence in parenting and satisfaction with parenthood and infant care postnatally, while less perceived access to instrumental support prenatally was associated with greater confidence in infant care postpartum. Perceived instrumental support from parents and siblings was found to be positively associated with maternal investment (Gameiro et al., 2011).

*Summary.* Most of the social networks of first time mothers in previous studies were composed primarily of kin, with larger networks generally associated with more positive maternal outcomes such as maternal sensitivity, adjustment to motherhood, and

parental performance. The support provided by network members included informational, emotional, instrumental, appraisal, and general socializing support. Family members were most often named as support providers, with spouses often listed as the most important support providers. In general, social support was positively associated with maternal outcomes such as maternal sensitivity, successful breastfeeding, maternal competence, and parenting satisfaction, while it was negatively associated with depression. Supportive relationships with network members were important for many aspects of new mothers' experiences. In the next section I describe some of the changes that take place in these relationships across the transition to motherhood.

#### 2.1.3.4 Changes in social network relations

Changes in social network relations, as reflected in changes in network characteristics such as size, composition, and tie strength (i.e., frequency of contact and perceived closeness) can be catalyzed by the transition to motherhood. According to Richardson and Kagan (1979), first time mothers' relationships with some "old friends" (particularly those with children) grew closer after baby's birth, but mothers also reported a "gradual and non-descriptive alienation from old ties" (p. 6) after the birth of their babies.<sup>8</sup> This change in the quality of "pre-motherhood" friendship ties was echoed in Cronenwett's (1985b) finding that relationships with friends who did not have children were increased sources of stress after baby's birth and that the percentage of friends with preschooler children increased significantly after their babies were born.

Observed changes in familial network composition and frequency of contact varied slightly across studies. Cronenwett (1985b) did not observe any significant changes in the percentage of family members in new mothers' networks, nor in the frequency of contact with family members. Gameiro et al. (2010) found that the total number of family members in the network remained relatively constant over the

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<sup>8</sup>Richardson and Kagan (1979) also coded their interview data for "presence of a new mother network, expressed need to meet other new mothers, and knowledge of resources for making such contacts" (p. 4). They did not, however, present that data in their paper and a search of the literature did not reveal any further reports from this study.



transition to motherhood, but that compared to before the baby was born, more immediate family members (parents and siblings) were considered “so close that [the new mother] could not imagine life without them” (p. 178), while the number of in-laws and other relatives considered that close decreased. Perhaps reflecting a similar shift in the number of family members considered “close” (the criteria used to define new mothers’ social networks – see Table 2.1), Bost et al. (2002) found that the average number of family members in new mothers’ social networks decreased in the first few months postpartum, but remained relatively stable in subsequent months; average frequency of contact with family members increased over first year of motherhood.

The number of friends in a new mother’s network remained relatively stable over the transition to parenthood (Bost et al., 2002; Cronenwett, 1985b; Gameiro et al., 2010). Bost et al. (2002) and Cronenwett (1985b) also observed an increase in the frequency of contact with friends. What is not clear from the reported results, however, is if this consistency in the number of friendship ties is because all “pre-baby” friendship ties persisted postpartum, or because some of those ties were replaced by friends who were not previously considered close or important, or by friends newly met. Cronenwett’s (1985b) results suggest that at least to some extent, the constant number of friendship network ties might be in part a result of a certain amount of turnover: The increase in percentage of friends with preschoolers and increased contact with friends overall reported by the new mothers in her study was accompanied by decreased frequency of contact with coworker friends.<sup>9</sup>

*Summary.* Overall, results from the research described in the foregoing sections indicate that first time mothers’ social networks were largely composed of family and friends, from whom they received a broad range of support. Types of support provided varied by provider, and different types of support differentially influenced maternal outcomes. Networks were composed mostly of family (with the exception of Richardson

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<sup>9</sup> Compared to the prenatal network, the overall percentage of family members did not change significantly, nor did the average network size, indicating that the postpartum changes in relative friend composition occurred as a result of changes in friendship ties (categorized as neighbour, coworker, or “other friend”).

and Kagan's (1979) study sample). As discussed in Section 2.2.3, this is possibly a result of the name generators used in each of the studies, which may have been more likely to generate "core" networks. Overall network size did not appear to change dramatically for new mothers after the birth of their babies, although new mothers did describe changes in some of their relationships. Changing relationships with childless friends and those with children (Cronenwett, 1985b; Richardson & Kagan, 1979) suggest that a closer examination of friendship ties is warranted to explore whether these changing relationships occur within existing friendship ties, or whether they involve the dissolution of old friendships and the forging of new ones, and in particular whether these processes occur along the lines of parental status. This type of exploration may require approaches to network elicitation that attempt to go beyond close family and friend ties to include more peripheral relationships. The remainder of this chapter is devoted to a discussion of methods for eliciting and studying egocentric social networks.

## **2.2 Methods in social network analysis**

As discussed in Chapter One and alluded to in the previous section, of prime importance in any egocentric network study is eliciting names from study participants such that the social network most relevant to the research question(s) under investigation is generated. Unsurprisingly, this has spawned a great deal of research into and debate over how to best elicit the network of interest. I first provide a brief overview of some of the common approaches to egocentric network generation along with some key issues. This is followed by a discussion of the name generator used in my study within the context of its use by other researchers and debates over the types of networks it "dredges up" (Bernard, Shelley, & Killworth, 1987). I then briefly discuss some aspects of social network change to be considered when studying the networks of people undergoing life transitions, followed by a review of the name generators employed in the studies of new mothers' networks described in Section 2.1.3. Lastly, I discuss the use of combined methods in social network studies.

### ***2.2.1 Techniques and issues in egocentric network elicitation***

General issues related to eliciting egocentric networks include respondent burden, issues of forgetting, how to elicit network ties of interest (e.g., strong or weak ties), and respondent understanding and interpretation of the terms used in name generators.

#### **2.2.1.1 Respondent Burden**

With unlimited resources and infinite participant patience it would be possible to ask a large number of name generator questions and corresponding name interpreter questions to obtain very detailed network data, but in reality choosing a name generator for a given study involves a balance between study goals and practical constraints (Hammer, 1984; McCallister & Fischer, 1978; Milardo, 1989). Eliciting larger networks takes longer, and requires more effort on the part of the respondent in terms of summoning up a great deal of information; respondents may become fatigued or uncooperative (McPherson, Smith-Lovin & Brashears, 2006; van Tilburg, 1998a), making it necessary to balance the number of ties elicited with the amount of information collected about each tie. Additionally, respondents may not know as much about the weaker ties that are likely to emerge as the network list gets longer (Kogovšek & Ferligoj, 2005). It is therefore essential to balance real constraints of time and respondent burden with the level of detail required in the network data.

#### **2.2.1.2 Strong vs. weak network ties**

As described in Chapter One, the criteria upon which name generators are based will shape which types of network members are most likely to be named. Networks of “significant others” elicited by name generators using criteria of importance, closeness, or significance, and “exchange networks” based on criteria of specific rewarding or unrewarding exchanges (e.g., confiding, personal favours) have been found to be different from, and overlap minimally with, networks elicited by methods that use criteria related primarily to social interactions (e.g., listing all instances of social contact, no matter how minor, over a 24-hour period; Bernard et al., 1990; Milardo, 1989, 1992) or

instrumentality (e.g., accomplishing a specific task; Bernard et al., 1987). Networks based on social interaction (interactive networks) or instrumentality are more likely to have a higher proportion of weaker ties (e.g., acquaintances) than significant other or exchange networks (Bernard et al., 1987; Milardo, 1989, 1992).

### 2.2.1.3 Forgetting

Bound up with the challenge of asking the right question(s) to elicit relevant networks is ensuring that study participants recall or recognize network members accurately. “Forgetting” in network elicitation describes the tendency for respondents to not list some network members who, based on given name generator criteria, should be in that individual’s network and who are often recalled upon further prompting or with the use of memory aids such as a list of group members (e.g., friends from a church group; Feld & Carter, 2002; Sudman, 1985). Another issue is that some people might exaggerate the number of people in their network to appear more “popular” (Feld & Carter, 2002; McCallister & Fischer, 1978). Forgotten (and exaggerated) network ties obviously impinge on the accuracy of network size data, but they can also distort other network level characteristics or measures such as density (Brewer, 2000; Feld & Carter, 2002), and may give the mistaken appearance of unstable network ties in longitudinal studies (Marsden, 1990).

Techniques for obtaining information about individuals’ social networks include:

- interaction diaries: having individuals keep diaries detailing recent social interactions; or, asking individuals about their interactions over the past 24 hours in several network interviews conducted over a given period of time (e.g., Gurevitch, 1961, cited in Sudman, 1985; Milardo, 1989);
- recognition: asking individuals to look at a list of names (for example of coworkers or church members) and indicate with whom they have a given relationship (e.g., Brewer & Webster, 1999; Sudman, 1985, 1988); and,
- recall: asking individuals to freely state names in response to a given name generator (e.g., Brewer & Webster, 1999; Burt, 1984; Sudman, 1985, 1988).

Recall techniques have been more often associated with forgetting of network members than recognition techniques (Brewer & Webster, 1999; Sudman, 1985, 1988). Weak or peripheral ties appear to be forgotten slightly more often than strong ties, but a significant proportion of strong ties are forgotten as well (Brewer & Webster, 1999; Brewer, 2000). Recalled alters tend to be “frequent, intense, and recent contacts” (Marsden, 1990, p. 448; see also Hammer, 1984), although it is possible that since weaker ties might be recalled later than stronger ties (Brewer & Yang, 1994) they may simply not be recorded in cases where an upper limit is placed on the number of alters named (Campbell & Lee, 1991). Additionally, increased network size is associated with increased forgetting (Bell, Belli-McQueen, & Haider, 2007; Brewer & Webster, 1999). While recognition techniques appear to be more accurate, they require prior knowledge of who should or could be in a given network, a requirement not always met in exploratory egocentric network studies.

#### 2.2.1.4 Name generator interpretation

Another issue in network elicitation is that of name generator interpretation. For example, eliciting networks using name generators based on criteria of friendship or closeness may be problematic because terms such as “friend” or “close” might mean different things to different people. For example, Fischer (1982b) determined in a survey of adult Californians that most non-kin relations were described by respondents as “friend”, but only one quarter of non-kin alters were described as being “close”, indicating that the term “friend” is applied to a wide range of people, and is not necessarily indicative of a particularly close relationship. The issue of name generator interpretation is discussed in more detail below.

#### 2.2.2 *The “important matters” name generator*

In 1985, the U.S. General Social Survey (GSS) contained a social network module for the first time (Marsden, 1987). The name generator used in this survey is widely referred to in egocentric network vernacular as the “GSS” or the “important matters” name generator, and is likely easily recognized by most egocentric network

researchers by either of these abbreviations (e.g., Bailey & Marsen, 1999; Marin, 2004; Straits, 2000). The full name generator is: “From time to time, most people discuss important matters with other people. Looking back over the last six months who are the people with whom you discussed matters important to you?” (Bernard et al., 1987, p. 50).

In describing his proposed social network module for the GSS, Burt (1984) argued for a “one-name-generator-plus-several-name-interpreters” approach over a multiple name generator approach. Multiple name generators, he acknowledged, would yield more concrete relationship data and allow for exploration of the more subtle aspects of interpersonal relationships, but the increased interview time required presented a practical reason for not going this route. Not only would it take longer to ask the multiple name generator questions, extra time would also be needed to then compile a non-redundant list of alters and collect any alter attribute and alter-alter relationship data. More importantly, Burt asserted, overly concrete name generators have the potential for being limited in their comparability with other network survey research (see also Marsden (1987)) and substantive application (especially in other contexts, Ruan (1998)), for too strictly defining relational content when not much is known about potential relations, for generating redundant information when successive narrowly defined name generators are used, and for being less salient to respondents than more broadly defined name generators. Burt decided that an optimal approach would be to use “a single name generator with a relatively clear criterion but [allow] the respondent to define interaction details” (Burt, 1984, p. 317). The criterion chosen was that of intimacy because it was central to the many research interests served by the GSS (e.g., research on social support, social participation, wellbeing) and had been used enough in past research for the criterion to have “known and desirable properties” (Burt, 1984, p. 317). The name generator was followed by several name interpreter items to elicit more details about ego’s relationships with his or her alters. Citing some of his previous work on the types of alters elicited by the “discuss personal matters” name generator in Fischer’s (1982a) study, Burt (1984) asserted that “discussing personal matters” is a “central quality and stable point of reference for understanding other qualities of relationship...and is clearly distinct from, and equally mixed with, four identified domains of relationship: friendship,

work, kinship, and acquaintance” (p. 318).<sup>10</sup> Although the “important (personal) matters” name generator was intended to elicit networks of intimates, data from a previous study using a “personal matters” name generator indicated that those people named as intimates also included relatively new acquaintances or friends of friends (Fischer, 1982a, cited in Burt, 1984).

The “important matters” name generator is essentially an exchange name generator (Bailey & Marsden, 1999; van der Poel, 1993) that tends to elicit a relatively small, kin-centred, dense (Marsden, 1987), intimate (affective based), core set of network members with whom the respondent likely interacts regularly, and with whom discussion topics vary from serious life matters to trivial tidbits (Bailey & Marsden, 1999; Bearman & Parigi, 2004; Bernard et al., 1987; Marsden, 1987; McPherson et al., 2006; Straits, 2000). The notion that the GSS name generator elicits core network ties is supported by Marin (2004), who found that the likelihood of an alter being recalled in response to the GSS name generator increased with perceived level of closeness to the respondent and with the alter’s connectedness to other network members. An exception to the idea that the “important matters” question generates a network of intimates highlights the importance of context when considering name generators: Ruan (1998) determined that in the Chinese context, the GSS name generator elicited a broader range of social ties that included a larger portion of coworker ties in addition to more intimate kin- and friendship- based ties.

Thus, it appears that for the most part, the name generator proposed by Burt (1984) does indeed elicit networks based on the criterion of intimacy. However, the mechanism by which these networks are elicited is not obvious, since the “important matters” question is still subject to issues of interpretation. Bailey and Marsden (1999) suggested four interpretive frames through which respondents who were asked the

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<sup>10</sup> Burt (1984) originally proposed using the phrase “discuss important personal matters” (p. 331), but the “personal” was removed because pretests showed that people defined “personal matters” in a very intimate and narrow way (Ruan, 1998, citing personal correspondence with Dr. R. Burt and Dr. T. Smith in 1997). Presumably the attractive qualities of the “personal matters” name generator were seen to hold for the “important matters” name generator as well.

“important matters” name generator constructed their networks: literal interpretations of “important matters” in which respondents referred to specific matters (e.g., recent job loss); general interpretations in which respondents made vague references to discussions with others; translation of the “discuss important matters” request into a request for “emotional intimates, frequent or recent contacts, or persons to whom they have particular role relations” (p. 294); and (mis)interpretations based on confusion or uncertainty around the term “important matters”. Respondents using the literal or general interpretive frameworks tended to interpret “important matters” as pertaining to matters in the personal domain. Despite these different interpretive frameworks, Bailey and Marsden (1999) determined that network composition did not vary greatly according to the interpretation employed.

Results from previous studies suggest that the “important matters” name generator was not good for investigating:

- relationships between network structure and specific outcomes (Bearman & Parigi, 2004; Marin, 2004);
- a broader range of weak ties (Bernard et al., 1987; Campbell & Lee, 1991; Marin, 2004);
- ties with specific content (Bailey & Marsden, 1999; Bernard et al., 1990); or,
- ties that are important to ego but have not been activated in the 6-month timeframe imposed by the GSS name generator (Campbell & Lee, 1991).

Despite repeated questioning of the validity of the “important matters” name generator, it appears that it “captures something and captures it with consistency... There is clearly much to be learned from an orienting question about important matters, whatever the matters turn out to be that are important” (Bearman & Parigi, 2004, p. 554). The “important matters” orienting question is, therefore, suitable for an exploratory study, as Burt (1984) alluded to in saying that it is useful when the exact content of relations is not known. While the “important matters” name generator has been widely used, and provides a common basis for comparing egocentric networks across studies, it does have limitations as described above. Using any single name generator is unlikely to



tap all theoretically pertinent ties in an individual's social network; in particular, any given name generator is likely to preferentially elicit core over peripheral ties, or vice versa. Multiple name generators could address this, but using multiple name generators is not always practical or desirable for the reasons already discussed in previous sections. One approach is to use a name generator that is expected to elicit most of the ties of primary theoretical importance, and then, as discussed in Section 2.2.4, use semi-structured qualitative interviews to obtain more in-depth information on these ties and to draw out information on any missing or forgotten ties that may be of substantive import.

### ***2.2.3 Eliciting the social networks of first time mothers***

It is clear from the extensive literature on the topic that name generation is not a simple matter; the complexity of the problem is increased when we try to elicit the social networks of people undergoing major life transitions. In this section I first briefly describe some of the features of social network change, some of the factors to consider when studying changing networks, and the challenges associated with their elicitation. I then focus on the social network generation of a specific group in transition: first time mothers.

#### **2.2.3.1 Changing lives, changing networks**

According to the convoy model, individuals inhabit a core set of stable social relations that move through time to help individuals cope with different life situations (Antonucci et al., 2004; Antonucci et al., 2011; Levitt, 2005). As the “situational characteristics” of the individual change – for example the groups to which an individual belong or the demand and expectations of the roles they occupy – the social relations in the convoy will change in tandem, with many of the changes in network members taking place on the periphery of the convoy (*Ibid.*). Life transitions such as getting married, having children, retiring, or becoming a widow can spur changes in situational characteristics, which can lead to changes in the daily settings in which an individual is immersed, and can result in the weakening or loss of some ties, producing new needs for individuals in terms of their social networks (Fischer, Sollie, Sorell, & Green, 1989; Hays

& Oxley, 1986; Zettel & Rook, 2004). According to Feld, Sutor, and Gartner-Hoegh (2007), research exploring how an individual's egocentric network changes across time should include the consideration of the characteristics of ego and alter, the characteristics of ego's situation (i.e., context), the characteristics of the ties that persist through the change, what ties are lost, and what kind of ties are formed as a result of the change (see also Cornwell & Laumann, 2012).

As individuals age or undergo major life transitions they respond to their changed contexts – or proactively anticipate changes – by actively managing network ties so as to maintain a certain amount of continuity in network structure and function (e.g., Cornwell & Laumann, 2012; Lamme, Dykstra, & Broese van Groenou, 1996; van Tilburg, 1998b; Zettel & Rook, 2004). In order to find ties that can fulfill the function of lost ties – a process referred to as “network substitution” (Zettel & Rook, 2004) – individuals might seek new ties, rekindle dormant ties (e.g., relationships with relatives, friends, or other acquaintances that for various reasons have been weakened), or turn to currently active ties. It is likely that ties will be sought or activated according to their “functional specificity” (Perry & Pescosolido, 2010); that is, individuals will form or activate ties that best support them according to their specific needs at a particular time. Although there is much emphasis in social support and social network literature on emotionally close and supportive ties, peripheral ties also serve a distinct purpose as well, providing such things as new information and access to new activities, with the particular functions served by peripheral ties changing at different life stages (Fingerman et al., 2011).

A key challenge in studying the networks of people in transition is eliciting the core set of ties that tend to remain stable while also capturing the more context dependent, peripheral ties that may be less stable across a transition (Antonucci et al., 2004; Bidart & Lavenue, 2005; Degenne & Lebeaux, 2005; Levitt, 2005; Morgan et al., 1996; van Tilburg, 1998b) and that can be important in the initial stages of a life transition (Hays & Oxley, 1986). The network elicitation techniques employed in the above-cited studies, many of which were longitudinal, range from in-depth qualitative interviews (Bidart & Lavenue, 2005; Degenne & Lebeaux, 2005), to multi-item name generators focused on interactive (as opposed to supportive) networks (Lamme et al.,

1996; van Tilburg, 1998b), to the single-item GSS “important matters” name generator (Cornwell & Laumann, 2012).

In the following section I discuss some of the name generators used in studies of first time mothers, and I consider some of the contextual factors that may have contributed to the number and types of network ties elicited.

#### 2.2.3.2 Network elicitation: First time mothers

Table 2.1 shows the name generators used in the network studies of first time motherhood described in Section 2.1.3.<sup>11</sup> The name generators in this table are largely based on criteria of importance, closeness, significance, and the provision of support, and so are mostly likely to elicit affective and exchange networks – the “psychological” networks that are most likely to coincide with the relatively stable set of core network members, or the inner circles of the convoy (Antonucci, 1986; Milardo, 1989). This is perhaps reflected in the fact that average network size reported in the studies conducted in the U.S., where federally legislated maternity leave consists of 12 weeks of unpaid leave (U.S. Department of Labor, 2012) did not differ greatly from the average network size reported in the two studies conducted in countries where extended maternity leave is offered. The exception – the larger average network size reported by Richardson and Kagan (1979) – could have been a result of the higher limit on the maximum number of alters allowed, as well as the inclusion of people “frequently seen for visits and socialization” (p. 4) in the name generator combined with the fact that less than half of the new mothers were working at the time of their interviews, which took place between three and seven months postpartum; these new mothers may have had more opportunities for “visits and socialization”, and the number of people listed in this category may have contributed to larger overall network size. Similarly, given their major life transition and their extended hiatus from their pre-motherhood daily settings, new mothers on extended maternity leave might be expected to have more time, more opportunities, and more need

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<sup>11</sup> Goldstein et al. (1996) used the same name convoy model name generator as Gameiro et al. (2010) but, because they did not directly report network size, this study is not included in Table 2.1.

to change their social network relations to cope with their transition to new motherhood. It is possible that Richardson and Kagan's networks contained a high proportion of friends who provided a great deal of socialization because they allowed for these ties to emerge; it might also be because the question ended with the idea of "visits and socialization", perhaps leading respondents to name more of these ties and relatively fewer close or supportive ties. This was not evident in the Finnish and Portuguese studies, perhaps because the criteria of significance, support and closeness used to generate new mothers' networks did not encourage the naming of newly formed or changed relations (or network members who were simply seen for "visits and socialization"). Neither of these studies reported the percentage of network members with young children; given that Cronenwett (1985b) and Richardson and Kagan (1979) found that in the U.S. context this percentage increased over the first year of motherhood, it would be of interest to have comparable information for new mothers on extended maternity leave.

**Table 2.1. Name Generators Used to Elicit Maternal Networks**

Study	Name generator(s)		
<b>Richardson &amp; Kagan (1979)</b>  Context: U.S.  15/39 mothers employed at time of interview	List “those individuals who are important or significant persons in their lives, provided encouragement or support, or are frequently seen for visits and socialization” (p. 4).		
	<b>Survey administration</b>	<b>Avg network size (Max # alters allowed)</b>	<b>Relationship categories</b>
	Self-administered questionnaire (Survey completed when babies were between 3 and 7 months old)	10.70 (15)	Family members; work associates; friends; parents of one or more small children
<b>Cronenwett (1984, 1985b)</b>  Context: U.S.  87% of mothers had been working just prior to pregnancy or giving birth	“We would like you to list at least one and at most ten people who are important in your life right now. These people may be family members, including your spouse, or they may be neighbours, coworkers, or friends. The people you list should be those with whom you share something significant...It is not necessary to enter ten names. Only list people who are truly meaningful to you” (Cronenwett, 1984, p. 172).		
	<b>Survey administration</b>	<b>Avg network size (Max # alters allowed)</b>	<b>Relationship categories</b>
	Self-administered questionnaire	Prenatally: 8.5 (10) 8 months: 7.9 (10)	Spouse; mother; father; mother-in-law; father-in-law; relatives of own age; childless friends; friends with children; coworkers; religious community; health professionals

Table 2.1 continued

Study	Name generator(s)		
<b>Tarkka et al. (1999); Tarka (2003)</b>  Context: Finland (maternity leave of close to one year offered to all mothers)  Half of mothers employed outside the home before baby's birth; at 8 months, 93% still at home with their babies	From the Norbeck Social Support Questionnaire (NSSQ) (Norbeck, Lindsey, & Carrieri, 1981; Norbeck, 1984):  "List each significant person in your life on the right. Consider all the persons who provide personal support for you or who are important to you... You do not have to use all 24 spaces. Use as many spaces as you have important persons in your life right now" (Norbeck, 1984, p. 48).		
	<b>Survey administration</b>	<b>Avg network size (Max # alters allowed)</b>	<b>Relationship categories<sup>a</sup></b>
	Self-administered questionnaire	3 months: 7 (24) 8 months: 7 (24)	Spouse or partner; family member or relatives; friends; work or school associates; neighbours; health care providers; counsellor or therapist; minister, priest or rabbi; other
<b>Bost et al. (2002)</b>  Context: U.S.  % mothers working not reported	Participants were asked to "list all individuals with whom they had a close relationship" (Bost et al., 2002, p. 521).		
	<b>Survey administration</b>	<b>Avg network size<sup>b,c</sup></b>	<b>Relationship categories</b>
	In-person questionnaire	Prenatal: Approx. 8 3 months: Approx. 6.5 12 months: Approx. 6	Family members (including in-laws); Friends; others (e.g., clergy, acquaintances)

Table 2.1 continued

Study	Name generator(s)		
<b>Gameiro et al. (2010)</b>  Context: Portugal  Approx. two thirds of new mothers in sample on maternity leave	Convoy model hierarchical mapping technique:  Participants asked to “place in the innermost circle those individuals who are so close that it’s hard to imagine life without them; in the second circle those that are not quite as close, but are still very important; and in the third circle those that are not quite as close, but still important” (Gameiro et al., 2010, p. 178).		
	<b>Survey administration</b>	<b>Avg network size<sup>b</sup></b>	<b>Relationship categories</b>
	Self-administered questionnaire	Prenatally: Approx. 7  At 4 months postpartum: Approx. 7  (Only “close” family and friends reported, other network members and network members in third circle of convoy diagram not reported.)	Nuclear family (parents and siblings); Extended family (in-laws and other relatives); Friends

a. Categories specified in the NSSQ, but detailed network composition not reported in Tarkka et al. (1999) or Tarkka (2003).

b. Maximum number of alters allowed not specified.

c. Total network size not directly reported, and is calculated based on network size data reported for family and friends combined with composition data reported for family, friends, and others.

#### ***2.2.4 Combined methods in SNA***

Combined methods or multi-strategy research has enjoyed increasing acceptance in many fields, including sociology (Brannen, 2005; Bryman, 1988, 2001; Pearce, 2012), although it is not always labeled or acknowledged as such (Pearce, 2012). The conscious and deliberate use of a mixed methods approach in social network studies, however, is less common. Although social network studies do exist that employ only qualitative methods (e.g., Bidart & Lavenu, 2005; Degenne & Lebeaux, 2005), many of the recent developments in SNA have been on the quantitative side (Crossley, 2010), likely due in no small part to the increased availability of modeling software, statistical packages, and computing power able to handle the large datasets associated with quantitative SNA. Recent calls have been made to systematically combine qualitative and quantitative approaches in the study of social networks (Crossley, 2010; Fuhse & Mützel, 2011), and some examples of a combined approach are found in studies on social network influences on fertility (Bernardi, Keim, & von der Lippe, 2007; see also Bernardi, 2011), the social networks of older women (McLaughlin, Adams, Vagenas, & Dobson, 2011), the friendship networks of young single people (Bellotti, 2008), and inter-organizational networks (Barnes, 2005). Bernardi et al. (2007) used the hierarchical mapping technique (Antonucci, 1986) to create a network map, along with a network “grid” (an alter-alter matrix) during a qualitative interview to collect systematic network data. Data collected through these instruments was analyzed quantitatively and qualitatively, along with the qualitative interview data. Bellotti (2008) used structured egocentric network surveys to elicit friendship networks of single people, and followed these structured surveys with in-depth qualitative interviews during which they explored the criteria by which people were named in response to the name generator used, as well as differences between “friends” named as networks members and “acquaintances” not named. Bellotti then developed a typology of friendship networks based on a combined analysis of the quantitative and qualitative data.

Recent multi-strategy social network studies involving first time mothers are lacking. With the exception of Richardson and Kagan (1979), who combined semi-structured qualitative interviews with structured questionnaires (although data from the



qualitative interviews was, at least in part, coded and analyzed quantitatively), the social network studies described in Sections 2.1.1 and 2.1.3 used quantitative approaches to describing and analyzing maternal social networks.

### **2.3 Gaps in the literature**

Previous research on the social networks of first time mothers has been focused on the ‘core’ networks of significant others; most of the name generators used have automatically imbued network relations with qualities of closeness or support and elicited little to no information on more peripheral network members (see Table 2.1). Studies of new mothers’ social networks have been mostly quantitative, leaving no room for the element of discovery and the greater depth of understanding afforded by qualitative techniques (e.g., Bost et al., 2002; Cronenwett, 1984, 1985a, 1985b; Gameiro et al., 2010; Goldstein et al 1996; Tarkka, 2003; Tarkka et al., 1999). The supportive aspects of new mothers’ networks have also loomed large in previous network studies; other network characteristics such as size, composition, tie strength, and density have not always been systematically, consistently, or explicitly reported (e.g., Bost et al., 2002; Cronenwett, 1984, 1985b; Gameiro et al., 2010; Tarkka, 2003; Tarkka et al., 1999). While I do not dispute the importance of close social ties and the support they provide, it is also worthwhile to explore other aspects of new mothers’ networks that might prove important in early experiences of motherhood. Finally, the social networks of first time mothers in contexts where extended maternity leave is offered have not been studied in a way that appears to take into account the role that context specific ties may play in these networks during the extended leave. Much of the research described in this chapter was longitudinal and, to varying degrees, captured overall changes in networks across the transition to motherhood, but may not have captured the more temporarily salient relations that may be of particular importance. The social networks of new mothers described by studies conducted in contexts where extended maternity leave is not common (e.g., the U.S.) may not fully reflect the experiences of mothers in contexts where it is common. The two studies reviewed that were conducted in contexts where the new mothers were on extended maternity leave (Gameiro et al., 2010; Tarkka, 2003;

Tarkka et al., 1999) used name generators that were likely to elicit close ties, and that were less likely to capture the peripheral relations that might be more expected to shift during a transition (Antonucci et al., 2004; Levitt, 2005). This study will contribute to existing literature through

- the combined quantitative and qualitative description of Canadian first time mothers' social networks;
- insight into new mothers' experiences relative to their social networks and social support;
- the use and appraisal of the "important matters" name generator for eliciting the social networks of new mothers;
- the comparison of structured social network data with network data emerging from semi-structured qualitative interviews; and,
- a description of the social networks of first time mothers with explicit consideration of the context specific exigencies of extended maternity leave.

## Chapter Three: **Research Design, Methods, and Project Evolution**

### **3.1 Research design**

The research design for this study consisted of a cross-sectional design incorporating a “multi-strategy” approach, the latter described in simple terms by Bryman (2001) as “research that integrates quantitative and qualitative research within a single project” (p. 444). Data from 40 online, structured surveys was used to provide a quantitative description of the social networks of first time mothers in Calgary. In-person, structured social network surveys were used in conjunction with semi-structured qualitative interviews to elicit in-depth information about the social networks of 10 first time mothers living in Calgary.

#### ***3.1.1 Using a multi-strategy research approach to explore the social networks of first time mothers***

In order to best answer my research questions I chose a combined qualitative and quantitative strategy, so that I could draw on some of the strengths of each approach (Brannen, 2005; Bryman, 1988, 2001; Morgan, 2007). I wished to elicit and examine quantitative information about the social network characteristics of first time mothers through quantitative survey techniques. I also wished to explore, using qualitative techniques, new mothers’ experiences related to their networks and network change during this life transition. In addition, and in accordance with the qualitative ethos of letting the data guide an iterative process, I was willing to explore the “unexpectedly important topics” (Bryman, 1988, p. 67) that might come up during data collection:

It is essential ... to reiterate the iterative process of qualitative research design. Data analysis begins shortly after the first data are collected. This analysis creates new understandings, generates changes in research question, and uncovers new anomalies. The result is often a change in the sampling strategy, new collection tools, and thus changes in the analysis style. This recursive cycle continues until understanding is complete enough and/or no disconfirming data are discovered” (Miller & Crabtree, 1992, p. 21).

While I employed a combined methods approach from the start, the balance of qualitative and quantitative elements shifted during the course of the study. According to

Bryman (1988), this is not uncommon: he suggests that it is “important to realize that the ways in which quantitative and qualitative research are fused may on occasions be unplanned outcomes” (p. 129). The overarching concern of this study - the social networks and early maternal experiences of first time mothers - remained consistent, but the specific questions addressed were refined in response to data obtained and observations made early on in the research.

A multi-strategy approach to a social network study is appropriate for many reasons. Quantitative approaches to SNA allow large amounts of complex relational data to be collected, reduced, systematized, and summarized in a way that allows for subtle patterns, not as easily or efficiently captured through qualitative techniques, to emerge (Bryman, 1988; Crossley, 2010).<sup>12</sup> Of course, the complexity of human relationships is such that they cannot be fully described quantitatively – numbers cannot tell the entire story. All of the ties elicited by a particular name generator “have content...and this content makes a difference” (Crossley, 2010, p. 10). Through qualitative analysis we can learn about the meaning that individuals ascribe to their network ties, and add to our depth of knowledge and understanding of these networks beyond descriptive statistics (Bernard et al., 1990; Crossley, 2010; Fuhse & Mützel, 2011). As Crossley (2010) nicely expresses, qualitative data collection and analysis can allow details to emerge and be drawn together into the “story” of the network. Part of this “story” includes the unexpected yet important information that might not emerge within the strict confines imposed by a structured network survey but that might be brought forth during a semi-structured qualitative interview (Bryman, 1988; Crossley, 2010). From a methods perspective, qualitative techniques can also help to ascertain how individuals are interpreting and responding to the name generators used in quantitative network surveys (e.g., Bailey & Marsden, 1999).

Bryman’s (1988, 2001) classification of approaches to multi-strategy research provides a useful framework within which to describe the ways in which quantitative and qualitative approaches can be combined:

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<sup>12</sup> Crossley (2010) refers primarily to the use of qualitative and quantitative approaches in whole network analysis, but many of his arguments are relevant to egocentric network analysis.

*The logic of triangulation.* The accuracy of research findings can be confirmed when data from one method is consistent with data obtained through a different method. Alternatively, discrepancies between the results obtained using different methods can also provide valuable information about the substantive focus of the research or about the methods themselves (Bryman, 1988). Brannen (2005) also refers to “complementarity”, the idea that quantitative and qualitative results might differ, but when taken together can generate insights.

*Filling in the gaps.* When a qualitative or quantitative method alone cannot provide enough information for the researcher’s purposes, a method taken from the other research strategy can help fill in the gaps.

*Researchers’ and participants’ perspectives.* Qualitative data can yield insights into participants’ perspectives while quantitative data can help the researcher explore areas of interest to them.

*Qualitative research facilitates quantitative research.* Bryman (1988) suggests that one way in which qualitative research can help guide quantitative research is through the acquisition of in-depth information that can be used to inform quantitative structured survey development.

I provide more details on how the qualitative and quantitative approaches in my study were combined in the final chapter of this thesis. As previously alluded to, there were changes to aspects of my approach over the course of my study. The following sections provide details on the recruitment process, data collection procedure, instruments, and methods most relevant to the final analysis. The full evolution of my project approach is described in Section 3.6, with a few details adumbrated along the way.

### **3.2 Participant Recruitment**

Participants were divided into two groups: those mothers with whom I conducted in-person interviews, and those mothers who completed an online social network survey.

### ***3.2.1 In-person social network survey and qualitative interview participants***

This non-probability sample of first time mothers was recruited through various methods. I sought first time mothers who were over the age of 18, whose babies had not had any major health issues and were between approximately 3 and 6 months old.<sup>13</sup> Initially, recruitment took place at a low risk maternity clinic in Calgary. Recruitment notices were posted on the maternity clinic bulletin board, and handed out to patients by clinic staff at their 36-week prenatal and 6-week postnatal appointments. In addition, interested patients could fill out slips with their contact information and baby's due date or date of birth and put them in a locked drop box at the clinic front desk. Participation incentives consisted of the chance to win one of three gift cards for local businesses catering to parents. After two months of attempting to recruit this way, however, only two first time mothers had signed up to participate (the target was 50 participants). After consultation with the low risk maternity clinic and ethics approval of a modified recruitment strategy, the following additional strategies were employed:

- in-person contact at several mom and baby classes around Calgary;
- information provided to participants of mom and baby classes around Calgary by the program instructors/owners;
- snowball sampling - having people (e.g., study participants, people in my own social networks) pass my study and contact information on to new moms; and,
- through information provided to patients at one non-AHS wellness clinic.

Potential participants were told that they were welcome to bring their babies to the interviews.

When contacted by a new mother or mother-to-be, I followed up immediately to set up an interview time (if they had already given birth), or to let them know that I would be contacting them when their babies were around three months old (if they had

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<sup>13</sup> The age restriction for the babies was in place because of the initial use of maternal confidence as a quantitative indicator (see Section 3.6); maternal confidence is related to infant age (Pridham, Lin, & Brown, 2001). My subsequent shift in approach eliminated the need to measure maternal confidence quantitatively, making this age restriction less important, although all babies in this sample were between three and seven months old.

not yet given birth). A total of 16 women contacted me to express interest in participating. One pregnant woman did not reply when I followed up with her after her baby's due date, and one woman with whom I had to reschedule an interview did not reply to my attempts to schedule the second interview, resulting in a sample size of 14 new mothers for the face-to-face structured social network surveys and qualitative interviews. Although data from four in-person structured social network survey interviews informed subsequent data collection and analysis (see Section 3.6), this data was not included in the final analysis and is not presented here. The "in-person" interview data consists of data from 10 new mothers who participated in semi-structured qualitative interviews (three mothers) and combined network survey and qualitative interview sessions (seven mothers). These interviews are described in Section 3.4.

### ***3.2.2 Online social network survey respondents***

Online social network survey respondents were recruited several ways. For this component of my study, I sought first time mothers whose babies were under 12 months old and had not any major health issues, and who lived in Calgary (this last was specified because of the possibility of the online survey being accessed from anywhere). The inclusion of babies up to 12 months old was intended to improve my response rate by casting a wider recruitment net while still focusing on new mothers – the first year of motherhood is a timeframe commonly used in studies of the transition to motherhood. Also, having mothers whose babies were within a very narrow age range became less important when maternal confidence was eliminated as an indicator, as described in Footnote 13.

Recruitment strategies used for this component of my study are described below.

- Business cards with the link to the survey, my contact information, and the incentive for taking the survey were handed out to women with young babies in public areas such as shopping malls, after ascertaining that they were first time mothers;
- Business cards were left at some Calgary businesses catering to mothers;

- Emails containing a link to the survey were forwarded by various contacts on my behalf to potential participants inviting them to take the survey;
- A link to the survey was posted on my personal Facebook page, with similar information as that contained on the business cards and in the emails.

Participation incentives for this part of the study consisted of the chance to win one of three draw prizes of \$75 cash.

Because it is not possible to know how many eligible new mothers saw my online ads or business cards, it is not possible to calculate a response rate. A total of 56 people started the online survey. Five people quit the survey after indicating their informed consent. Two people indicated that they did not meet the inclusion requirements and quit the survey, and three people quit the survey after confirming that they did meet inclusion criteria. Two more people quit the survey after providing background information (i.e., they did not name even one network member), and four people did not provide complete information for all of the network members named, leaving 40 surveys suitable for analysis. There were no obvious differences in the age, education, and marital status of the six women for whom background information was available but whose surveys were incomplete and those who completed the survey.

### **3.3 Data Collection: Instruments**

#### ***3.3.1 In-depth semi-structured qualitative interview guide***

The interview guide (Interview guide V1, V2, V3, Appendix A) covered topics related to social networks, social support, maternal confidence, baby characteristics, and overall maternal experience. Questions pertaining to maternal confidence and infant temperament were based on the maternal confidence and infant temperament surveys that originally formed part of my quantitative approach (see Section 3.6), and were retained in later versions of the interview guide because they remained relevant to new mothers' experiences (and were often brought up spontaneously by the new mothers in response to general questions about their experiences of motherhood so far). Modifications and



refinements were made to the interview guide throughout the course of the study, based on previous interviews.

### ***3.3.2 In-person social network survey***

The structured social network survey (Network Survey V3, Appendix B) was a shortened version of the social network survey that I developed based on social support and social network analysis theory and literature (Network Survey V1 and V2, Appendix B). For reasons laid out in Section 3.6, the shorter version of the survey was used, and is described here.

#### ***3.3.2.1 Egocentric social network approach***

As described in Section 1.3.2.1, I investigated the egocentric social networks of first time mothers, which comprise the ties that the new mothers have to other people, plus the view that new mothers have of ties among their network members. I chose this approach over a whole network approach in which all of the ties among members of a bounded population are studied. From a methods perspective, a whole network approach is appropriate when all of the members of the network of interest are known and can take part in the survey (for example in the study of the relations between members of a formal organization). In such an approach all of the members of a specified network would be asked to provide information on their ties to all other members of the network, often through the use of a roster from which respondents can check off those with whom they have specific relations (Butts, 2008; Scott, 2000). A main difference between whole network and egocentric network approaches is that in a whole network study, all of the people in a defined network take part in the study, while in an egocentric study, only the focal person – the “ego” – takes part in the study. This focal person provides all of the data on the people in his or her network, but his or her network members do not necessarily take part in the study. Thus, the egocentric network approach employed in my study entailed collecting data from a sample of first time mothers on the people in their social network, but I did not interview these named network members.

### 3.3.2.2 Name generator selection

I expected that the new mothers I studied would have people in their lives who were important to them in relation to their newly acquired mothering roles; however, I chose a name generator that I thought would cast a wider net and situate this “maternal network” (Donahue-Jennings et al., 1991) within the greater “personal network”, which consists of “all the people that the mother regards as important in her life, including potentially her spouse, other members of her immediate family, relatives, friends, neighbours, and others” (*Ibid.*, p. 966). To this end, I used the GSS “important matters” name generator: “Looking back over the last six months who are the people with whom you discussed matters important to you?” (Bernard et al., 1987, p. 50). Based on the literature reviewed, I expected the “important matters” name generator to elicit a core set of intimates that are important to a new mother’s experience, consistent with the networks described by the studies listed in Table 2.1. I also expected, however, that the potential for multiple interpretations of the phrase “discuss important matters” (Bailey & Marsden, 1999; Bearman & Parigi, 2004) would allow me to capture of some of the more context specific, weaker ties that may or may not contain an explicitly supportive element. For example, I anticipated that for first time mothers, “important matters” might largely comprise baby-related topics, and that they might be likely to discuss these matters with people newly brought into their lives as a result of their babies’ birth, such as other new mothers or health care professionals.

### 3.3.2.3 Name interpreters

Name interpreters were used to elicit more information about the attributes of all named alters. Alter attributes recorded include sex, age, education, marital status, contact frequency, length of time known, whether or not they lived in Calgary, and role label (e.g., friend, relative) (Burt, 1984; Cronenwett, 1984, 1985b). Alters’ parental status (parent/non-parent, first time mother or not) was also recorded (Cronenwett, 1984, 1985b; Richardson & Kagan, 1979). Questions on alters’ employment status, including maternity leave status, and on whether or not the new mother met them through a parents’ group (e.g., prenatal or mom and baby classes) were also included because of the

likelihood that other mothers with new babies would also be on maternity leave (Marshall, 2010), and to determine whether people met in parents' groups subsequently figured into first time mothers' networks. A final name interpreter question asked whether or not the new mother discussed her baby with alters, in order to highlight differences (if any) between network members with whom the mothers discussed their babies and those with whom they did not discuss their babies. Ties between alters were recorded in a matrix by asking participants to rate, on a scale of 0 to 2, how well they thought alters knew each other, with guidelines for rating based on the GSS survey criteria for the same process (Burt, 1984). Background information on the new mothers was obtained through questions about the baby's age, the mother's age, education, marital status, years lived in Calgary, and employment status (including maternity leave status).<sup>14</sup>

### ***3.3.3 Online social network survey***

The online structured social network survey (Network Survey V4, Appendix B), administered via Survey Monkey, was a shorter version of the survey just described. To reduce respondent burden for what was already a complex survey compared to many online surveys, name interpreter questions about alters' age, education, and marital status were omitted, as was the question about whether or not they discussed their baby with specific network members (according to the in-person network survey results, this last question did not distinguish between participants or between alters, since all mothers reported discussing baby with all alters named). Questions about alter-alter connections were retained, but were limited to whether or not alters knew each other, without information on the strength of relationship.

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<sup>14</sup> The original version of the social network survey also contained multiple name interpreter questions pertaining to social support. For reasons described in Section 3.6 these name interpreters were removed.

### **3.4 Data Collection: Procedure**

The first three in-depth qualitative interviews were conducted in participants' homes, with babies either napping in their rooms or present during the interview. Sessions were kept to approximately one hour, and interviews were recorded using a digital voice recorder and subsequently transcribed by me.

Following these initial qualitative interviews, four mothers participated in face-to-face structured social network interviews. Three of these sessions took place in coffee shops (two mothers brought their babies, one did not), and one took place in the new mother's home while her baby was napping. Sessions lasted approximately one hour, and I recorded responses on hardcopy versions of the surveys. As mentioned earlier, data from these four interviews is not presented in this report. Although it did inform subsequent data collection and analysis (see Sections 3.6 and 3.7), the data obtained from these four interviews alone was not sufficient to undergo quantitative analysis, nor could it be included with the quantitative online network survey data, given the differences in how the data was obtained (face-to-face vs. online).

Seven first time mothers then participated in interviews in which a short structured social network survey (Network Survey V3, Appendix B) was first used to elicit the new mothers' social networks according to the GSS "important matters" name generator. Immediately after the completion of the structured network survey, I conducted a semi-structured interview (Interview Guide V2 and V3, Appendix A) to learn more about the new mothers' experiences relative to their social networks and social support, and to add to the social network data collected through the structured network survey. I will refer to these sessions as "combined interviews". The purpose of this combined interview approach, in addition to providing a detailed description of first time mothers' social networks, was to allow for the direct comparison of network data obtained through the quantitatively oriented structured social network survey with the picture of first time mothers' social worlds obtained during the semi-structured qualitative interview. All combined interviews took place in participants' homes with babies either napping in their rooms or present during the interview, and sessions were approximately one hour long. I recorded participants' network survey responses on a

hardcopy version of the survey, while the qualitative interviews were recorded using a digital voice recorder and subsequently transcribed by me.

When presenting the in-person interview data and findings in Chapters Four and Five, I refer to data obtained from the ten mothers who made up the in-person qualitative sample; in doing so, I am referring to the three initial qualitative interviews plus the qualitative interview portion of the seven combined interviews described above.

The online social network survey was accessed via Survey Monkey, and was active for three months after all other data was collected. During this period, 56 respondents started the survey, and 40 completed it.

### **3.5 Ethical Considerations**

#### ***3.5.1 Informed Consent***

Ethics approval for this project was obtained by the University of Calgary Conjoint Faculties Research Ethics Board (CFREB) on March 15<sup>th</sup>, 2011; two amendments to the original application, the need for which is described in Section 3.6, were approved on June 15<sup>th</sup>, 2011 and January 10, 2012. Informed consent was obtained from all participants prior to their participation in the study (see Appendix C for sample consent forms); where applicable, this informed consent included permission for me to record the conversation using a digital voice recorder. Participants who were interviewed in person read and signed the consent form and kept one copy signed by me. Participants in the online survey read the informed consent form online (Appendix C), and indicated their consent by checking a box on the web page. Participation was voluntary, and all participants were advised that they could withdraw from the study at any time. Where applicable (e.g., the low risk maternity clinic and various mom and baby classes) potential participants were assured that I would not reveal to clinic staff or business owners whether or not they participated in my study, and that their participation would not affect the care or services received from the maternity clinic or mom and baby businesses.

### ***3.5.2 Risk to Participants***

Study participants were first time mothers who were experiencing all of the challenges that come with the role. There was a minimal risk of the interview upsetting a mother or of interviewing a mother at risk for or experiencing postpartum depression. Most mothers would likely have been screened for PPD at the many standard postnatal appointments (e.g., public health nurse visits, 6-week postnatal check-up, baby's 2-month and 4-month immunization appointments), and if they were found to be at risk they were likely being monitored closely by health care professionals. All the same, I created a postcard for new mothers (see Appendix D) that included resources for women who thought they might be experiencing postpartum depression, as well as other resources of potential use to new mothers (e.g., mom and baby classes, parenting websites). I left this resource card with all participants.

In the unlikely situation that a mother appeared to be in extreme distress, I had plans in place to get her support immediately, and when necessary seek the advice of my thesis supervisors or staff at the low risk maternity clinic. This scenario did not occur.

## **3.6 Project evolution**

The recruitment, data collection and analysis phases of this research took place over a long period, during which the project evolved in response to events described below.

### ***3.6.1 Original research approach***

As indicated at the beginning of this chapter the balance between qualitative and quantitative methods for this project evolved during the course of the study. The original research design called for a primarily quantitative approach wherein social network analysis would be used to describe the social network characteristics of approximately 50 first time mothers and to relate these characteristics to their experiences of new motherhood; in particular, I intended to use maternal confidence as a quantitative

indicator of maternal experience.<sup>15</sup> Because of their intensive nature, I planned to collect all social network data through face-to-face structured interviews. In-depth, semi-structured qualitative interviews were intended to serve the dual purpose of informing and refining the network survey, and enriching the quantitative descriptions of new mothers' social networks and their correlation with maternal confidence.

### ***3.6.2 Modified research approach***

After the completion of the first three semi-structured qualitative interviews and four structured social network interviews, two factors coincided which precipitated a change in approach. First, combined data from these first seven interviews (presented in Chapter Four) suggested that the GSS "important matters" name generator might not be eliciting all of the network members relevant to the new mothers' day-to-day experiences. The second precipitating factor was the low participation rate. While the additional recruiting strategies described in Section 3.2.1 resulted in the first few interviews, seven months into my recruitment efforts I was still far shy of my target of 50 people.

These combined issues inspired a change in my approach such that I expanded my focus to include an exploration of what qualitative interview data adds to structured social network data, and whether or not the GSS "important matters" name generator is an appropriate way of eliciting the social networks of women who are experiencing the transition to motherhood in a very specific context – one in which extended maternity leave is offered (i.e., RQ3 and RQ4). Given these additional methodological dimensions, I refocused the substantive aspects of my research to encompass the qualitative and quantitative description of first time mothers' social networks and maternal experiences

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<sup>15</sup>Maternal confidence was framed within maternal role attainment theory. While there are many potential indicators of maternal role attainment, Walker et al. (1986) asserted that "maternal confidence in caring for infants" (p. 69) provides one such indicator. Mercer & Ferketich (1994) described maternal confidence as a "basic determinant of [a woman's] capacity as a mother [which] affects her response to her infant" (p. 38). For the purposes of this study maternal confidence was defined as "the perception mothers have of their ability to care for and understand their infants" (Badr, 2005, p. 164). A new mother's confidence in caring for her infant is influenced by various aspects of her social world – Rubin's "reflected appraisals of self" are part of the social network feedback important for a mother's assessment of her mothering competence (Tarkka, 2003), while social support can also influence maternal confidence (Leahy-Warren, 2005).

without the narrow focus on maternal confidence (i.e., RQ1 and RQ2). The more descriptive and exploratory nature of these additional and reconfigured elements led to the qualitative portion of the study becoming more prominent than previously planned. In response to recruitment challenges I also changed my strategy for collecting quantitative network data, as described below.

### ***3.6.3 Changes in procedure and data collection instruments***

Interview Guide V1 (Appendix A) The original interview guide was developed in line with the original social network survey and its accompanying maternal confidence and infant temperament surveys (see below). Semi-structured qualitative interviews conducted before the structured social network interviews were intended to inform the development of the social network survey and, in conjunction with qualitative interviews conducted after the network interviews, enrich the quantitative social network data. Three qualitative interviews were conducted with this version of the interview guide.

Network Survey V1 and V2 (Appendix B) The original social network survey consisted of the “important matters” name generator, and more than 20 name interpreter questions; in addition to the questions described earlier, a further set of name interpreters addressed the giving and receiving of the four types of social support (informational, emotional, instrumental, appraisal), and the positive and negative aspects of support received.<sup>16</sup> This network survey was given in face-to-face interviews along with two other structured surveys, the Maternal Confidence Questionnaire (MCQ; developed by Parker and Zhar [Badr] in 1985 and described by Badr (2005)) and the What My Baby is Like survey (WBL; Pridham, Chang, & Chiu, 1994).<sup>17</sup> Combined, these structured surveys were originally intended to form the bulk of the quantitative portion of the study. Four in-person, structured social network survey interviews were conducted with this version of the social network survey. Although these four network survey interviews informed later data collection and analysis, data from these is not presented in this report.

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<sup>16</sup> Network Survey V2 was identical to Networks Survey V1, except for slight modifications to the role relationship choices after the initial network survey interview.

<sup>17</sup> Maternal confidence has been linked to infant temperament (Tarkka, 2003).



Network Survey V3 (Appendix B) Based on data collected from the first three qualitative interviews and the first four network interviews, and in response to my change in approach (in particular the addition of a methodological element), the network survey was shortened and employed as part of the seven combined interviews previously described in which I conducted a structured social network interview and a semi-structured qualitative interview in the same sitting. Name interpreter questions pertaining to social support were eliminated from this version of the survey because they added considerably to the time required for the network interview, they were no longer required for a quantitative analysis, and questions about support in the new mothers' social network remained in the qualitative interview guide to help round out descriptions of the new mothers' social networks. Similarly, since I was no longer using maternal confidence as a quantitative indicator, the MCQ and WBL surveys were no longer used.

Interview Guide V2 and V3(Appendix A) The interview guide evolved in response to my change in approach, a return to the literature, and as part of the iterative data collection and analysis process inherent in the qualitative approach (see Section 3.7.1). Questions relating to maternal confidence and infant temperament were retained in the semi-structured interview guide in order to draw out these aspects of first time mothers' experiences during the second segment of the combined interview sessions.

Network Survey V4 (Appendix B) The network survey was further shortened to create an online version to collect data intended for quantitative analysis. I created this version of the network survey with the expectation that new mothers would be more willing to take a short online survey than to commit to a one-hour face-to-face interview.<sup>18</sup> Out of 56 survey responses, 40 were suitable for analysis.

Key events and decision points are summarized on the project timeline shown in Figure 3.1.

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<sup>18</sup> CFREB approval for this additional data collection method, accompanying recruitment strategies and participation incentives was obtained on January 10, 2012.

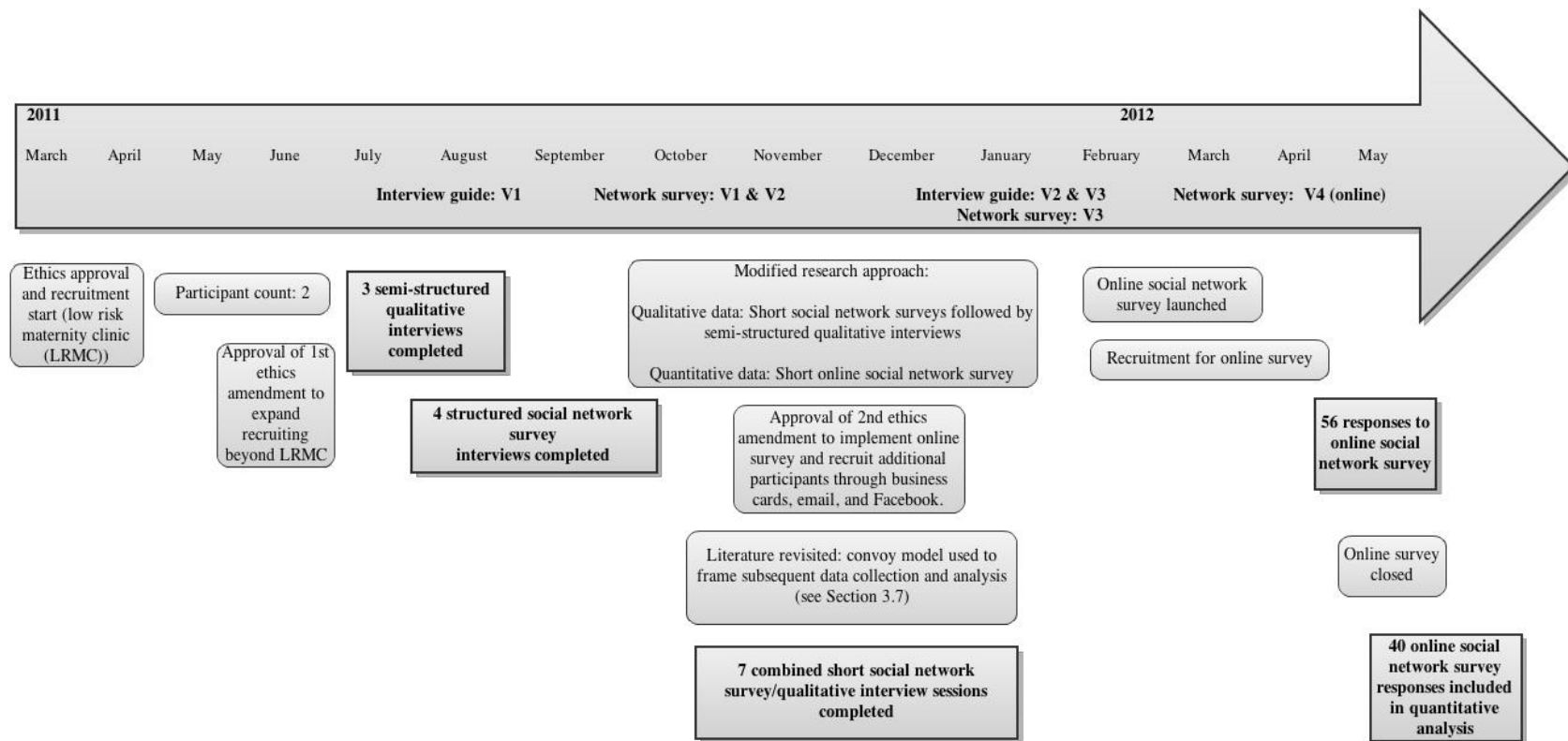


Figure 3.1 Project timeline

### **3.7 Analysis**

#### ***3.7.1 Analysis of interview data:***

Analysis of semi-structured qualitative interview data began with the initial impressions noted while I transcribed all interviews myself. Once completed, each transcript was read through (without any active coding) to get an overall sense of the data. At this point, the coding process began.<sup>19</sup> My approach to the coding and analysis process followed the Template Analysis style for analyzing qualitative data (Miller & Crabtree, 1992). In this approach, the template “derives from theory, research tradition, pre-existing knowledge, and/or a summary reading of the text. Templates can be codebooks developed prior to data collection...or created after data collection has begun” (*Ibid.*, p. 19). As described below and illustrated in Figure 3.2, I developed a template prior to data collection, and modified it during my research process based on information from initial qualitative interviews, structured social network survey interviews, and a return to the literature. The numbered paragraphs below correspond to the numerical labels in Figure 3.2.

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<sup>19</sup> Coding of transcribed qualitative interview data was accomplished with the aid of HyperRESEARCH™ qualitative analysis software.



Miller and Crabtree (1992). For example, under “Social Support” I created a new code in response to emerging data on the importance of the relative ages of network members’ children with respect to support provision, an element of support I had not originally considered when creating the codebook.

3. Based on preliminary connections and interpretations made in relation to data from the first three qualitative interviews, the original structured social network survey was revised and administered in four face-to-face structured interviews.
4. Based on observations made during these four network survey interviews and analysis of the first three qualitative interviews, as well as a concomitant return to the literature (resulting in the use of the convoy model discussed in Section 1.4 to frame the social network and social support experiences of the new mothers) the original codebook was modified in accordance with the increased emphasis on context specific aspects of new mothers’ experiences and social networks, and to tease out differences between the network members described in the structured social network survey and those discussed during the semi-structured interview during the combined interview sessions. The major categories “Context Specific” and “Methods” were added to the template, and codes such as “during the day” and “person not named in network survey” were included under each of these categories, respectively. This is described as a change to the template rather than a simple revision of categories in the original codebook to emphasize that this change occurred at a major decision point during the project evolution.
5. Iterative process continued based on modified template, until I arrived at five major categories under which I was able to group my major findings and within which I framed the presentation of my results: “Social network”, “Social support”, “Network dynamics”, “Network comparisons”, and “During the day”.
6. A modified version of the hierarchical mapping technique associated with the convoy model framework was used to compare data from the two sections of the combined interviews (see Section 3.7.2). These comparisons also formed part the iterative qualitative interview analysis.

### ***3.7.2 The hierarchical mapping technique as analytic tool: Comparison of qualitative interview data with in-person social network survey data***

I employed the hierarchical mapping technique as an analytical tool to map network members elicited during the two segments of the combined interview sessions (see Figure 3.3). This map was used to find patterns in the characteristics of network members and their interactions with the new mothers, and to more easily compare characteristics of network members named during the two segments of the combined interviews.

Because the diagrams were not created by the new mothers during the data collection process, assignment of network members to the inner, middle, or outer circles could not be done based on the mothers' perceptions of "closeness" with network members. Instead, I employed duration of relationship criteria to make these assignments as follows:

Inner circle: Longer than 5 years

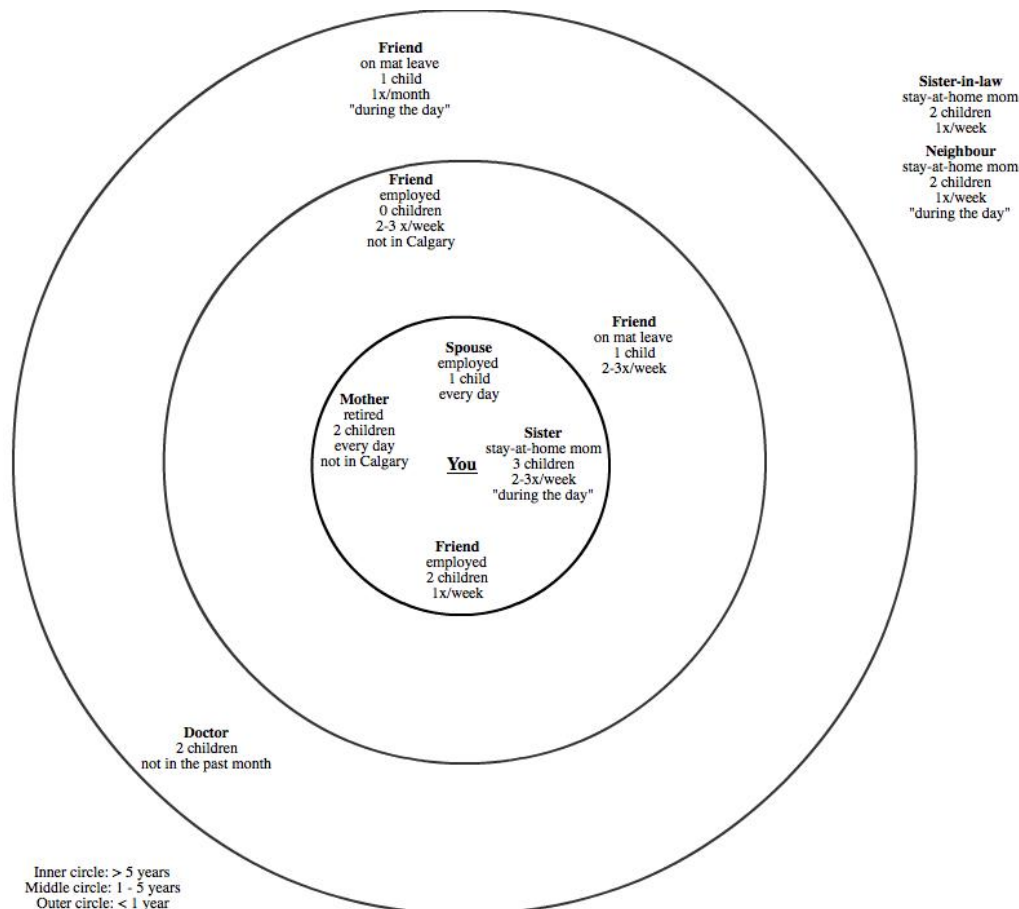
Middle circle: 1 to 5 years

Outer circle: Less than 1 year

Rationale for using length of time known to ascribe "circle status" to network members is based on results from Haines and Henderson (2002), who empirically determined that the closeness gradients prescribed by the convoy model are reflected in network tie strength indicators such as duration of relationship. Of course, this assignment criteria meant that new network members to whom the new mother felt very close might appear to be more peripheral than they would based on the original criteria of closeness used in the hierarchical mapping technique. It was hoped, however, that data from the qualitative interviews would help provide clarity in such cases. "Additional" network members not elicited during the structured network survey but who were mentioned during the subsequent qualitative interview were placed outside the concentric circles.

All network members were then labeled with information obtained from name interpreter questions and during the qualitative interviews (e.g., parental status, frequency of contact). The information obtained during the qualitative portion of the combined

interviews varied because it was not systematically elicited, but rather emerged during the course of the conversation.



**Figure 3.3 Sample diagram of a first time mother's social network**

### ***3.7.3 Analysis of online quantitative network survey data***

Raw data from 56 online social network surveys was downloaded from Survey Monkey into MS Excel, where data was coded and incomplete response sets were removed from the dataset. The 40 response sets suitable for analysis were imported into IBM SPSS Statistics 20 for descriptive statistical analysis (frequencies, means, and standard deviations) of first time mothers' social network characteristics. Bivariate analyses consisted of Pearson correlation coefficient calculations to explore the

relationship between baby's age and network characteristics, and to explore associations among network characteristics. Independent sample t-tests (2-tailed) were used to determine whether the network characteristics of first time mothers differed significantly based on mother's education, age, baby's age, and plans for returning to work after the birth of her baby. One-way ANOVA was used to test for age-related differences in mean network and alter characteristics among the first time mothers.



## Chapter Four: **Results**

This chapter is organized into four major sections: In the first section I provide a quantitative description of first time mothers' social networks, based on the online social network survey of 40 Calgary mothers. In the middle two sections I provide a qualitative description of the social networks, and experiences vis à vis several aspects of these networks, of the ten first time mothers who participated in the in-person interviews (three semi-structured qualitative interviews plus seven combined interviews). I finish the chapter by switching focus from the substantive portion of my results to the methods-related aspects of my investigation, presenting the network data generated through the in-person structured social network survey in relation to the network data that emerged during the subsequent qualitative interviews. The results from each of the four sections will be discussed separately and in tandem in the final chapter.

#### 4.1 Quantitative description of the social networks of 40 first time mothers: Results from the online social network survey

##### 4.1.1 Characteristics of first time mothers: Online network survey respondents

The characteristics of the first time mothers who completed the online network survey are presented in Table 4.1.

**Table 4.1. Characteristics of online social network survey respondents**

	<u>Frequency</u>	<u>Percent</u>
<b>Mother's age (N = 39)</b>		
18 – 19	1	2.6
20 – 24	1	2.6
25 – 29	6	15.4
30 – 34	22	56.4
35 – 39	7	17.9
40 - 44	2	5.1
Total	39	100.0
<b>Mother's highest level of education (N = 40)</b>		
Some high school	1	2.5
Some post-secondary	5	12.5
Post-secondary certificate	11	27.5
Bachelor's degree	21	52.5
Postgraduate degree	2	5.0
Total	40	100.0
<b>Mother's marital status (N = 40)</b>		
Divorced	1	2.5
Living common-law	5	12.5
Married	34	85.0
Total	40	100.0
<b>Mother's employment status (N = 40)</b>		
Not employed	2	5.0
Employed and has returned to work	1	2.5
On maternity leave, planning to return to work	22	55.0
On maternity leave, not planning to return to work	8	20.0
On maternity leave, undecided about returning to work	7	17.5
Total	40	100.0

Almost three quarters of the new mothers were in their thirties, almost all were married or living common-law, and more than three quarters of the new mothers had completed some form of postsecondary education. Over 90% of the new mothers in the sample were on maternity leave, with close to 60% of these mothers planning to return to work after their leave, and just under 20% undecided about doing so. On average, these

new mothers had lived in Calgary for 14.08 years (s.d. = 10.31) and their babies were, on average, 6.17 months old (s.d. = 2.61).

#### 4.1.2 Network characteristics

Network characteristics of the 40 first time Calgary mothers who responded to the online network survey are summarized in Table 4.2 and Table 4.3. Because all respondents except one were married or living common-law, and all but three of the respondents who were married or living common-law included their spouse as a network member, all quantitative network calculations were carried out – and results are presented – exclusive of spouses.

**Table 4.2. First time mothers' quantitative social network characteristics: Size, composition and density (N = 40)**

	Average (s.d.)
<b>Network size</b>	5.63 (2.91)
<b>Network composition</b>	
% Female	97.25 (6.70)
% Family <sup>a</sup>	39.86 (23.58)
% Immediate family <sup>b</sup>	24.84 (16.98)
% In-laws <sup>c</sup>	10.44 (15.99)
% Female family members <sup>d</sup>	35.90 (21.76)
% Friends <sup>e</sup>	45.00 (27.06)
% Friend/other role <sup>f</sup>	8.60 (14.34)
% Health and wellness professionals and practitioners <sup>g</sup>	5.27 (9.34)
% Web contacts <sup>h</sup>	1.27 (4.58)
% Parents	77.27 (20.95)
% First time mothers	25.32 (18.54)
% New network members <sup>i</sup>	15.31 (23.96)
% New network members who are also first time mothers	9.88 (14.90)
% Met through parent group	9.17 (16.18)
% Live in Calgary	62.99 (29.14)
% Same work status	18.11 (23.51)
<b>Density of alter network<sup>j</sup></b>	0.4602 (0.2849)

a. Mother, father, mother-in-law, father-in-law, sister, brother, sister-in-law, brother-in-law, other relative; b. Mother, father, sister, brother; c. Mother-in-law, father-in-law, sister-in-law, brother-in-law; d. Mother, sister, mother-in-law, sister-in-law, all "other relatives" marked as "female"; e. Network members marked with the role relationship "friend" only; f. Co-worker, neighbour, co-member of a group, friend/co-worker, friend/neighbour, friend/co-member of a group, friend/neighbour/co-member of a group; g. Health and wellness professionals and practitioners defined as: doctor, nurse, midwife, doula, lactation consultant, Health Link, sleep consultant; h. Web forum, website, or web contact; i. Network members known less than one year; j. Density =  $2L/[N(N-1)]$  where L = number of alter connections and N = network size.

The number of network members named in response to the “important matters” name generator question ranged from 1 to 14 people. On average, family members comprised approximately 40% of the new mothers’ networks, with friends accounting for slightly more, at 45% of the network. Approximately 65% of all relatives named (s.d. = 32.78) were immediate family members, 24% (s.d. = 30.51) were in-laws, and almost 11% (s.d. = 21.96) were other relatives. Almost 92% (s.d. = 16.78) of all family members were female. Other parents comprised a large part of new mothers’ networks (this high number perhaps reflects the fact that the mothers’ own parents or parents-in-law were often named as network members). Since most of the respondents were on maternity leave, the percentage of network members who had the same employment status as the first time mothers – approximately 18% – reflects, to a large extent, the proportion of other mothers in respondents’ networks who were also on maternity leave. The average percentage of first time mothers in respondents’ networks was equal to the average percentage of first time parents, indicating that respondents did not list first time fathers in response to the name generator question (beyond their own babies’ fathers, who were excluded from this calculation).

The majority of network members had been known by the new mother for longer than five years, most were seen at least once a week, and most were employed and currently working (Table 4.3). Forty-five percent of respondents named new network members, and most (74.81%, s.d. = 36.68) of the new network members named were also new mothers. New network members comprised, on average, approximately 15% of the new mothers’ networks, and approximately 10% of the entire network were new network members who were also first time mothers.

**Table 4.3. First time mothers' quantitative social network characteristics: Duration of relationship, frequency of contact and alter employment status (N=40)**

	Frequency	%	C%
<b>Relationship duration</b>			
Less than 3 months	6	2.69	2.69
Between 3 and 6 months	8	3.59	6.28
Between 6 months and 1 year	19	8.52	14.80
Between 1 and 5 years	37	16.59	31.39
Longer than 5 years	153	68.61	100.0
Total	223	100.0	
<b>Frequency of contact</b>			
Not in the past month	3	1.34	1.34
Once a month	36	16.07	17.41
2 or 3 times a month	36	16.07	33.48
Once a week	52	23.21	56.69
A few times a week	66	29.46	86.15
Every day	31	13.84	100.0
Total	224	100.0	
<b>Employment status</b>			
Not employed/retired	53	23.66	23.66
Employed and currently working	119	53.13	76.79
On maternity leave, planning to return to work	30	13.39	90.18
On maternity leave, not planning to return to work	9	4.02	94.20
On maternity leave, undecided about returning to work	13	5.80	100.0
Total	224	100.0	

#### **4.1.3 Bivariate analyses: Tests of significance and Pearson correlations**

##### **4.1.3.1 Differences in network characteristics according to mother's age, education, baby's age, and plans for returning to work**

Independent sample t-tests (2-tailed) were used to determine whether the network characteristics of first time mothers surveyed differed significantly based on mother's education, age, baby's age, and plans for returning to work after the birth of her baby.

*Mother's education.* First time mothers with an education level of below BA had a significantly higher mean percentage of family members in their network ( $49.72 \pm 25.00\%$ ) than new mothers with a BA and above ( $32.57 \pm 20.00\%$ ) ( $t(38) = 2.411$ ,  $p = .021$ ). The 90% confidence interval of this difference was 5.16% to 29.15%. New

mothers with an education level of below BA also had a significantly higher mean percentage of immediate family members in their network ( $31.04 \pm 15.97\%$ ) than new mothers who had achieved a BA or above ( $20.26 \pm 16.55\%$ ) ( $t(38) = 2.068$ ,  $p = .046$ ). The 90% confidence interval of this difference was 1.99% to 19.58%. Mothers who had an education level of BA or higher had a significantly higher mean percentage of health and wellness professionals and practitioners in their networks ( $7.82 \pm 10.84\%$ ) than mothers whose education level was below BA ( $1.83 \pm 5.40\%$ ) ( $t(33.981) = 2.292$ ,  $p = .028$ ).<sup>20</sup> The 90% confidence interval of this difference was 1.57% to 10.41%. Mothers who had an education level of BA or higher also had a significantly higher mean percentage of new members in their networks ( $22.27 \pm 27.73\%$ ) than mothers whose education level was below BA ( $5.91 \pm 13.37\%$ ) ( $t(33.462) = 2.468$ ,  $p = .019$ ).<sup>21</sup> The 90% confidence interval of the difference was 5.15% to 27.58%.

*Baby's age.* Mothers whose babies were older than six months had a significantly higher mean percentage of network members with the same employment status ( $24.92 \pm 28.06\%$ ) than those with babies under six months old ( $9.78 \pm 12.71\%$ ) ( $t(30.483) = 2.264$ ,  $p = .031$ ).<sup>22</sup> The 90% confidence interval of the difference was 3.80% to 26.50%.

*Commitment to returning to work.* The new mothers did not differ significantly on any of their network characteristics based on their certainty of returning to work after the birth of their babies (if they had not already returned).

*Mother's age.* One-way ANOVA ( $\alpha = 0.05$ ) was used to test for differences in network and alter characteristics among women in three age groups: under 30 years old, 30 – 34 years old, and 35 years and older. Network size differed significantly across the three age groups,  $F(2, 36) = 4.195$ ,  $p = .023$ . Tukey post-hoc comparisons of the three groups indicated that women aged 35 and older had significantly larger networks ( $M = 7.89$ , 95% CI [4.64, 11.14]) than women between the ages of 30 and 34 ( $M = 4.77$ , 95%

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<sup>20</sup> Levene's test for equality of variances:  $p = .000$ , so reported values are based on "equal variance not assumed".

<sup>21</sup> Levene's test for equality of variances:  $p = .018$ , so reported values are based on "equal variance not assumed".

<sup>22</sup> Levene's test for equality of variances:  $p = .018$ , so reported values are based on "equal variance not assumed".

CI [3.77, 5.78]),  $p = .018$ . Comparisons between the women in the “under 30” group ( $M = 5.38$ , 95% CI [4.04, 6.71]) and the other two groups did not yield any statistically significant differences at the chosen  $\alpha$ -level.

#### 4.1.3.2 Pearson correlations

Pearson correlation coefficients were calculated to explore the relationship between baby’s age and network characteristics, and to explore associations among network characteristics. The results are presented in Table 4.4. Network size, baby’s age, the proportion of network members living in Calgary, percentage of web contacts in the network, and the percentage of female network members were not significantly correlated with any other variables.

The percentage of family members in new mothers’ networks was moderately correlated with three variables: as the percentage of family members increased, alter network density tended to increase; as the percentage of family members increased, the percentage of first time mothers tended to decrease; and, as the percentage of family members increased the percentage of network members with the same work status as the new mother tended to decrease. The percentage of parents in new mothers’ networks was moderately and positively correlated with the percentage of first time mothers in the networks, as well as the percentage of network members with the same employment status. The percentage of health and wellness professionals and practitioners was moderately correlated with two variables: as the percentage of health and wellness professionals and practitioners increased, the percentage of network members met through a parent group tended to increase, while the percentage of network members with the same employment status tended to decrease. The percentage of new network members was moderately, positively correlated with the percentage of network members met through a parent group, and moderately, positively correlated with the percentage of new mothers in first time mothers’ networks.

*Summary.* According to the results of the online survey, the social networks of first time mothers in Calgary were composed mainly of friends and family, most of whom had been known longer than five years, and most of whom lived in Calgary.

Health care professionals, wellness practitioners, and web contacts formed a small portion of new mothers' networks. Almost 20% of network members shared the same work status as the new mothers (i.e., on maternity leave). Approximately one quarter of network members were also first time mothers, and approximately 15% of network members had been known less than one year. None of the new mothers' social network characteristics differed significantly according to their plans for returning to work. Mothers whose education level was below BA had significantly higher mean percentages of family and immediate family members in their networks than mothers whose education level was BA or above, while the latter had significantly higher mean percentages of new network members and of health and wellness professionals and practitioners. Women aged 35 and older had significantly larger networks than women between the ages of 30 and 34. Women aged 35 and older also had larger networks on average than those in the "under 30" age group as well, but the difference was not statistically significant. . Mothers whose babies were older than six months had a significantly higher mean percentage of network members with the same employment status – which for most new mothers was "on maternity leave" – than those with babies under six months old.

According to exploratory correlations, network size, baby's age, the proportion of network members living in Calgary, percentage of web contacts in the network, and the percentage of female network members were not significantly correlated with any other variables. Significant correlations did exist between variables representing role relationship, parental status, density, employment status, new network members, and network members met through a parent group.

The results from the online social network survey will be discussed in the next chapter. The remaining sections of this chapter are used to report the in-person qualitative interview findings and to compare network data generated by the in-person structured social network surveys with the data that emerged through the semi-structured qualitative interviews.



**Table 4.4. Pearson correlation coefficients for network characteristics (N = 40)**

Variables	2	3	4	5	6	7	8	9	10	11	12	13
1. Baby's age, months	-.091	-.196	.055	-.006	.136	.109	.218	-.073	.216	.195	-.232	.191
2. Network size	-	-.025	.013	.026	-.162	.074	.009	-.239	.096	-.053	-.173	-.065
3. % Family		-	-	-	-.199	-.258	-.016	.015	-.456**	-.246	.334*	-.391*
4. % Health and wellness practitioners			-	-	-.286	.338*	.142	-.091	-.117	.108	-.232	-.352*
5. % Web contacts				-	.052	.101	.309	-.115	-.037	-.005	.036	.010
6. % Parents					-	.050	-.192	.299	.378*	.074	.115	.105
7. % Met through parent group						-	.179	.048	.400*	.564**	-.244	-.153
8. % Live in Calgary							-	-.192	.021	.269	.148	-.069
9. % Female								-	.109	.140	-.074	-.059
10. % First time mothers									-	.328*	-.129	.073
11. % New network members										-	-.087	.081
12. Density among alters											-	-.112
13. % Same employment status												-

\*p < 0.05; \*\* p < 0.01; significance levels based on two-tailed test

## 4.2 Qualitative description of the social networks and maternal experiences of 10 first time mothers: In-person interview findings

In this section I provide a general description of the social networks of the ten mothers who participated in the in-person qualitative interviews (three mothers) and combined interview sessions (seven mothers), and further develop this picture through a detailed description of their experiences in relation to their social networks.

### 4.2.1 Characteristics of in-person interview participants

Characteristics of the first time mothers comprising the in-person qualitative sample are presented in Table 4.5. These new mothers reflected, to a large degree, the mothers who responded to the online survey.

**Table 4.5. Characteristics of 10 first time mothers – in-person sample**

New mother (Baby) <sup>a</sup>	Age category	Baby's Age	Marital status	Education	Years lived in Calgary	Employment status
Allison <sup>g</sup> (Emma)	35 - 39	3 mths	Married	Postgraduate degree	36	Mat leave – returning <sup>b</sup>
Barbara <sup>g</sup> (Ethan)	40 - 44	6 mths	Single (never married)	Postgraduate degree	25	Mat leave - returning
Holly <sup>g</sup> (Max)	30 - 34	6 mths	Married	Postgraduate degree	5	Mat leave – returning <sup>c</sup>
Joy <sup>h</sup> (Graham)	30 - 34	4.5 mths	Married	Bachelor's degree	6	Mat leave - returning
Sonya <sup>h</sup> (Jackson)	35 - 39	4 mths	Married	Bachelor's degree	33	Mat leave – not returning <sup>d</sup>
Jessica <sup>h</sup> (Olivia)	30 - 34	6 mths	Married	Postgraduate degree	8.5	Mat leave - returning
Emily <sup>h</sup> (Lucas)	35 - 39	5.5 mths	Married	Post-sec. certificate	15	Mat leave - returning
Erica <sup>h</sup> (Andrew)	25 - 29	5 mths	Married	Post-sec. certificate	5	Not employed <sup>e</sup>
Linda <sup>h</sup> (Caleb)	25 - 29	5 mths	Married	Bachelor's degree	4	Mat leave - returning
Melanie <sup>h</sup> (Lily)	30 - 34	4 mths	Married	Bachelor's degree	5	Mat leave – undecided <sup>f</sup>

a. All names throughout this thesis – mothers, babies, and other network members – are pseudonyms chosen by me; b. On maternity leave and planning to return to work; c. Worked 3.5 days in the past month, but not working regularly yet; d. On maternity leave and not planning to return to work; e. Not employed before baby's birth; f. On maternity leave and undecided about returning to work; g. Semi-structured qualitative interview only; h. Combined interview.

#### 4.2.2 *Qualitative social network descriptions*

The following social network descriptions are based on information obtained during the three semi-structured qualitative interviews and from both the semi-structured qualitative interview portion and the structured network survey portion of the seven combined interviews.<sup>23</sup> (See Figure 4.1 in Section 4.4 and Figures E.1 through E.6 in Appendix E for graphical representation of the social networks of the seven mothers who participated in the combined interviews.) These short descriptions are further enriched through the depiction of how the first time mothers' social networks featured in their experiences of new motherhood.

In general, the networks described by the ten new mothers interviewed in person reflect those of the online survey respondents, comprising mostly family and friends known longer than five years. For those who participated in the combined interview, the number of people listed in response to the structured network survey "important matters" name generator, not including the participant's spouse, ranged from 6 to 15 (average: 9.43), with most new mothers naming at least one other person or resource in the subsequent qualitative interview whom they would have added to their network survey list. The density of the alter networks ranged from 0.4095 to 0.8667, with an average of 0.5544. Five out of the seven combined interview participants named new network members who, on average, comprised approximately 11% of the new mothers' networks. New network members who were also first time mothers made up approximately 3% of the new mothers' networks. Of the new network members named, approximately 17% were also first time mothers.<sup>24</sup>

*Spouse/Baby's Father.* All of the networks described by the new mothers included their babies' fathers, with only one mother not currently married to or living common-law

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<sup>23</sup> This applies to all of the in-person interview findings described and discussed throughout this chapter and the next: when I refer to the new mothers' "networks" I am making reference to the entirety of the relations they mentioned during my conversations, whether they were named during the structured social network survey (where applicable), the semi-structured qualitative interview, or both.

<sup>24</sup> These calculations were based on a very small N, and are reported only for the purposes of comparison with the corresponding values from the online social network survey results. These values are also reported without including spouses for comparison with the online network survey results. All mothers who responded to this survey included their spouse as a network member.

with her baby's father, although he remains in their baby's life. All of the women who completed the structured network survey named their spouse first in response to the "important matters" name generator.

*Family.* Whether or not family members lived in Calgary, they comprised a significant part of most new mothers' networks. All of the social networks described by the first time mothers during the qualitative interviews and in response to the "important matters" network survey name generator included family members: mothers, fathers, mothers-in-law, fathers-in-law, sisters, brothers, sisters-in-law, brothers-in-law, grandparents (of the new mother), cousins, and aunts were mentioned. Four of the new mothers indicated that none of the family network members that they named lived in Calgary, and one mother had only her brother in Calgary, with her parents, sister and her husband's family living elsewhere. Geographical separation from family (two mothers had family as far away as New Zealand) did not appear to differentiate new mothers based on frequency of contact (all types) with their family; those with family in Calgary did not necessarily have more frequent contact with family than those without family in Calgary. A few of the mothers mentioned using internet video chat to stay in touch with far-away family members.

*Friends.* Friends were present in the social networks of all of the first time mothers interviewed. The friends mentioned included longtime friends, new friends, friends who were also co-workers, friends considered "close", and friends who appeared to fulfill a need for companionship but who were not labeled as "close" friends by the new mother. None of the new mothers named male friends during the structured network interview. Most of the friends mentioned during the qualitative interview were women as well, with occasional mention of a friend's spouse or of couples with whom the new mother and her spouse were friends. The parenthood status of friends varied, ranging from one mother who did not report any of her "pre-motherhood" friends having children, to one mother who reported that all of her friends had children, and that she was the last one to have a baby.

*Health care professionals and health and wellness practitioners.* Doctors, nurses (including HealthLink nurses), midwives, lactation consultants and a sleep consultant

were included in the new mothers' networks. In most cases, these practitioners were new to the women's networks, usually becoming part of their lives because of their pregnancy and the birth of their babies. In some cases, health care professionals were listed in response to the network survey name generator, but were not mentioned in the subsequent qualitative portion of the interview.

*Other (neighbours, co-workers, etc.).* Neighbours were infrequently mentioned and, with one exception, were not listed in response to the "important matters" name generator. Co-workers appeared in some of the new mothers' networks, often explicitly combined with the role of "friend". One mother listed a religious leader in her network survey response, but did not speak of him again during the rest of her interview.

*Resources (websites, books).* Resources such as websites or books were generally mentioned briefly or in passing as sources of information, with the exception of one mother who described being very active in an online community of new mothers.

#### **4.3 First time mothers' social networks: Dynamics, function, and context**

In this section, I provide an in-depth account of how the social networks of the ten women I interviewed in person figured in their early experiences of motherhood. I first provide details on how parts of the first time mothers' social networks changed upon their entry into motherhood. I then describe how social support is configured in their networks; in particular, how was support manifested, and by whom? Following this, I detail ways in which the new mothers' networks helped shape their experiences of motherhood beyond the provision of support, and then I end the section by focusing on the context specific network ties formed, accessed, or sought by first time mothers on extended maternity leave.

##### **4.3.1 Social network dynamics**

My cross-sectional research design did not allow me to systematically study changes in the social networks of first time mothers over the first year of motherhood; however, it was possible to tease out shifts in relations that had occurred since baby's birth by using network survey items such as duration of relationship (Lamme, et al., 1996). The new mothers also discussed postpartum changes in relationships during the

qualitative interviews. Many of these changes hinged on the parenthood status of network members. New mothers also displayed a conscious awareness of the number and types of relationships making up their network, and the effort required to maintain these relationships. Correspondingly, they demonstrated a certain amount of control over (or a desire to control) the formation of network ties.

#### 4.3.1.1 Changing relationships: The parenthood club and a new commonality of experience

Some of the women expressed a conscious awareness of how their recent entrée into the “parenthood club” (Barbara) was accompanied by a reconstitution of their interactions with some network members. In some cases relationship content was altered (e.g., the topics discussed changed), while in other cases formerly non-existent or weak ties were created or strengthened – especially those ties to other parents. Ties to network members who were not parents, however, sometimes weakened or dissolved. The new mothers often explicitly referred to the shared experience of parenthood as being a factor in strengthening relationships with other parents; conversely, they also pointed to an absence of such a commonality of experience as a factor in their postpartum distancing from non-parent network members.

Barbara unexpectedly became a new mother late in life, after she had been told that it was very unlikely she would be able to have children. She described how her belated entry into motherhood affected her relationships:

...and there's been times where I kinda feel like (sigh) I, it's, it's a funny way of putting it but it's like it's now I, I belong to that club, you know, the parenting - the parenthood club. Like I was always on the outskirts and always *wanted* to be, um, wanted to have that experience and wanted to be, you know, a mom and, and be able to share my mom stories with everybody else, um, and now it's like okay, now I made it I'm in that exclusive club, um I'm, I, I *belong*... Automatically you have that connection, yeah. And I, I was, like *last* of all my friends, the only one that, you know, didn't have kids, and so although I had really *good*, close friendships always like it's like now...I can relate at a different level now I can finally, you know, I understand where they've been all along and, um and we have very different conversations.  
(Barbara)

In a similar vein, Holly described reconnecting with an old friend after they both became mothers:

And we've been friends since, since, high school, so. W- she's my, probably, well, she's the friend that I've had for the longest, and it was interesting 'cause we kind of drifted apart for a little bit. And then, came back together, when, she got married, so a few years ago like four or five years ago? And then we've been even closer since we've had kids 'cause now we have even more in common. (Holly)

Holly also related how becoming a mother contributed to converting a longtime acquaintance – the wife of her husband's best friend – into someone she would now consider a friend:

...The wife and I, you know, we [would all] go for dinner, like as couples, and...mainly it's dinners though or see each other at parties...but we were never actually friends like I wouldn't consider her my friend. But now that I have a kid and we're home, my husband was like, 'you should really hang out with Lucy, like just, hang out the two of you, 'cause Brian and I hang out all the time you should become friends with Lucy. 'Cause you're not really friends, you're like – your husbands are friends' (laughs a bit). So, we kind of, we broached that barrier? Probably, when he was probably a month old. We were like, we should hang out, just us and the kids. And now we see each other all the time and ... we have a new friendship, which, is really nice. (Holly)

Similarly, other mothers attributed new friendships and new acquaintances to the shared experience of new motherhood. Emily referred to her neighbour Anne, whose first baby is about two months older than Emily's son, as one of her "newer closer friends, because [they] were going through the same thing". Melanie stated that she had made casual acquaintances as a direct result of shared parenthood status, while Barbara described spending more time with a co-worker because they were both new mothers on maternity leave:

Well Christie is one of them, um, and and we didn't really know each other all *that* well we just knew each other through work but the fact that she just had a baby in April, you know we've got that in common and both being off, like so we've, you know, signed up for a few classes together, and um, gotten together to go for walks, or whatever...(Barbara)

Linda described how becoming a mother strengthened her ties with friends who are also mothers, despite her initial resistance to becoming a part of the parenthood club:

...I've become closer with my friends who are moms even though you say you don't want to (laughs) but you end up (laughs)...Or, not that you don't want to but like, you know, I always thought, you have friends who are like "oh we're the moms we only hang out with other moms"?...Yeah. And then um, yeah I find you've just, like naturally done that. I guess 'cause it's usual advice, and, they're other people who are off anyways, right, like during the day. And, babies do sleep a lot, so. People that like, I've, been in close contact in the last bit are the other, um, girls from work. We're all, close anyways, but we're closer now since we all have babies relatively the same age. (Linda)

Part of her statement suggests that at least some of the attraction of spending time with these other mothers is simply that they are available at a specific time – “during the day”. In seeming contrast to the tendency of becoming less close to non-parent network members, Holly mentioned that she saw some friends who do not have children more often than before; she partially attributed this to their availability during the day. This aspect of new mothers' experiences – the partial shaping of network interactions according to companion availability – was visible in other mothers' experiences as well, and is described more thoroughly in Section 4.3.4.

Postpartum strengthening of relations with some network members was sometimes accompanied by a distancing from others. In Holly's case, this distancing occurred between her and a friend who does not have children:

So it's been interesting to see how like, I have a friend who, doesn't have kids and probably doesn't ever, want to have kids? And we've *totally* drifted apart... You just don't, have the same stuff in common like, I'm like, well we have to be home by 7:30 to put him to bed otherwise it's just (laughs) *owly*-ness, and, they just don't understand that right, they're like oh, can't one, one night won't make a difference and I'm like well (laughs a bit) one night *does* make a difference (laughing). And he'll just be, screaming his head off if we're there, and, it's past bedtime, so. (Holly)

The issue of not having “the same stuff in common” with non-parent network members partially extended to network members who were parents, but whose children



were much older, as illustrated by Barbara's telling of how the large age gap between her baby and her friends' children altered her relationships with them:

And, and there's a...you know that's all wonderful but there *is* a part too, of that that I miss – I mean 'cause like I say most of my friends their kids are *older* um, so when they're, you know, 10 or 11 years old, and we used to be able to, you know, get together and share a bottle of wine, or go out, to have a nice, dinner, or, you know, um, I do...mm-miss the fact that our friendship has changed in that way that we can't do some of those things or that we're not relating in that kind of level but um...but at the same time I wouldn't, I wouldn't trade it for the world (laughs), you know. (Barbara)

Barbara's current "new baby" stage meant that she no longer socialized in the same way with her friends whose children were old enough to easily be included in a gathering or left with babysitters for an adult dinner out. The ages of network members' children relative to the new mothers' babies played a role in other ways as well, as described in Section 4.3.2.2.

#### 4.3.1.2 Managing network ties: "Full" networks vs. network gaps

The new mothers did not passively experience the reconfiguration and reconstitution of their network ties. A few of the mothers spoke about their networks in ways that suggested an awareness and assessment of how their current network was (or was not) fulfilling their needs, and of how much effort they were putting into maintaining their networks. Some mothers, who felt satisfied with their current network, displayed a desire to limit the formation of new ties, while others actively sought to fill gaps in their network.

Emily and Allison were two mothers who explicitly expressed feeling of having "enough" friends:

...I guess my network is pretty full so I didn't make a point of going out and really socializing with the moms that we had in our prenatal class. (Emily)

...[T]here's some things that I've signed up for now and started going to that I'm like I really don't – this sounds awful but I don't need more friends so it's more me just going to get whatever information and, like the library class I'm I'm not really there to meet anybody or make any

more...daytime friends that I can meet to walk 'cause I'm already... finding that I'm overscheduled that way, so. (Allison)

Moreover, Allison indicated that she was more interested in maintaining her current relationships than forming new ones, a sentiment echoed by Emily:

...I have a pretty big network and I don't really, so I, became a new friend with Anne, but I don't necessarily want to, like um, put myself out there for a whole other new network 'cause I'm, feel like I'm already busy enough (laughs). (Emily)

Additionally, Emily declared that although she had, in the months previous, been very active in a variety of mom and baby classes, she was not currently looking for any more groups because she was "burnt out" from that busy schedule, and was more interested in spending time with "her really good network of friends". Similarly, Holly voiced surprise at just how busy she was with her various daytime outings and activities, and at how challenging it could be to fit in visits with different friends in a given week.

This sense of one's network – or at least a certain part of one's network – being "full" was not shared by all. Some of the first time mothers did express a desire to expand their network of people with whom they could spend time. Linda expressed dismay that the people in her Alberta Health Services (AHS) prenatal class did not maintain contact:

...we were supposed to – somebody collected all our email addresses and said that they would send it out but I'm sure they had the baby and then (laughs a bit) life got busy, yeah. But like the, the instructor recommended that, and said it would be really good 'cause like you guys are all due around the same time. And, it would've been neat, 'cause we did – like I did talk to, a few of the other like couples in the class too, but um, I mean everybody lost contact, so. (Linda)

Linda had recently signed up with a website designed to connect Calgary moms to one another based on their location within the city, although she had not yet been to any gatherings. Melanie was also ready to actively seek out companionship:

... So yeah I'm at the stage now where I'm like trying to you know, like find um – [I'm] really comfortable going out taking her anywhere, I want to see if I can find more people to hang out with and do things with. (Melanie)

Although Barbara had many friends with whom to spend time and to whom she could go to for support, she articulated a need to connect with other new moms who could relate to her experience as a new, single, “older” mother:

The thing that I’ve missed, that I *would* appreciate I guess is if I did have a chance to meet other *single* moms. That’s been something that, that I’ve thought of before um...yeah because I, I think it’s a very different experience and I can’t relate to some of the moms like when I went to the Baby & You class and, you know they were talking about how they appreciate their husbands so much more, just seeing them with the baby, it’s you know, changed their relationship, and – I can’t relate to any of that and ah, I would, I would appreciate or wish that I could – and I haven’t sought out you know a single moms support group I know they’re out there and I could do that but um, but yeah if I did connect with especially someone who was older like myself um, you know someone in a similar situation I think that would be, the piece that I’m missing that I would appreciate, support-wise? But otherwise, yeah like I say I’ve got lots of friends. And, and a lot of my girlfriends are single, you know, divorced, with, older kids so, you know, we, we do have that in common. But yeah, to meet another, older, *new* mom, that’s single, ah, would be, interesting for me anyway.  
(Barbara)

Echoing her earlier expression of regret about some of the less positive ways in which her relationships with friends with older children had changed despite the fact that they now had parenthood in common, Barbara also found that merely having single motherhood in common with some of her friends was not same as sharing the experience of *new*, single motherhood.

Just as Barbara was aware that single mother support groups are “out there”, most of the new mothers were already attuned to the many organized activities offered in Calgary for mothers and babies, but a few expressed uncertainty about how to connect to other new mothers. When I asked Erica about some of her day-to-day activities, she indicated that a tight budget meant that she had not signed up for any paid programs, and she was not aware of some of the free programs offered through, for example, AHS or the public library – and asked me if I knew of any programs or resources. Similarly, Melanie wondered if she had “missed” something with respect to the information provided to new mothers by AHS:

...do they give you a list of, um, social supports that you can connect with those mums or they just leave it up to mums to figure that out themselves? (Melanie)

Although Emily's network was, as she put it, "full", and she had been active in several classes and programs, she also expressed a certain amount of consternation over the lack of information provided by AHS and her maternity clinic in terms of activities and classes available to mothers and babies.

While, as shown in the next section, the new mothers mostly appeared to have networks of support provision in place, there was a parallel expectation from some that their health care providers would talk to them about how to connect to activities and supports specific to their postnatal needs.

#### **4.3.2 Social support**

The first time mothers' social networks provided various combinations of the four types of support delineated in this study: informational, emotional (including companionship), instrumental, and appraisal support. Overall, very few network members provided all four types of social support; rather, a division of support labour appeared to occur among network members, ensuring that all four types of support were collectively provided. For each type of social support, I first briefly describe the general patterning of support among network members (see also Figure 4.1 and Figures E.1 through E.6), followed by details of the new mothers' experiences of support. I then describe some of the ways in which the relative ages of network members' children factored into the receipt and provision of support, and end this section by discussing some of the "unhelpful" support experienced by the new mothers.

##### **4.3.2.1 Social support: Emotional, instrumental, appraisal, informational**

*Emotional support.* All of the married new mothers indicated that their spouses were sources of emotional support, as were many family members (parents, parents-in-law, siblings, siblings-in-law) and friends. Network members provided emotional support in a variety of ways, such as by being someone to talk to, someone who provided

reassurance and encouragement, someone who shared the new mother's excitement about her baby, or someone with whom the new mother spent time. In general, family members (including spouses) and close friends were most often described as providing support in the form of reassurance, encouragement, and being someone to talk to, while companionship came from a variety of network members. In a few instances, health care professionals were described as providing emotional support.

When talking about whom they might go to if they were having a particularly difficult day with their babies, Joy named her husband, mother, and close friend, while Erica mentioned her husband, mother-in-law, and her own mother:

Um Greg is, is probably the first, first person that gets to find out what kind of day we're having, or had, and often he will ring at lunch time to kind of see, see how our day is going, or. And sometimes we'll, um, in the summer we would walk into downtown and have lunch with him, and, and um, and that would be nice. Um, so yeah he's probably number one. Um, and, yeah Jane or my mum would be number two.  
(Joy)

Um, Brad he's my big support, so, my bad days I can always talk to him, or his mum, she's easy to talk to and, she's had kids, so it's, that helps a lot. And same with my mum, so. (Erica)

Joy's mother does not live in Calgary, but was still considered an important source of emotional support. Like Joy, Melanie also named her mother as someone she could talk to, although she lives far away. Other new mothers also described network members who are not geographically proximate as being someone to talk to. Holly described how although some of her friends live in Edmonton, they were still network members she felt she could talk to and who she would call on if she were having a difficult time:

I find, my, friends in Edmonton are actually probably, because I'm closer to them, because I they're like, my friends for longer? And we have a closer relationship I find that they're actually a bit more supportive [than friends in Calgary], because the friends that I have here are a bit newer? So my, older friends are the more supportive ones, even though they're not physically, *here*... I feel like I can tell them more... It's a, it's a deeper relationship rather than the, more of the, like, if I was, having a really really bad day and was, crying, I wouldn't probably call the friends who are here? If I really needed them, I *could*,

but, I would try my, older friends first. Just 'cause they're the ones who know me better, so. It's a different type of relationship, yeah. We may not hang out, because we can't, but, it's, it's just a different relationship, so. (Holly)

Companionship was a frequently cited sort of emotional support that was closely tied to the notion that emotional support consists in part of having someone to talk to. Spending time with other people provided new mothers with adult interaction and opportunities for conversation (baby-related and otherwise). Joy described how she saw her friends in terms of her role as a mother and the types of things they discussed:

I'm really lucky and they're really supportive and we kind of talk about all sorts of things from whether it's um, you know things about Graham in terms of you know, eating or sleeping or how, how he's going with that to... cloth diapering to the fact that Calgary's climate is really dry and (laughs) how do you try and get your skin... so I mean it can range from, from stuff like that to also um, other... things that we would normally talk about whether it's you know sports that we're involved with, or, um, or, you know books we've read or movies we've seen and so it's kind of a whole range of topics. I wouldn't say that it's – I mean, there's obviously more kids talk now, that, that I'm a mum as well. (Joy)

Joy's conversations with her "supportive" friends appear to include some information exchange, but also contain an element of non-baby-related, "adult" interaction. Similarly, Sonya appreciated visits from two of her sisters-in-law in part because they provided the opportunity to discuss a broader range of topics. When asked about whether she provided support to other new mothers, Barbara responded in a way that reflected the fact that she might experience companionship as supportive in and of itself:

Um, someone like Christie who is also [a] first time [mother] I know she gets tons of support from, like she's got more family in town than I do, and, and they've got kids too so I think, she doesn't necessarily rely on, me that way, but we do, you know, we talk and, and I think the fact that we're again joining classes, and just getting together and doing stuff that way is part of that support... (Barbara)

According to the new mothers, this kind of "doing stuff" support came from a variety of network members; as suggested earlier, one factor that seemed to determine

with whom the new mothers spent time was individuals' availability during weekday daytime hours. I will return to this point in Section 4.3.4.

Emotional support also took the form of reassurance that what the new mothers were experiencing was within the realm of normal – this type of support came from network members who were also parents (usually other mothers), and who had “been there”. One way this reassurance was expressed was through commiseration about some of the day-to-day drudgery that attends new motherhood:

...well, just like family, they they, already know you, they know...what raising kids is about, and advice, and – especially like my mom, you know, [she tells me that] there's days that yeah, your accomplishment might be chang[ing] a roll of toilet paper (laughing) – yes! Check that off. (Linda)

...my sister-in-law's been amazing. Ahm, she has three kids...she's really good about calling and checking in and saying, you're doing great, being a mom is so glamorous, do you have spit-up all over you, do you have poo on you? (laughing) Have you gone to the grocery store without having had a shower for four days? *That's* what being a mom is all about! So she's a great sort of, cheerleader and pep-talk. (Sonya)

Another way reassuring emotional support from other mothers showed up was in their responses to concerns the new mother had about her baby. For example, Melanie's friends would often address her questions or concerns with, “oh yeah I had that with my kid, don't worry, it's normal”. Similarly, Holly described a typical exchange with a friend:

So, it's been good 'cause we can totally like, 'did [your baby] do that?' and she'll be like 'oh yeah, [he's] horrible...He totally went through that stage', and 'don't worry it'll go away.' So that's nice. (Holly)

Emotional support as described by some of the new mothers was often tied up with other forms of support. For example, the “don't worry, it's normal” type of emotional support in response to baby-related concerns described above is a form of informational support as well, teaching first time mothers about what baby behaviours and development are considered “normal”. In Sonya's quote further above, the “pep-talk” from her sister-in-law incorporated an explicit assertion that she was “doing great”

(appraisal support). Similarly, Sonya described being able to call two of her friends with young children when she was having a hard time with Jackson:

...they've been a wonderful resource just, to be able to call and say, 'I'm losing my mind, he's been crying, I don't know what to do', and they[re] either very reassuring saying 'this is what it's supposed to be like you're doing a great job', or, 'you need to get out of the house, come over to my house. Just bring your crying baby over, it'll be fine.' (Sonya)

Evident in Sonya's description is emotional support in the form of reassurance that her baby's crying is a normal part of babyhood – this is also informational support – and the observation that she needed to get out of the house, and offer of companionship. Appraisal support comes through in the friends' assurance that Sonya was “doing a great job” as a mother.

Some of the new mothers appeared to experience emotional support through the display by network members of interest in and excitement over their baby. For example, Joy displayed clear pleasure when portraying her father as a “doting grandfather” in her description of how her family members were important to her in her role as a mother and how they supported her. Part of Jessica's response to the question of how she had experienced support as a mother included the mention of family and friends who took a “keen interest” in her daughter. In a similar way, Barbara indicated that part of the sadness she felt when having to leave her out-of-town family after a visit was leaving people who could share in the wonder of watching her baby grow:

Like especially because I think we go from, especially out in Victoria with my mom and my sister – sharing him with, with people who are so excited to see him, and love him, and, you know, or just want to eat up every single moment with him just like I do to come back to aww, now it's just us and you know, not being able to share and have someone to, watch and say oh, did you see him do that? or you know, th- then I always feel a little bit of a downer. (Barbara)

*Instrumental support.* Spouses were universally mentioned as sources of instrumental support. Family members – parents and parents-in-law in particular – also provided a good deal of instrumental support. In cases where family members lived



elsewhere, this type of support was often provided in concentrated bursts during a visit to Calgary. Friends were less likely to be cited as providers of instrumental help, although they were mentioned occasionally. Health care professionals provided a very specific kind of instrumental baby-related support, in the form of the provision of direct medical care and referrals to other health care professionals when needed.

Instrumental support from spouses was often framed in terms of how they “helped out” with basic childcare and household tasks and gave the moms a “break”:

...Mark was a great support every night, he, he was usually home most nights of the week, um, to be able to, sort of, help out and give me a break. (Sonya)

Um, who else was on my list – my husband? Oh, yeah, my husband was, yeah (laughs) pillar of strength, yeah he’s, he’s fantastic. He, um, really supportive um, with her, you know changes diapers, puts her to sleep, does everything that he can do to help me out. And, helps around the house when things need cleaning. (Melanie)

Family members commonly provided help with childcare and with household tasks. Linda described how her “bachelor” brother – her only family member who lives in Calgary – frequently volunteered to look after his nephew, while Allison laughingly talked about how eager her mother and aunt and were to babysit:

... they *want* to babysit her, that’s the thing, so my mom wants her more than what we probably were – and my, one of my aunts in town wants always to come over and babysit her too, so. They just come and usually they just come and hold her while we’re here but they would really like it if we left, yeah (laughs), so. (Allison)

At times, family members helping with childcare or household tasks also provided companionship in the process. Sonya, whose son would not nap in his car seat and whose napping was irregular, found it challenging to find the right time to leave the house with him because of her concern that he would miss out on sleep. Finding herself at home much of the time, she established a routine with her parents and her mother-in-law that provided instrumental support along with some companionship:

So, my parents are great and we sort of set up a routine where, at least once a week, they’ll come over and spend, the majority of the day playing with him and hanging out with him and um, it’s just nice to have some extra hands and some people to talk to and, um, so, they’ll

spend, you know, four, five, six hours at the house and, you know, help me cook or give me a chance to go for a run or have a shower or, um, they'll take care of him and, and my dad's also great with babies and he'll change diapers and rock him to sleep when he's crying, and – so that's fantastic. Um, my mother-in-law's, um, very similar. She's wonderful, she lives quite close so I can call her and say come over for a visit in the afternoon and, she's brought food over, and you know, she'll play with him and keep me company. (Sonya)

Sonya's mother-in-law bringing over food was in keeping with a common baby-welcoming ritual – family and friends bringing over meals for the new parents – for which several of the new mothers voiced their appreciation. This ritual was not only observed by close family and friends, but was something in which less close network members participated. For example Holly, whose family does not live in Calgary, was grateful for such help from an acquaintance:

And I'm thinking, one of the, *niciest* things, was, these people who aren't even really that close to us she brought over dinner, for us, one day. And, when Max was probably like four weeks old, or five weeks old, and it was one of the best gifts we got, because, it was dinner for a couple of days, with leftovers and everything, and, just, not having to think about that... (Holly)

Emily, when talking about the overwhelming number of visitors they had in the early weeks of Lucas's life, commented that at least most people brought food, indicating that the stress of having so many visitors so early on was in part balanced out by the help they brought with them in the form of meals for the new mother and father.

While instrumental support came often from spouses, family, and close friends, neighbours did sometimes fulfill this role. For example, Holly, who as mentioned does not have family in Calgary, described how elderly neighbours, with whom they visited regularly, had also provided help:

We also have - in the house across the back there – there's an elderly couple, who are like, in their seventies. And we're really, we're actually really close to them when we were renovating our house we lived with them for a week even. And, so, they've been a great source of support, especially the wife, because, the one day that I had to work the nanny got a flat tire on her way here, and I'm like, of all the days (laughs)... So I called her and I was like, can you come over, for half an hour, until the nanny gets here, just bring a book, he's asleep, you just

sit on the couch and read your book while he's sleeping. And, it was fantastic, because within two minutes she's over, and I could make it to work. So that was, that was incredible and I had to go to a meeting one day and she – I was like, can you come with me, and just watch him while I'm in the meeting? And she came with me. And watched him, so. That's been really nice 'cause it's like, he's got a set of great-grandparents who are here, they're grandparents or great-grandparents who, are here as well so we go and visit and stuff...Like we go over and visit usually once a week or so. (Holly)

Likewise lacking family members in Calgary, Joy mentioned that she and her husband planned to exchange babysitting with neighbours during the Christmas party season. Both of these mothers obtained emotional, appraisal and informational support through regular contact with their out-of-town families (and friends), but turned to the more “local” parts of their network for the help that far-away network members were not able to provide.

*Appraisal support.* Appraisal support was occasionally offered by spouses, but more often came from family members and friends. For a few mothers, lactation consultants were sources of appraisal support early on in the breastfeeding process.

When asked if they had received feedback from network members on how they were doing as new parents, two types of responses were common. The first type of response centred on how the baby's development or disposition seemed to reflect on the new mother's (and often her spouse's) performance:

Aaaaah, yeah like family, of course, and ah, and my friends [give feedback], but a lot of it again is 'cause feedback from them, 'oh he's such a happy baby' or when he's like you know slept pretty well they're like 'oh you guys are doing something right'. (Linda)

[Feedback has been] pretty much positive I guess when they see your kids growing they're like 'oh you must be doing it all right' (laughs a bit). (Melanie)

The second type of commonly described appraisal support focused directly on the new mother's parenting style:

...and then other friends that, um, you know, one friend just keeps saying wow, you know, you're – well, more than one friend – have said

you know, ‘you’re doing great’, and ‘you just seem so relaxed’, and, ‘oh you just seem like a natural’ like you know having that feedback from, friends, who are also moms who have been there has been, really affirming? (Barbara)

Barbara’s friends directly stated that she was “doing great” as a mother, and implied that being “relaxed” is a component of good mothering. Melanie appeared to make the same connection – that being called “laid back” constituted positive feedback about her mothering performance:

So yes I guess some, some mums have um, said to me ‘you’re so laid back um, I remember when I was first a mum I was so stressed out’, and I guess complimented that ‘good on you’ for just, being, pretty chilled out about the whole thing (laughs). (Melanie)

Appraisal support from health care professionals was mentioned by a few of the new mothers, who – particularly when it came to feeding their babies – appeared to appreciate feedback on how they (and their babies) were doing from, as Barbara put it, “so-called authorit[ies]”:

...yeah, ‘cause I – again I kinda went in [to the breastfeeding clinic] thinking I don’t know what I’m doing, I don’t know if this is right or, not, and heard different things from friends, and, and – so yeah to hear from, you know, a so-called authority, directly, was yeah, really helpful. (Barbara)

Holly, although she is a family physician and, by her own account comfortable with many aspects of handling her baby, still welcomed feedback from a lactation consultant when it came to breastfeeding:

I went to a lactation consultant...she was actually really nice and she said yeah - like, ‘cause I was worried that it was his latch, ‘cause I had lots of plugged ducts, and then that led to the mastitis, and, all on one side and I was like is it his *latch* that’s the problem so I got in [to see her], and, and she was like, ‘no your latch is perfect you’re doing a great job, like, there’s nothing that *you* can do, you’re doing everything right’. So it was nice to hear that, I was doing everything that I could? That this wasn’t something that I could, change at all, or it was just the way that, that I am, and the way that he is, and our relationship, so. (Holly)

Despite the fact that the lactation consultant could not offer a solution to the problems she was having – plugged ducts and mastitis – Holly found it helpful to know at least that the problem did not lie with something she was doing wrong.

Spousal appraisal support was notable mainly in its paucity; it was mentioned rarely, and when it was, it was spoken of in less detail. For example, although the feedback Holly described from the lactation consultant and her parents was quite detailed, she had less to say about her husband's feedback:

My husband hasn't really said that much. I mean he says, yeah you're a good mom or, that kind of thing...(Holly)

Erica likewise indicated that the extent of her husband's feedback about how she was doing as a mother was saying that she was "doing a good job".

*Informational support.* Even more scarce than spousal appraisal support was informational support from spouses; none of the new mothers indicated that their spouse was a source of this kind of support, which was most often described as coming from other parents such as the mothers' own parents and siblings, in-laws, and friends with children. Health care professionals were also cited as sources of information, and websites were mentioned as sources of information by a few of the mothers. Like emotional support, informational support was provided by network members whether they lived in Calgary or not.

As might be expected, the mothers' own mothers and mothers-in-law (and sometimes fathers and fathers-in-law) were often a valued source of information and advice. For example, Joy's mother (who lives in New Zealand) was a key source of information for her:

...my mum is a good role model, um, is how I would describe her. Um, she...so she had three of us, under two so it was pretty busy, pretty busy household with twins, right. Um, and she was amazingly supportive in terms of, um, for the whole breastfeeding/nursing piece, in terms of, you know, how you, how you can breastfeed in public without it being, you know, a big deal, and, and um, you know, not having to kind of coat yourself in blankets, or sheets, or whatever you need to do, um. And I suppose because we had talked a lot about that before Graham was born I felt, quite comfortable with it, and I think

that really helped in the fact that nursing him hasn't been a problem... So she's, she's been, awesome, and really good for advice and that kind of stuff. Although sometimes she's like, 'I can't remember, it was, that was 32 years ago!' (laughs). (Joy)

Joy appears to suggest that the fact that her mother had three children under two years old adds to her value as a source of information and as a role model. Linda appears to make a similar judgment about her parents:

Um, and then my dad, like, we talk to, my mom and my dad you know pretty much every day, every 2<sup>nd</sup> day. Um, you know, just, kind of like, someone to talk to, for - my parents, both of them, and get advice, I mean they had three kids. (Linda)

Melanie also received advice and information from her mother even though she lives far away:

...Um so, hugely important and still like I think – she's back in New Zealand I still call her and ask her questions. She'll tell me things about, what happened when I was young or, what I was like as a baby, and. Yeah so I find it helpful. (Melanie)

Despite the fact that the new mothers' own parents had in fact been parents of new babies a long time ago (as illustrated by Joy's mother's exclamation), they were still talked about as important sources of informational support.

Health and wellness professionals and practitioners provided information to new mothers on matters related to their own health, to their baby's health, and to the nuts and bolts of parenting young babies. Melanie described having a very positive experience with the public health nurse who came to see her after her baby was born, and who helped her with breastfeeding, answered her questions, provided reassurance, and referred her to physicians for her postnatal health concerns. Joy had a similarly positive experience with her midwifery group:

[The midwives] were excellent. It was um, a really, really nice experience being with them. The quality of care was amazing, um, and, very attentive and even after the six weeks when we handed back to our family doctor? Um, you know they still kind of keep in touch, and, you know, make sure that we're – you know, how we're doing, and, I mean they're, by no means obligated to, but they're fine if we send them an email, or, you know, phone up for a question or whatever. It's really, it's really – I really kind of appreciate that. It's kinda, really supportive.

Barbara, whose son had been having issues with reflux, received information from doctors on possible food allergens and how to avoid them. She also found information provided by a Health Link nurse and on-call physician helpful in making the decision to take Ethan to the hospital when he was very congested and not breathing easily:

...in the end...they did suggest that I take him to the Children's Hospital but I was glad that I was able to sort of feel that out first without - either not going, or running there first without checking...so that was good. (Barbara)

When Sonya was struggling with her son's sleep habits – she and her husband could only get him to go to sleep by holding him and rocking him – she sought help from a sleep consultant, who gave her practical advice on getting him to fall asleep in his crib:

I struggled, the three weeks when he was- wasn't napping during the day, I really felt like he, he wasn't happy, um, and he was struggling, he was tired, and cranky, and crying, and, that was really hard on me. 'Cause I didn't know really, how to fix it. Um, so I actually ended up seeking, ahm, help from a sleep consultant in Vancouver...I called her and I just said like I, I don't know what to do like what I'm reading in the books I don't know how to put into practice or it's not working...and so she gave us a plan to help us help Jackson fall asleep on his own ... and allow him to go into his crib... 'drowsy but awake' ... like his nap today seemed pretty good. (Sonya)

Emily, who had not had a great deal of prior experience with babies, found the information presented by her AHS prenatal class educator useful:

I, I liked my mums group or, I guess our prenatal class we did um, five week – we did the ten-week course where it was five weeks before and five weeks after. So that was really, um, one of the more beneficial... Michael probably knew more than I did 'cause he had nieces and nephews longer than I've had, but he um, we still wanted to um, I just thought the outline, the way that they did the program, like it touched on, I thought it was a good balance of everything. (Emily)

Emily also found that the other new parents in the prenatal class were useful sources of information, particularly when it came to advice on up-to-date services or baby equipment. The other new mothers related similar experiences of helpful information sharing among new parents:

Like it just sorta happens automatically, that you just start talking about...how things are going for you and what you've been doing what's new, and what new resource you've heard of, or um, yeah so maybe it doesn't stand out as obviously but, but that definitely is, yeah really important in terms of support and, ahm, yeah like I say I wouldn't have heard of some of these classes if I hadn't been told, by, by other people and then I've been passing on to other people 'have you heard about this class', or you know 'have you heard of'... so yeah just being able to pass on, things that you hear about. (Barbara)

Such exchanges did not always take place with people whom the new mother had met in person. Linda described her interactions with other new mothers in an internet forum that she joined when she was pregnant, and that she visited several times a day (using her iPad while she nursed her son):

So I get like most of my, you know, advice [from this forum] 'cause everybody's going through the same thing. So it's everybody whose babies were born in, that birth month, and, you can post any questions that you want, um, or, people are like, they'll recommend like, good products like, you know, a baby carrier, or whatever and everybody just you know, gives their own feedback, but. Or ways to get baby to sleep better, stuff like that, but...it's, awesome, 'cause like everything's, it's like top questions, like top, ah, baby gear and nursery gear, and um, what to expect [during] delivery and there's videos and stuff but most of it is like, just connecting with other parents...like you get to know people by their usernames I guess, you don't know really – there are pictures of like them and their kid and stuff, but. They're virtual friends (laughs). (Linda)

Linda continued to describe at length the type of information she received from her “virtual friends”, indicating that some of the advice on where to buy baby gear had helped her save money. Other examples of informational support from friends also revolved largely around the day-to-day practicalities of taking care of a baby, with mothers sharing information about useful websites, what types of baby gear to buy, and what worked for them, for example when traveling with a baby or introducing their baby to solid food.



#### 4.3.2.2 Social support and the relative ages of network members' children

In Section 4.3.1.1, I described how the fact that Barbara's friends' children were much older factored into her "post-baby" relationships with them. A similar phenomenon became apparent in the women's portrayals of their social support experiences – informational support in particular. Other parents whose children were older than the new mother's baby were often named as valued sources of information, as illustrated by Holly who explained that she would ask a friend whose child is older for advice rather than those with younger babies:

It's nice because everybody has kids who are different ages and some people have multiple kids. Like our one friends who have two kids, the younger one's one and the older one's three, so, they, *she's* been through the gamut, of everything and so it's, easier, if I have like, well, if I have lots of questions, or I'm, you know if you're looking more kind of like, long term like, how far in advance did you plan for this, or what's it like, flying with a one and a half year old if we're planning a vacation she's the person I can ask instead of, like, some of my friends have younger kids, than Max, like, their babies are younger, which, is good too 'cause *I* can give advice... (Holly)

Holly establishes her place in the advice-giving pecking order by pointing out that she gives advice to friends (who are first time mothers) with babies younger than hers. Similarly, when I asked Linda if she provided support to her friends who were also new mothers she responded with:

Ummm, it's usually, like the ones who are um, who have - their bab[y] is like a little, like one month younger than Caleb, so she, usually asks me like what worked – he's waking up all the time, or, like what to do, if fussy, and that kind of stuff, so (something) when we're together, it's always talking about babies (laughs). (Linda)

Linda specifically referred to the friend whose baby was younger, although she had friends with babies born within a month or so on either side of her daughter. Emily also commented that she was less likely to give advice to her friend who was a first time mother who was "a couple months more into it". This hierarchy of advice-giving is reflected in Barbara's feeling that because she was a first time mother, she did not feel her support was needed by her friends who already had children, even if their youngest children were younger than her baby:

I guess...um...some of, some of my friends who are, you know have babies again, have had babies before, so I don't really feel like they need as much support from me although we, you know, still compare notes. (Barbara)

For some of the first time mothers – and in contrast to the mothers who relied a great deal on their parents for information – the notion that parents of children older than the advice recipient's child were qualified to give advice was accepted as long as the age gap was not too large. Emily referred to the information provided by her parents' generation as “old school” (see quote in the next section), and indicated a preference for information from parents whose children were younger, mentioning a friend with two preschoolers whom she asked for advice. At another point in our conversation she talked about appreciating advice from people who had very recently – within the past few months – been through the same stage with their babies:

... so, just to talk to someone that's just been through it, so it's nice to talk to someone that's um, not information from like a year ago and then. And, I guess Michael's brother has a one-year-old and same with my brother so then you just talk with them and see, what they used, and what worked, so. (Emily)

When talking about how she shared information with other mothers, Jessica also indicated a slight preference for seeking information from a friend whose baby was at a similar stage as her daughter:

...I guess because our kids are, at such a similar age, not that they're both first children but that they're a similar age I guess, we might, talk more specifically about the day-to-day kind of things that are happening, but...[for example] what, what your baby likes to eat I don't know that I would've, I would think to go to Jenna and say, what does Caitlyn like to eat rather than going to Shannon and asking what her six mo- six-year-old like to eat when he was six months old kind of thing, so. Yeah, but not that I'm opposed to finding out what Shannon did for introducing her kid to food, or, anything. (Jessica)

Information from a variety of sources was appreciated by the new mothers, but information and advice from network members who were very recently in their shoes appeared in some cases to be given slightly more credence; correspondingly, mothers felt

more qualified to provide advice to women who were even just a step or two behind them in the transition to motherhood.

#### 4.3.2.3 Unhelpful support

The vast majority of support experiences described by the first time mothers in this study were positive; in most cases the support offered was understood to be meant well, was sought out by the new mother, or was considered helpful (or any combination of these). There were occasions, however, when support offered by network members was not considered helpful. The first time mothers described several instances of such “unhelpful” support, and in a few cases indicated how they handled these situations.

Although many instances of helpful informational support were described, this type of support was most often presented as problematic. Negative experiences sometimes resulted when different people or resources provided contradictory information, as described by Emily and Barbara:

...so I had at least four to five different [nurses or lactation consultants]. And, their advice was 80% similar, but then – and it was all pretty good advice but then um, there was a few contraindications I guess like I s- like one nurse would try to correct another nurse...like ‘oh she told me to do this’ or whatever, so. There’s like a little bit of maybe old school, um, theory, maybe as opposed to like new, um, that – ‘oh we used to do it that way’ is the comment I heard, or, they’re they don’t, ‘they don’t want us to teach that anymore’ is basically the line I heard. So. (Emily)

Um, yeah [the doctors at the breastfeeding clinic] have been good, ah- some of what they’ve told me sort of contradicts (laughing a bit) ah, what I’ve read or heard elsewhere so that’s been a little bit confusing. Um, but you know, I wanna believe that they’re the experts in breastfeeding so I’m taking what, what they’re telling me as, as you know, the “word”. (Barbara)

Although Barbara chose to accept the information and advice from the clinic doctors as the “word” (over other sources of information), she expressed some hesitation in doing so when she indicated that she “want[ed] to believe” that they were the experts. Later on in our conversation she reiterated the sense of confusion brought on by contradictory information:

Yeah I think that's been the most overwhelming is just not knowing, feeling like there's so much to know, and not knowing any of it, and then, getting contradictory information even if it's just from friends or reading it online or whatever like that's, *that's* the part that's been most overwhelming is really wanting to make sure I'm doing the right thing? but not knowing, you know, what it is, and getting confused if I'm, hearing different things from different sources... (Barbara)

Another source of frustration vis à vis support from health care professionals stemmed from advice that appeared to be based on general policy, rather than on a mother's specific case. Allison (who works in the health care system) felt that workers at Health Link, in order to limit their own liability, would always advise parents to take their child to see a doctor regardless of the actual situation:

No, I wouldn't call [Health Link]. Every time you call they'll just say 'go to the hospital' anyway, so. I find by the time you give them all the information, it's, wasted half an hour that you could have been sitting in the waiting room to, go. (Allison)

Information that was considered out of date or inaccurate was (not surprisingly) also perceived by the new mothers as not useful, as illustrated by Emily's comments:

I'm thinking of like mothers and mother-in-laws and stuff, but I'm like, all their information is like old school... Michael will wander over, and his mom [has] like, put the baby to bed on the tummy with the blanket over his head, (laughing) it's just like, we don't do that anymore, so. (Emily)

As demonstrated in the following quote from Holly, new mothers sometimes handled instances of unhelpful advice or opinions by listening to them without voicing opposition, but then disregarding them in practice – without letting the advice-givers know that their advice was not welcome or heeded:

Like, my husband's family, is, a bit ridiculous, so (laughs a bit) they have, just their opinions about some things, and (laughs). And it's interesting being a physician right because they still argue with you, it doesn't seem to matter... 'No, he should be getting water at like, a month old.' And I'm like, 'no he doesn't need water'. And, 'no, no, he looks like he's thirsty'... they don't live here, so. It's easier, 'cause, you talk to them once a week, and you can be like, 'oh yeah, that's a great idea maybe we'll consider trying that this week', and then, it's not like they live here and they see that you're not doing what they, are suggesting, so. (Holly)

The good humour with which Holly was able to take her in-laws' misguided opinions contrasted starkly with the difficulties Erica had dealing with her mother-in-law's opinions on feeding her baby. Erica struggled a great deal with breastfeeding (almost to the point of becoming depressed) before deciding to give her baby a bottle instead:

In the beginning it was, a little tough 'cause she tried to give a little bit more advice and, we didn't talk for a little bit but, it's, it's the way it goes, so... Yeah, well and especially after like, breastfeeding and, it was kind of like, she was upset about the decision, but I'm like. She'd never really done it either, so it's, you can't really give me the, the gears about it, so. How much we're feeding him, she's like, well you're not feeding him enough but I'm like no, so. I got really upset but, Brad called her, and talked to her and she was a little upset but she got, she got over it. It's, yeah it's tough but she can be very opinionated, so (laughs a bit). (Erica)

Joy's mother-in-law and father-in-law, both of whom had been health care professionals specializing in children, were initially cited as helpful sources of information, but partway through her narrative, Joy's tone changed slightly:

So, um, so my father-in-law was a paediatrician? So, it's – an, and I would Skype with him, probably twice a week? So once in the weekend with Greg and then we'll catch up during the week so they can see Graham as well. Um, and they're really helpful, and, um, my mother-in-law was a, um, a children's nurse. So, um, you know, if you've got any questions or you're like, you know, this, I don't, kind of, yeah – I mean it was hard for them when we chose to do, or when we talked about doing our, our home birth. That was – they were very concerned about that. So um, that – I think that made things a little bit, I don't know, they were, they were very pleased when, when we said we were moving to a hospital. So um, and that, that's just everybody's background is a little bit different. (Joy)

The second part of her quote above implies that her parent in-laws' background in “mainstream” health care and their corresponding opinions on home birth caused some tension between herself, her spouse, and his parents.

Barbara, whose son was experiencing reflux and possible allergies, found that well-meaning friends sharing stories of their own children's ailments – perhaps with the

intention of demonstrating that it all turned out okay in the end – had the effect of causing her additional stress and worry:

...it was funny, as much as I love and appreciate the, the support of my friends, it was in talking to some of them that was...increasing my stress, because some of them have had really bad experiences where their kids have ended up at the Children's Hospital, or, you know, gotten really sick, and when I was talking to them, and comparing kind of some of what I was seeing in him, it got me more worried about oh what if I'm missing something, what if there is something like that, and – they didn't *mean* to stress me out, I mean they were just sharing their experiences with me (laughs a bit), um, and trying to be helpful, but, but I found that sometimes that was...counterproductive, and so I kinda have to step away from, talking to some of them sometimes and, and looking at yeah, what does the breastfeeding clinic tell me, what's the paediatrician telling me, and not...losing sight of that, yeah. Yeah.  
(Barbara)

She handled this in the same way in which she handled some of the contradictory information she came across, by choosing to trust in the information she was receiving from the health care professionals who were looking after her son.

These examples of “unhelpful” support notwithstanding, the new mothers gave overwhelmingly positive accounts of the support provided by the members of their social networks who collectively provided emotional, instrumental, appraisal, and informational support.

#### ***4.3.3 Comparisons to others: Network members as frames of reference***

First time mothers frequently used other network members (or their children) as a frame of reference relative to which they could situate their mothering experiences and assess their babies' development, disposition, and behaviour. In their comparisons with other mothers and babies, the new mothers expressed a range of reactions: from one mother's concern that her baby was lagging behind in achieving certain milestones to other mothers' expressions of pride or satisfaction at their babies' development or their own mothering abilities. For example, when I asked her how she was feeling about her experience as a mother so far, Allison responded with:

Well you know how you always wonder, like is this right or that right, or whatever. Like I really think she should be better at holding up her head for example, but (laughs) she's, not. So, it's just, good to see other people that are [going through similar experiences]. (Allison)

When asked if she saw other babies doing things and wondered if her own baby should be doing those same things, Allison continued with:

I *do* see that, a lot, like I, I think she is, like, a little, well, she's holding up really good right now but, but she's not, she's not the greatest at that. And there's lots of babies her age that, can roll, and there's no sign of that, so.

(Carol: Mm hmm. But she's still only three months.)

Yeah, I know, yeah. So, I mean there's a wide range but yeah you you'll always see people that are, ahead or behind you, right? So.  
(Allison)

Despite the fact that her baby, at only three months, was developing within “normal” standards, Allison was concerned about her head control, and seemed to take comfort in seeing that other people had concerns as parents. On the contrary, seeing that “lots of babies” her daughter's age were able to roll over appeared to cause her concern. Her statement that one will always see people who are “ahead or behind” in various aspects of baby development emphasized the opportunities for comparison – conscious or unconscious – presented by network members who had children of similar age to her own baby.

In addition to development, the new mothers sometimes compared their babies' general temperament to that of other babies. Holly, despite the challenges associated with what she described as her son's “strong personality”, also appeared to take pleasure in comparing her son's not-so-easygoing – but more “interactive” – character with her friends' calmer babies:

...and, I love it when he interacts with other babies. I think it's hilarious, 'cause a lot of my friends, their babies don't interact. Even if like, 'cause I have some – the ones from like, prenatal class, their kid's a week, older, than him. So they're pretty much the same age, and it's been interesting seeing them together? Because they're very different in temperament, their baby is very calm, and very just kind of [makes slapping noise and motion like something falling over] (laughs a bit)

she calls him The Lump (laughs) ‘cause he just kind of, he doesn’t roll, he doesn’t like, Max has been rolling since he was three months old, and, like, log rolling around the house and so. I’m *used* to that, and then to see [other friend’s baby] and he just lays there on the floor on his back playing with toys, and I’m like man, if I ever put Max on the ground like that it would – I, I can’t, he doesn’t stay on his back. And so (laughing) it’s funny, because, Max will sit there and like, *smack* [other friend’s baby], to get him to look at him and get him to laugh at him and he’ll poke at him, and (laughing) and so...um, so those – my favourite things are yeah, him, interacting with other, babies, and, just him interacting with people, like we go out and he just smiles at, the cashiers, and, smiles at random strangers, and (laughs) anyone who looks at him he grins at them and (laughs). So it’s, it’s nice ‘cause he’s a really interactive, baby. He’s, he’s not shy, or, or, timid, or anything like that. (Holly)

In addition to enjoying her son’s comparatively high-energy and outgoing nature, Holly also displayed a certain amount of pride in the fact that Max had achieved the milestone of rolling over before her friend’s baby, who was a week older. Emily also assessed her son’s development – in terms of his physical growth – relative to other babies the same age:

...there’s another baby that was born within a few weeks another friends of ours too, and um, I, it’s funny that Michael tries to compare to like, oh “what’s your [baby’s] weight” and “what’s your [baby’s] height” and all that kind of stuff so it’s kind of funny, just to like compare but, as long as they’re kind of roundabout you’re doing okay, so. (Emily)

Although in the above quote she is describing her husband’s comparison of their son’s “stats” with those of their friends’ baby, she also declares that as long as the babies are relatively on par, they are “doing okay”. (Here, it is possible that her use of the phrase “you’re doing okay” reflects an assessment of her own performance as a parent, as gauged through comparison of her son’s development with that of other babies).

First time mothers also looked to other mothers and their babies in order to judge how well they were performing as new mothers. Holly described how watching what other parents did, and comparing her son to their children, helped her feel more confident in her role as a mother by reaffirming her parenting choices and by providing a slightly more realistic standard than one she might encounter in books or by watching TV:



I think, um, well, like all moms always compare, right? So you compare your kid to their kid (laughs a bit) even though you don't want to, and even though you try not to you always do, 'cause it's just natural it's human nature. And ah, so I think it, it helps, provide you with, 'oh I wouldn't do that with my kid, but, you know, I do this instead', and, and it gives you kind of a sense of confidence that you feel like you're, you're doing the right thing? I think. So... And then, an- yeah it just gives you a sense of confidence that you're, that you're doing okay. 'Cause you're like, oh you know, their kid's dirty all the time too, or (laughs a bit) the kid's got food all over their face and they went out of the house like that (laughing) or they've got a stained shirt on. I'm not a bad mom for sending my kid out of the house with a stained shirt on, or clothes that don't match (laughs). Just giving you that sense of normalcy, right, 'cause if you, go by, you know, what all the books say, and what all the, and, TV shows and all that, and everyone's got their opinions. But just to see that other people struggle too, or hear that other people are having, you know, that they didn't follow any books in terms of sleep training, and you know, their kid finally – their kid *does* sleep through the night no matter what you do you can't, *break* a kid it's not like you're gonna, ruin them forever unless you do something really bad. But if you make common sense kind of decisions and try your best I think. (Holly)

This self-assessment through comparison is closely related to the reassuring emotional support described earlier, whereby other mothers, describing their own experiences or their babies', provided the new mothers with a sense of what might be considered "normal", both in terms of their babies' behaviour and development, and in terms of their parenting skills. In the examples above, the new moms compared their babies to other babies through observation; in other cases, they did so by participating in various versions of the "what is your baby doing now" conversation with parents of babies who were similar in age to their own. Emily's husband comparing weight and height measurements with their friends is one version of this type of conversation, while others were less quantitative. For example Jessica, Allison, and Barbara described comparing notes with other mothers:

Yeah, um, well just asking, kind of, you know, how does your baby like this kind of food, or what's your baby doing now, and that kind of thing... (Jessica)

...one of the people I met at the, prenatal class I meet once a week to go walk with. And it's good, just because they're born, like, just a few

days apart so we can – um, we can compare – not compare, that’s not, fair but like just talk about what each one is doing I don’t mean compare them against each other but, like if whatever their bowel movements are of the week or whatever. (Allison)

...we just sort of compare notes about you know, like oh is he sleeping is she sleeping, have you tried this, or heard of this, or, you know, how is this going for you. (Barbara)

Information on what babies “should” be doing or what milestones they should have achieved at any given stage is widely available from resources such as books, the internet, and health care professionals, but new mothers appeared to frequently use the frames of reference available to them in their own networks to gauge their babies’ – and their own – growth and development.

#### ***4.3.4 “During the day”: Context specific companions and activities***

A common thread in the new mothers’ portrayals of their experiences of motherhood highlighted the context specific quality of some of their network ties. In conjunction with the various interactions with network members described in previous sections, many of the ten women interviewed (nine of whom were working before having their babies) referred to daytime companions: These were other people whom, by virtue of being unemployed, retired, stay-at-home mothers, on maternity leave, or for other reasons were available for companionship and support during the Monday to Friday work week, when their spouses and other family members or friends were unavailable. In describing these relations, they repeatedly used the phrase “during the day” and “people who are off” (and variants on these) to situate the companions and activities that had taken on specific importance in their adjustment to the rhythms of new motherhood within the context of an extended maternity leave. For example Holly and Allison, who are both health care professionals, recalled their initial concerns about and struggles with their day-to-day lives during their maternity leave:

But those initial, first few months, where, you’re basically, like – you feel like your brain is melting (laughs a bit). That’s what I felt like, because, I was used to, being really busy during the day, and then, most evenings, had an activity...So being home a lot, and being tied to the

house, was a, was a big transition... I was actually really worried, when – before I had Max, because I was like, what am I gonna do, all my friends work, during the day, what am I gonna *do* all day I'm not gonna know anybody, I'm not gonna be able to go hang out with anybody. (Holly)

...I've always, been out – like I'm I wasn't at home before so my big fear was being trapped at home I didn't want to be trapped at home. So, I made a point of we do something every day morning and afternoon out, so we've signed up for a lot of classes (laughs a bit) um, or else we meet people for walks, or, those kinds of things, so um, people who are off during the day I met through, the, I guess prenatal classes through the health region but they were the – we did the long one like the one six before and the like after, so ten classes total. So, um so we have people through that class I can meet during the day. My sister isn't working right now so if we if I can get to her she can't drive so we go up there during the day, or whatever. My mom's retired, so we have her during the day (laughs). (Allison)

Both women were concerned about how they would handle the change in their daily context – from their busy work environments to being on maternity leave – after their babies were born, and Allison proactively lined up activities and companions to ensure that she was not “trapped at home” with her baby (to the extent that, as described in Section 4.3.1.2, she found herself overscheduled, and had already reached a point where she had “enough daytime friends”).

Mothers described finding daytime companions by meeting new people through various prenatal or mom and baby classes or by building on existing weak relationships. Holly's account of becoming friends with someone who had been a longtime acquaintance is detailed in Section 4.3.1.1; this friend is mentioned again below, along with other new friends met through prenatal aquacize classes, and, like Allison, through prenatal childbirth education classes:

... I go, with [my husband's friend's] wife and the girls to the zoo, and we go on outings. And then, I've got a friend who I met in a prenatal, aquasize class who has a little girl. So we see each other once a week usually and another friend who we met in prenatal classes who, we see usually once a week, so. We try and, get out, probably, three times a week? To see other people with kids. So. Just to get out of the house, and – three or four times a week. (Holly)

In addition to becoming friends with and strengthening relationships with other mothers, Holly started spending more time with friends with whom she had something other than motherhood in common – availability for socializing during the day:

But I have, probably, four or five friends here who don't have kids. And, some of them I see just as much as before – some of them I see more than before because they work – one of them, well two of them, they work but they work like, they take one day off a week? So, we can, you know, go for coffee or, they can come over, come over for lunch or something, if, they're on their day off. Instead of arranging something – 'cause it, it can be hard for evenings and weekends right, everybody's busy, so. If they're free during the day, we can hang out during the day instead, so. (Holly)

Barbara also talked about spending time with friends during the work week, who were often available because they had older children who were in school and they worked part time. She explicitly attributed her increased contact with Christie, the co-worker she mentioned in Section 4.3.1.1, to the common tie of new motherhood and to the somewhat more practical fact that they were both “off”, taking extended maternity leave. Emily, like Barbara, was also among the last of her friends to have a baby, and so other than her neighbour and new friend Anne who was also a new mother on maternity leave, she relied on friends who worked part time for companionship during the week:

...probably 80% of [my friends], have toddlers now, or school-aged kids whereas like we're, um, so um, they're, you know it's good advice, but we're not um, seeing each other like, 'cause they're back at work and stuff already so I need to hang out with people that are like part time working or whatever, so. (Emily)

Like Barbara, Linda also found herself spending more time with friends and coworkers who had just had babies; despite her initial reluctance to “hang out only with other moms”, described in Section 4.3.1.1, she did end up doing just that, in part because they were, as she put it, “people who [were] off anyways...during the day”, making it natural to spend time with them. She also took advantage of her bachelor brother's daytime availability:

Um, my brother, lives here in Calgary so I see him, like the most out of the family beyond – besides [my husband]. Um, and he, um, is fortunate to work from home, so, to have someone else like to go out with during the day, like, even just for lunches, or he'll come over, to

visit, or go, you know to Ikea or something like that. Just to get out of the house or, watch movies or something like that. (Linda)

While the new mothers in the preceding examples sought out other new mothers with whom to spend time, Jessica and Joy expressed their good fortune at already having other mothers in their lives with whom they were close who fit the criterion of daytime availability:

....and that I have people to spend time with during the day I think that makes a huge difference. I can imagine that if I didn't know anybody else who was, at home with their kids right now I think it would have been really lonely. And I think I probably would have sought out a lot more programs and that kind of thing than I have, um, just because I would have needed to meet people in the same shoes as me...I feel like I'm quite fortunate to be in the position that I'm in and I don't think we could have planned it the way that it happened just having so many of my, really close friends having, kids at the same time, really close together, so we've got basically our whole maternity leave to be off together, so, um. (Jessica)

... my friend, um, she's awesome she's um, she's the one who put me in touch with the midwives. And um, and I think having her as a stay-at-home mum to kind of catch up and do things with, and um, even thou- her daughter is three and a half, but it's still nice to, to have somebody else to – I mean, and I'm really lucky I've got a whole bunch of friends who are, either stay-at-home mums or on mat leave so I...I fe-, I don't feel cooped up by myself (laughs). (Joy)

In addition to seeking out specific daytime companions, the new mothers avoided being “cooped up” by themselves through daytime activities. Most of the new mothers listed several activities that they were doing, or soon planned to do, with their babies during the day. (The exception was Erica, who indicated that because of a currently tight budget she had had not signed up for any classes, and was not sure of what free programs were available, asking me for suggestions.) Activities mentioned included: formal “mom and tot” fitness classes such as aquafit and fitness bootcamps (and in one case baby Zumba); formal baby-centred programs such as library story times or AHS “Baby & You for Moms” or “Feeding Your Baby” classes; formal playgroups; and informal activities with other mothers such as coffee, “playdates”, going for walks, or hiking. Jessica’s summary reflects the types of activities described by most of the new mothers:

Um, so I'm part of a parents & tots group through my church? So we meet um, every other Thursday, for that. And um, I go swimming with her and I'm gonna be signing up for a, an aquafit class that I'll bring her to, um, designed for mummies and babies. Um, and I think in the New Year I'll do, um, some of the programs through the library as well – a lot of those seem to start at six months, so um, these first six months we just kind of did more, casual, so me and my friends went to the pool with our babies but it wasn't for a class or anything like that and, um, but lots of walks with our babies, and we've gone out ah, out to the mountains to do some hiking and, that kind of thing, so. Um, yeah, and just going to somebody's house for, a visit while the kids nap and that kind of thing as well, so. (Jessica)

These activities appeared to serve the dual purpose of getting mom and baby out of the house while providing mom with some social interaction; in the case of “mom and tot” fitness classes they also provided a way for mothers to exercise, while AHS classes provided baby-related information. For these mothers, all but one of whom were employed before giving birth, the extended leave from their pre-baby daily contexts created specific companionship and activity needs during the day.

*Summary.* The social networks of the first time mothers who participated in the in-person interviews were largely comprised of close family and friends, many of whom provided one or more types of support (not all of which was helpful), and many of whom provided a basis for experiential comparison. The age of network members' children relative to their own appeared to be a factor in the credence that first time mothers gave to information they received from other parents. Relationships with network members changed after the birth of their babies; in particular new mothers often spoke of strengthened relationships with other parents. Where new mothers perceived gaps in their networks – particularly related to how they spent their time “during the day” – new mothers sought to fill them by spending time with current acquaintances or by meeting other mothers through websites and mom and baby activities and programs. Daytime companions were an important part of new mothers' networks, whether they were family members or longtime friends, or whether they were relatively new acquaintances or friends.

#### **4.4 SNA methods: Comparing data collected through structured quantitative and semi-structured qualitative approaches**

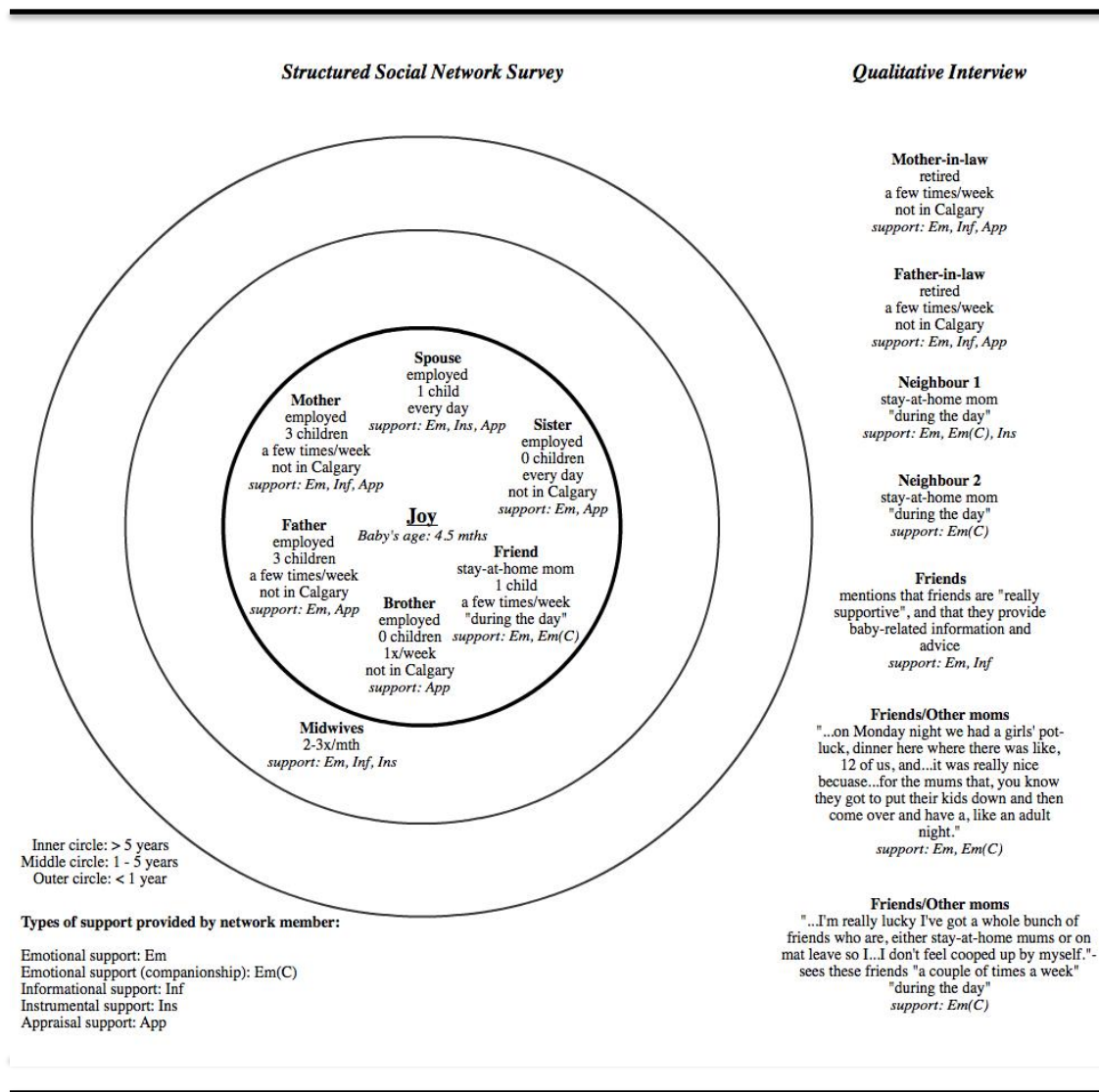
Thus far I have provided quantitative and qualitative descriptions of first time mothers' social networks, and for some of these mothers I have described the changes that occurred in their networks after birth of their babies, detailed the types and sources of support (helpful and otherwise) they received from their networks, discussed how their networks provided a basis for experiential comparison, and gave an account of how the mothers repeatedly situated many of the relationships they described within the context of the day-to-day social needs associated with being a new mother on extended maternity leave. In the final section of this chapter I shift my focus from substantive concerns to ones of method, by comparing the social network data obtained from the in-person structured social network interviews and the semi-structured qualitative interviews. This brief comparison is extended in the last chapter alongside a discussion of my substantive study results.

Figure 4.1 and Figures E.1 through E.6 depict the social networks of the mothers who participated in the combined interviews. These “target diagrams” were created using an adapted version of the hierarchical mapping technique associated with the convoy model (Antonucci, 1986) described in Chapter One and Chapter Three.<sup>25</sup> These diagrams were used to (1) look for patterns in some of the characteristics of network members and their interactions with the new mothers (e.g., network members' parenthood status, employment status, support provision, frequency of contact, and length of time known); and (2) display any differences between the network members elicited by the “important matters” name generator during the structured network survey interview, and those referred to during the semi-structured qualitative interview. The network members named during the structured network survey interview were assigned to the inner, middle and outer circles as described in Section 3.7.2 (see also legend in Figure 4.1) while network

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<sup>25</sup> The convoy model is based on the notion of close, supportive relationships. A major deviation in my use of this model and its attendant mapping technique as a lens through which to consider my network data is that the network relationships depicted are not automatically relations of supportive exchange, as they would be if I were using this as a network elicitation technique in strict accordance with the procedure described by Antonucci (1986).

members who were not elicited during the structured network survey, but who were mentioned during the qualitative interview, were placed outside the target diagram. Note that because these additional contacts were not systematically elicited, the information obtained about them varies according to what emerged during the course of the conversation. The new mothers sometimes directly mentioned individuals, but often referred to groups of people not listed during the network survey interview – both types of references to additional network members were recorded on the diagrams.



**Figure 4.1 Combined social network diagram: Joy**



Based on the new mothers' combined social networks depicted in Figure 4.1 and Figures E.1 through E.6, a few observations can be made:

- Most network members named in response to the “important matters” name generator were, for all mothers, situated within the inner two circles of the diagram.
- During the qualitative portion of their interviews, all of the new mothers mentioned people who were not mentioned during the structured interviews and with whom they spent time or who provided support. In some cases they explicitly mentioned that these people should have been on their network list.
- Network members with whom the new mothers spent time “during the day” included those named during the structured network survey as well as those mentioned during the qualitative interviews (these network members also tended to be retired, on maternity leave, or stay-at-home mothers).
- Support was provided by network members who were named during the structured network survey interviews and by some people who were mentioned only during the qualitative interviews. “Support” from some network members consisted mainly of companionship; these network members fell both inside and outside the target diagram.
- Not all network members within the target diagram were cited as providing support.
- During the qualitative interview, all of the new mothers mentioned individual parents or groups of parents (e.g., prenatal groups) with whom they socialized, but who were not named during the structured network survey interview.

The social network data that emerged during the qualitative interview differed from, and was complementary to, the data elicited through the structured social network survey. This is discussed further in the next chapter.

*Chapter Summary.* The social networks of first time mothers comprised a variety of ties, but consisted largely of family and friends who collectively provided emotional (including companionship), informational, instrumental, and appraisal support. Although most support was positively received, not all support was considered positive, and the credibility of support from network members was often gauged in relation to the ages of their children relative to the new mothers' babies. Network members, particularly other mothers, constituted frames of reference relative to which new mothers could assess their skills and experiences and their babies' development. Network relations changed with the advent of motherhood, and new mothers consciously adapted network ties, or sought to adapt them, to their changed daily contexts. Different aspects of new mothers' networks were highlighted by the different methods used to elicit them. In the next chapter I discuss both the substantive and methodological implications and possible applications of my combined quantitative and qualitative results.

## Chapter Five: **Discussion and Conclusion**

This exploratory study contributes to social network and new motherhood literature through the quantitative and qualitative descriptions of first time mothers' social networks and experiences associated with them, and through an examination of the methods used to elicit and describe these networks. In this final chapter I first discuss the main substantive study results, following which I discuss methods-related observations and make suggestions for future studies of the social networks of first time mothers. Lastly, I suggest possible applications of my study findings and avenues for future research.

### **5.1 What do the social networks of Calgarian first time mothers look like?**

#### ***5.1.1 First time mothers' social networks: Comparison of Calgarian mothers to new mothers in other contexts***

The social networks of the 40 first time mothers who completed the online survey were dominated by other women and by non-kin – including friends, co-workers, neighbours, and health care professionals – who were loosely connected to one another. These networks were slightly smaller on average (even accounting for the exclusion of spouses in my analysis) than the mostly kin-dominated social networks described in previous studies of first time mothers (except for Richardson and Kagan's (1979) friend-dominated networks) (Bost et al., 2002; Cronenwett, 1984, 1985a, 1985b; Gameiro et al., 2010; Goldstein et al., 1996; Richardson & Kagan, 1979; Tarkka, 2003; Tarkka et al., 1999). On average, 25% of the network members of the new mothers in my study were first time mothers, a value that shows some consistency with previous studies in which approximately 40% of network members were parents of preschool-aged or young children (Cronenwett, 1985b; Richardson & Kagan, 1979). Previous network studies on first time mothers did not explicitly report comparable social network data on health care professionals, although Cronenwett (1985b) reported that at eight months postpartum, 70% of new mothers reported increased support from health professionals. Web contacts formed a very small part of the networks of the mothers in my sample, but given my small sample size and the non-interactive nature of the survey (i.e., respondents could not

ask for clarification on the inclusion of web resources as network members), it is possible that the results underreport the extent to which new mothers depend on internet sources for some types of support in early motherhood. While data from the above-noted literature on first time mothers did not include information on network web contacts, other research on mothers of young children suggests that websites and web forums can be important sources of support and information for these mothers (Madge & O'Connor, 2006; Nelson, 2009). Combined with the results from my online network survey and the mentions during the in-person interviews of motherhood-related internet use, this suggests that there is value in including these resources when considering the social networks of first time mothers. Other studies did not examine new network ties for first time mothers or density of the networks. Thus I was not able to make comparisons on these aspects.<sup>26</sup>

### ***5.1.2 Comparison of first time mothers' networks to the networks of GSS respondents***

Given the importance of the name generator in ultimately determining what network relations are studied (Bernard et al., 1990; Campbell & Lee, 1991; Marsden, 1987, 1990; McCallister & Fischer, 1978; van der Poel, 1993), I would ideally compare the social networks of the women in my study to other new mothers' networks elicited by the "important matters" name generator, but such studies do not exist. Moreover, regardless of the name generator used, there is a lack of consistent data on specific aspects of new mothers' networks such as composition, tie strength (e.g., duration of relationship and frequency of contact), and density. Where possible I compare my results to studies of first time mothers, but I also compare my results to social network data from a nationally representative dataset: the 2004 U.S. General Social Survey, which employed the "important matters" name generator (McPherson, Smith-Lovin, & Brashears, 2006).<sup>27</sup>

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<sup>26</sup> Richardson and Kagan (1979) did provide alter network density values, but direct comparison with their results is not possible because the formula they used to calculate density results in inflated values.

<sup>27</sup> Published articles reporting comparable Canadian GSS social network data were not available; also, the social network module from the 2008 Canadian GSS does not use the "important matters" name generator to generate egocentric networks (Statistics Canada, 2008).

Compared to the networks of GSS respondents, a nationally representative (albeit American) sample, the new mothers in my study had larger, less dense networks: The mean network size of GSS respondents was 2.08, they were composed of 54% kin (including spouses), and the average density was 0.66 (McPherson et al., 2006). Compared to GSS respondents, the new mothers in my study had fewer network members who had been known longer than approximately five years: On average, 89.3% of GSS respondents' network members had been known longer than four and a half years, while on average 68.61% of the respondents' network members in my sample had been known longer than five years. While approximately 86% of GSS respondents' network members (including spouses) were seen at least once a week, this proportion was closer to two thirds for my sample.<sup>28</sup> The low density of the new mothers' networks in my study compared to the density of GSS respondents' networks is likely related to the higher proportion of friends and newer network members: networks dominated by non-kin are more likely to include individuals who are not known to each other than kin-dominated networks. Relatedly, the positive correlation in my sample between proportion kin and network density is consistent with the 2004 GSS data (McPherson et al., 2006). As a nationally representative sample, GSS respondents included both males and females from a broad range of socioeconomic backgrounds; differences in network characteristics between this sample and mine might be expected, given the narrow constitution of my sample, and given that I did not include spouses in my analysis. Additionally, my study was clearly advertised as pertaining to the social networks of first time mothers, perhaps compelling women who felt that they had "good" networks to participate, and also preparing them to list network members. In contrast, the social network component of the GSS was part of a larger survey, and respondents may not have been as prepared to summon this information. Some of the differences between the networks of the two samples, however, also likely reflect the specific circumstances of the new mothers in my sample – their transition to motherhood.

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<sup>28</sup> While my values do not include spouses, including spouses does not increase them greatly.

### ***5.1.3 Factors related to first time mothers' network characteristics***

Discussion of how new mothers' education, age, and their babies' age relate to their social network characteristics begins with additional comparisons to the 2004 GSS data: the result that mothers with lower levels of education had a significantly higher proportion of family members in their networks is consistent with the 2004 GSS data.

Except for the significantly larger networks of mothers in the highest age group (35 and over) compared to networks of mothers aged 30 – 34, no significant effects of mother's age on network characteristics was found. The substantive meaning of the statistically significant difference between the two highest age groups is not clear. Comparable data specific to first time mothers' networks is not available, and age had little relation to network size or composition for the 2004 GSS respondents (McPherson et al., 2006). The age range of 2004 GSS respondents was much greater than the age range of the women in my study, ranging from 18 to 89 years (Warren & Hernandez, 2007).

Given the exploratory nature of this study, comparisons to existing data are not always possible, and potential explanations for some of the significant findings from this study cannot be gleaned from existing literature. While the online network data and the in-person network data were obtained from different samples, the overall similarities in mothers' age, education, and marital status suggests that some of the qualitative data might be used to provide some insight into the networks of the new mothers who responded to the online survey.

The result that mothers whose babies were older than six months had a significantly higher percentage of network members with the same employment status than mothers with babies younger than six months suggests that as babies get older, new mothers seek out other mothers with whom to spend time; since most of the respondents were themselves on maternity leave, "same employment status" largely signifies other mothers also on maternity leave. This possibility is corroborated by the many reported instances from the qualitative interviews of new mothers spending time with other mothers on maternity leave, or indicating that they were ready to meet other mothers.

Relatedly, the positive correlation between the percentage of new network members in a new mother's network, many of whom were first time mothers, and the percentage of network members met through a parent group is consistent with the new mothers' qualitative descriptions of meeting other new mothers through parent-oriented groups such as prenatal classes and mom and baby classes, and points to the importance of these groups for expanding new mothers' networks.

New mothers who were more educated were more likely to have new network members (most of whom were also first time mothers), and to have a higher percentage of health and wellness practitioners in their networks than those who were less educated, suggesting that those new mothers with more resources (e.g., education and, likely, financial ability) are better able to expand their social networks to meet their early motherhood needs. (Cronenwett (1984), the only other author to present data on this relationship for first time mothers, did not find any relationship between education and new mothers' network characteristics.) More highly educated mothers may be more easily able to find and afford activities such as mom and tot fitness classes, or to pay for health and wellness services not covered by public health insurance, such as doulas or sleep consultants. The positive association between the percentage of health and wellness practitioners and the percentage of network members who were met through a parent group might reflect a tendency for some first time mothers to seek support from a broad range of resources, or it might indicate that parenting groups put new mothers in touch with health and wellness practitioners. Regardless of the mechanism, it appears that educated new mothers are more likely to expand their networks, a point I return to later.

*Summary.* While slightly smaller than the social networks of new mothers in most previous studies (Bost et al., 2002; Cronenwett, 1984, 1985a, 1985b; Gameiro et al., 2010; Goldstein et al 1996; Richardson & Kagan, 1979; Tarkka, 2003; Tarkka et al., 1999), the networks of the women in the online sample were larger than those of people in the general population. These networks also included a relatively large proportion of friends (all of whom were female) compared to most of the studies of other first time mothers, as well as compared to the networks of GSS respondents. Compared to the

networks of the 2004 GSS respondents, new mothers' networks were less dense and included a larger proportion of weak ties based on criteria of relationship duration and frequency of contact. Some non-kin network members such as new network members (many of whom were also first time mothers), health care professionals and practitioners, and web contacts appeared to be particularly relevant to the new mothers' changed needs and contexts as they made the transition to motherhood. More highly educated mothers were more likely to add new members to their networks. As their babies grew older, new mothers appeared more likely to include other mothers on maternity leave in their networks. All of these factors, when combined, paint a picture of first time mothers' social networks that to a great extent are organized around the specific needs of new motherhood. In the next section I discuss some of the qualitative findings that enrich this picture of new mothers' social networks.

## **5.2 Network function, dynamics and the importance of context**

First time mothers' social networks consisted of a great deal of family and friends, but other non-kin relations – such as acquaintances, coworkers, neighbours, health care professionals – also formed a significant part of the new mothers' social fabric.<sup>29</sup> In this section, I focus on the functions that network members played in new mothers' experiences, including the provision of support, opportunities for comparison, and daytime companionship.

### ***5.2.1 Core and peripheral network members***

In the discussion that follows, I refer at times to “core” and “peripheral” network members, and given the different methods used to elicit and round out the descriptions of the new mothers' networks, it is worthwhile to explain my use of these terms. Network members can be considered “core” or “peripheral” based on standard SNA indicators of tie strength (e.g., duration of relationship, frequency of contact), on a mother's own

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<sup>29</sup> The discussion in this section is largely based on the in-person findings, and I use the term “network members” to describe people that the new mothers named during the structured social network survey, as well as additional people they mentioned during the qualitative interviews.



assertion of how “close” she considers a particular network member to be, or based on a combination of SNA indicators and qualitative information. Using the relationship duration criterion, newer network members named in response to the “important matters” name generator are considered peripheral. It is possible that within the intense experience of new motherhood, new ties very quickly become strong ties because of high frequency of contact (e.g., regular walks) or because of bonding over the shared experience of new motherhood. With the possible exception of one woman who referred to another first time mother as a “newer closer friend”, this did not appear to be the case; according to the accounts of most of the new mothers, even frequent visits did not appear to translate into feelings of “closeness”. Although some new mothers described feeling *closer* to certain people than they had felt before (e.g., previous acquaintances with whom they had developed a friendship), they did not speak about them as being “close” the way they did with other members such as relatives and “old” friends. For mothers who participated in the combined interviews, some of the individuals or groups (e.g., neighbours, church groups, prenatal group contacts) who were mentioned in the qualitative portion of the interview but not during the structured network survey are labelled peripheral by virtue of several details: they were given role labels such as “neighbour” instead of “friend”; they were sometimes mentioned as a general group rather than as an individual; or they were described as being new ties. For the purposes of this discussion, when I refer to “peripheral” network members, I am referring to these network members and to the newer network members named during the structured network survey. “Core” network members are family members and longtime friends, whom the new mothers also often spoke of in terms of being “close”.

### ***5.2.2 Patterns of social support across the network***

First time mothers relied on the combined emotional, instrumental, appraisal and informational support of different network members to fulfill different needs, a finding consistent with previous research (e.g., Cronenwett, 1984, 1985b; Gameiro et al., 2010; Leahy-Warren, 2005, 2007; Richardson & Kagan, 1979; Tarkka, 2003; Tarkka et al., 1999). Much of the patterning of support evident in the new mothers’ networks was also

consistent with Power and Parke's (1984) model of social support during the transition to parenthood, and with Leahy-Warren's (2005, 2007) results, which were based on the same social support framework used in this study.<sup>30</sup> For example, family, friends and health care professionals (these last I include under what Power and Parke referred to as "institutions") were the most commonly cited sources of informational support in my study, a pattern that is consistent with Power and Parke's proposed model and Leahy-Warren's results. Similarly, the provision of instrumental support by husbands, family, and friends is also consistent with Power and Parke's model and Leahy-Warren's results. Appraisal support did not form part of Power and Parke's model, but my findings that this type of support came from family, friends and health care professionals were somewhat in line with Leahy-Warren's; the difference in findings with respect to spousal appraisal support is discussed below. The women in my study most often described receiving emotional social support from spouses, family, and friends; this is very much in keeping with Power and Parke's model, with Leahy-Warren's results, and with other research (e.g., Cronenwett, 1984; Gameiro et al., 2011; Tarkka, 2003).

Companionship, another aspect of emotional support (Power and Parke, 1984) was provided by close family and friends, but was also often derived from more peripheral network members, along with other forms of support such as informational and (rarely) instrumental support. Similarly, Haines and Henderson (2002) showed that weak ties were significant sources of instrumental support and companionship to older adults. At the same time that peripheral members were sources of support in my study, not all core network members were subsequently spoken of in terms of support. While this might be, as described below, a result of the qualitative method used, it is also congruent with Haines and Henderson's (2002) conclusion that not all significant ties are supportive, and not all supportive ties are considered significant. I discuss the companionship role of peripheral ties in Section 5.2.5.

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<sup>30</sup> Cronenwett (1984, 1985a, 1985b) also used this framework for social support, but much of her descriptive data on new mothers' social support pertains to prenatal support, with selected *changes* in support and perceived need for support reported at five months postpartum.

I first, however, consider the support provided (or not provided) by the new mothers' spouses. The fact that none of the women I interviewed mentioned their spouses as sources of baby-related information is consistent with Power and Parke's (1984) proposed model, in which husbands, along with friends and relatives, are primary agents of relational and physical (instrumental) support, but are not included as primary agents of informational support. Leahy-Warren (2005, 2007) determined that spouses were the least frequently reported as providers of informational support, and more frequently named as providers of instrumental or emotional support. A possible reason for the dearth of spousal informational support is that they simply have none (or feel they have none) to give, because they do not yet have the appropriate skills themselves (Goodman, 2005). Although men can participate in prenatal classes (and many of the spouses of the new mothers in my study did), they are not privy to the additional information and knowledge that new mothers are exposed to during some of the conversations and rituals that mark a woman's journey into motherhood – for example, baby showers – which are still usually “women-only zones” (Nelson, 2009). These conversations and rituals are usually open to women who are not mothers or pregnant, which means that even first time mothers who have not had much direct prior experience with children can accumulate indirect knowledge about mothering through attendance at many of these events before their own pregnancy and transition to motherhood. This may lead the new father (and the new mother) to judge him as a not-very-promising source of parenting information and advice. This phenomenon may also have been at play in the apparent lack of appraisal support from the spouses of the women in my study: the new fathers may simply have felt that they were not in a position to judge their ostensibly more-qualified partners' parenting skills. The contrasting results from Leahy-Warren's (2005, 2007) work, however, in which she found that spouses were identified more frequently than any other network member as providing appraisal support, suggest the possibility that my results are in part an artefact of the method by which social support data was collected. Leahy-Warren (2005, 2007) collected social support data through a structured survey, while I allowed this data to emerge in response to broader questions during the semi-structured qualitative interviews. When asked about whether or not they received feedback from

others on how they were performing as mothers, the new mothers tended to volunteer examples of appraisal support from network members other than the spouse. It is possible that specific questions about feedback from spouses would have prompted memories of this type of support (this may in fact have been the case for all types of support from all network members). Leahy-Warren (2005) also reported that appraisal support, particularly from spouses, was significantly associated with maternal confidence in infant care tasks, suggesting that determining whether or not this support truly exists for new mothers is important.

Many of the new mothers described the instrumental support that their husbands gave them as “helping out” or “giving me a break”, a finding that echoes what has been previously observed: despite the more active role men take in parenting, or are perceived as taking, a certain amount of reversion to traditional gender stereotypes occurs after the baby is born, with the mothers taking on primary responsibility for domestic and childcare duties (Nelson, 2009; Power & Parke, 1984).

### ***5.2.3 Social support experiences: Unhelpful support and the hierarchy of maternal advice-giving***

Based on previous accounts of new mothers and their experiences of social support (e.g., Cronenwett, 1984, 1985b; Gameiro et al., 2010; Leahy-Warren, 2005, 2007; Nelson, 2009; Richardson & Kagan, 1979; Tarkka, 2003; Tarkka et al., 1999), the forms of social support offered by network members – for example reassurance, encouragement, excitement about baby, advice, information, and feedback – and its positive reception, was not surprising. Two aspects of the support experiences described by the women in my study, however, did stand out: the unhelpful nature of some of the support they received, and the hierarchy that appeared to exist among mothers in relation to giving and receiving support.

*Unhelpful support.* Accounts of ostensibly supportive offerings – usually information or advice – from network members that were not perceived as supportive emerged alongside the positive accounts. Common sources of these negative experiences appeared to be people or resources whose advice contradicted that of other people or

resources, or would-be advice givers whose viewpoints or knowledge of childrearing and motherhood differed greatly from those of the new mother. This is perhaps not surprising, as it might be expected that a new mother might become distressed when contradictory information or information and advice not consonant with her viewpoint or current situation serve to make her feel like she is not “doing it right” (Wilkins, 2006). For example, while the women in my study generally had positive interactions with health care providers, other research has shown that health care professionals’ persistent encouragement and support for breastfeeding can result in women who decide not to breastfeed, or who are unable to do, so feeling “pushed” into breastfeeding (Flaherman, Hicks, Cabana, & Lee, 2012; Nelson, 2009).

While some negative support experiences have emerged in the narratives of new mothers, an explicit in-depth exploration of the unhelpful aspects of support was less apparent in other studies of first time mothers; for example, most of the studies referenced extensively here (Gameiro et al., 2010; Gameiro et al., 2011; Leahy-Warren, 2005, 2007; Tarkka, 2003; Tarkka et al., 1999), as well as Power and Parke’s (1984) model, did not include negative aspects of support or network relations. A few studies measured support or network satisfaction (Bost et al., 2002; Goldstein et al., 1996; Richardson & Kagan, 1979), while Cronenwett (1985b) reported on relationships that were perceived to have become increased sources of stress for new mothers at five months postpartum. These studies did not go into detail about whether the qualities of the support were satisfactory or not. Such accounts, particularly when combined with information about support patterning across a network, would be of value to help ascertain which types of support offered to new mothers – and the people offering it – are truly supportive.

*The maternal advice-giving hierarchy.* During my conversations with the new mothers, it became apparent that the ages of network members’ children, relative to their own, created a hierarchy of advice-giving in which mothers of older babies or children – even if only by a month or two – appeared to be deemed more credible sources of information and advice. Previous studies on first time mothers’ social networks and support that reported composition data on other parents of young children in the mothers’

networks (Cronenwett, 1984, 1985b; Richardson & Kagan, 1979), did not provide detailed information on how the ages of network members' children related to the direction of support flow and perceived credibility. My findings do, however, resonate strongly with Nelson's (2009) description of the "elaborate system of advice-giving and respect-showing" (p. 30) among new mothers, in which mothering experience is highly valued and respected and in which, for example, it might be considered disrespectful for a less experienced mother to offer advice to a more experienced mother. The relative age of mothers' babies in my study was an indicator of their relative mothering experience, and had some importance in determining the flow and perceived credibility of information. The tendency for the women in my study to give more credence to advice from mothers more contemporary with them than from mothers much further ahead in the process (from years to decades) was also exhibited by the mothers in Nelson's (2009) study, some of whom also expressed the view that older women's information was outdated. Information from contemporaries might in fact be more up-to-date, which can have important consequences in terms of baby health and safety. In my study, the mothers' eye-rolling amusement at some of their older relatives' baby care practices belies the fact that some of these practices – such as giving water to a newborn or laying a newborn on his or her tummy – are considered unhealthy or unsafe practices today. This is not likely problematic for new mothers who have access to a range of information from their network and who can, like the mothers in my own study and in Nelson's (2009) study, weed out inaccurate or outdated information. New mothers, however, who for whatever reason are more isolated and whose few role models are much further removed from having young children, may be less able to do so. Although up-to-date information on baby care is widely available through health care professionals, books, TV, and the internet, the credence that new mothers give to the advice of more experienced mothers, which may contradict this "official" information (Nelson, 2009), highlights the importance that the relative age of network members' children might have in terms of support, and suggests that this might be an important aspect of new mothers' networks to consider when studying support.

*Summary.* First time mothers' networks provided emotional, instrumental, informational, and appraisal support derived from different members. The types of support provided by different network members was largely consistent with previous research, although spouses did not provide as much appraisal support as might have been expected. Consistent with previous research, the social support was generally well received by new mothers, but instances of unhelpful support did occur. The ages of network members' children relative to the new mothers' own babies' ages was a factor in determining the flow and credibility of support. Consideration of negative support experiences and which types of support are considered credible can enhance what we know about what first time mothers truly find supportive.

#### ***5.2.4 Network member comparisons***

That new mothers' networks serve an important supportive function is not surprising, but the networks of the mothers in this study factored into their experiences of new motherhood beyond the provision of support. Observing other mothers and their babies provided first time mothers with external benchmarks by which they could gauge their mothering experiences and performance as mothers. The comparisons that mothers made when talking about their babies or their mothering experiences also served to confer a sense of normalcy upon some of the common challenges and experiences of motherhood and provide reassurance vis à vis some of the common concerns associated with caring for a new baby. For example, seeing that her baby is gaining weight more rapidly or crawling earlier than a friend's baby can increase a mother's sense that she is "doing it right", and that she and her baby measure up to (or are doing better than) other mothers and babies. Observing other mothering approaches can help reaffirm a new mother's own parenting techniques and decisions, through her conscious confirmation and acceptance of other approaches or, conversely, through their rejection (as described by Rubin, 1967a). The importance of having other mothers through whom new mothers can reflect on, compare, and assess their own experiences has been noted in previous research on first time mothers (e.g., Barclay et al., 1997; Nelson, 2009).

Comparisons with other babies did not always result in positive reassurance for the new mothers. Perceiving their own babies as being behind other babies of similar age in terms of development or milestone achievement, or feeling that they might not be doing enough compared to other mothers was stressful, even when by most standards both mother and baby were doing well. In most such cases concern is likely unwarranted, but for mothers whose babies truly do have developmental delays, consistently unfavourable comparisons with other babies might prompt them to seek guidance from a health care professional sooner than they might have otherwise, further emphasizing the importance of having network members with whom to make comparisons.

#### ***5.2.5 Social network dynamics***

##### **5.2.5.1 Changing network relations in the transition to motherhood: The importance of network members' parental status**

Consistent with previous literature on network change (Antonucci et al., 2004; Antonucci et al., 2011; Bidart & Lavenue, 2005; Degenne & Lebeaux, 2005; Levitt, 2005; Morgan et al., 1996; van Tilburg, 1998b) and with the convoy model framework, new mothers appeared to maintain relations with core network members as they transitioned into motherhood; most of the network members described had been in the women's lives long before they became mothers. The strength and content of these relations, however, did change. First time mothers described strengthened relationships with other parents and a distancing from friends without children, a pattern of change stemming from the often intense commonality of experience – or “experiential similarity” (Suitor et al., 1995) of those in the “exclusive club” (as one mother called it) of parenthood. Other parents also played an important part in supporting new mothers with advice, information, and reassurance, and in providing them with ways to reflect on their own experiences. Additionally, relationships with childless friends were strained when they did not, for example, understand the exigencies of life with a new baby. This pattern of change in network relations reflects Cronenwett's (1985b) finding that support for new mothers from friends with children increased after childbirth, while conflict with



childless friends increased. Similarly, Richardson and Kagan (1979) found that ties with old friends were particularly strengthened when old friends were also parents, while Nelson (2009) also noted that new mothers strengthened or created relationships on the basis of parental status. As discussed in the next section, some of the changes in network relations during the transition to motherhood resulted from the new mothers in my study consciously managing their network ties to fit their changing contexts.

#### 5.2.5.2 Managing context specific network ties

As already discussed, the new mothers described receiving instrumental, emotional, appraisal, and informational support from other network members. They also described the need for and receipt of a specific type of support that took place at a specific time: companionship during the day. Most of the mothers who participated in my study – both the online respondents and the in-person interviewees – were previously employed, and on maternity leave with plans to return to work at the end of their leave. Although as previously described, their networks consisted largely of individuals known prior to their transition to motherhood, the in-person interview participants described changes that took place in their day-to-day networks, particularly with respect to context specific ties – ties that gain particular relevance in a given context defined by situation or time. For new mothers, such ties might include lactation consultants and other new mothers and, especially for new mothers at home with their baby, people with whom to spend time during the day. Their extended removal from the pre-motherhood daily work settings and the corresponding relationships and interactions that normally comprise a substantial part of an adult's network (Fingerman, Bradford-Brown, & Blieszner, 2011) created a need for working first time mothers to find replacements for these daytime work ties to ensure companionship during their leave. Such companionship not only provided adult interaction, but when provided by other mothers, also entailed sharing and discussing some of the day-to-day experiences of new motherhood.

The new mothers engaged in various network substitution techniques (Zettel & Rook, 2004) to intentionally manage their network ties, particularly with respect to their daily companionship needs. (Although context specific ties such as lactation consultants

and nurses were sources of support, these ties did not regularly figure in to the new mothers' daily experiences, and did not appear to be actively managed in the same way that other context specific ties, such as other new mothers, were managed.) When possible they activated existing strong ties with network members, such as family and friends, some of whom were parents or new mothers. They also kindled or re-kindled relationships with acquaintances, or sought new ties by signing up for various mom and baby activities or by seeking mom and baby groups through Calgary-based websites. According to the accounts of some of the in-person interview participants, and based on some of the quantitative online results, new mothers appeared more likely to need and seek out daytime companionship as their maternity leave progressed, supporting Power and Parke's (1984) assertion that different types of support are important at different times throughout the transition to motherhood.

The strong ties activated by new mothers to provide daytime companionship (e.g., parents, siblings, close friends on maternity leave) also often served other supportive functions such as instrumental and emotional support. The weaker ties that new mothers kindled or re-kindled, or the newer ties they sought out (many of whom were not named in response to the "important matters" name generator) were sometimes added to new mothers' networks initially because of their functional specificity (Perry & Pescosolido, 2010); that is, ties were strengthened or formed with individuals who could provide daytime companionship, stimulation, potential access to new information, and in some cases, instrumental support. These are consistent with the functions of peripheral network members described by other researchers (e.g., Fingerman et al., 2011; Haines & Henderson, 2002).

Previous research also suggests that new mothers might be actively managing their networks to fit their changed contexts: Wandersman et al. (1980) suggested that while new mothers might feel cut off from their "general social network" of friends and co-workers, they also may tend to seek out and receive more sharing around the experience of new motherhood. Similarly, Cronenwett (1985b) also noted that new mothers experienced a postpartum increase in network members with preschool children, and they also increased contact with friends but decreased contact with coworkers. This

research was conducted in contexts where new mothers, if previously working, did not receive extended maternity leave. In Tarkka's (2003) study 93% of the mothers were still home with their babies at eight months while at four months two thirds of the mothers in Gameiro et al.'s (2011) study were at home with their babies, but these studies provided no indication of whether or not new mothers' daily contexts played into their network experiences, and focused largely on core supportive network ties. Explicitly studying context specific ties in places where extended maternity leave is offered is important: Mothers returning to work within a few weeks of giving birth, as is the case in contexts where extended maternity leave is not offered, may not have the same need to replace these network members, as they will be returning to these daily settings relatively quickly. That is not to say that they do not undergo changes in their networks, but that the changes in their daytime networks are potentially less drastic for them during their first year of motherhood.<sup>31</sup>

The suggestion that mothers on extended maternity leave have the need for and the opportunity to extend their networks (even temporarily) assumes that mothers indeed have the capacity to do so. For new mothers to expand their networks, they need knowledge of available programs, groups, and activities, the means to travel to them, and in some cases the financial resources to pay for them. These were not a problem for most of the mothers in my study, although one mother described finances being an issue, and was not aware of free activities or groups; other mothers expressed uncertainty about how to meet other new mothers. Of the mothers in the online sample, the networks of those who were more highly educated also contained higher mean percentages of new network members. Thus, although context specific ties – in particular ties related to daytime companionship – appear to play an important part in new mothers' experiences, not all new mothers are equally able to ensure that their networks include these types of ties. It is also possible that my sampling procedure yielded both in-person and online samples that

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<sup>31</sup> Of course, new mothers who do not plan to return to work will also need to reconstitute their daytime networks, but the two mothers in my study who were not sure about going back to work (one was not, one was unsure) did not appear to approach their daytime needs in a way that was drastically different from the other new mothers, although perhaps a more systematic investigation of this issue would reveal differences.

were biased toward mothers who were feeling relatively comfortable in their new motherhood roles and looking for something to do. New mothers struggling with issues such as colicky babies or post-partum depression might be less likely to seek out daytime companionship, and might also have been less likely to sign up for my study.

*Summary.* The supportive aspect of first time mothers' social networks, the change in new mothers' network relations during their transition to motherhood, and the importance of contexts – or situational characteristics – to these networks were consistent with the convoy model framework. The transition to motherhood entails the activation of support – not all of which is perceived as equally helpful or credible – from a broad range of core and peripheral ties. The opportunities for comparisons provided by the social networks of new mothers are also important. In Canada, where most previously employed new mothers take advantage of provincial and federal maternity leave programs and benefits (Marshall, 2010), day-to-day companionship is also very important for new mothers who are removed from their “normal” daily settings for an extended period of time.

Examination of and understanding of the functions fulfilled by first time mothers' social networks can help service providers better support new mothers in ensuring that their support and companionship needs are being met in early motherhood. In the following section, I discuss methodological issues in studying the social networks of first time mothers.

### **5.3 Methodological issues in studying the social networks of first time mothers**

As described in previous sections, the social networks of first time mothers include a mix of core and peripheral ties, with each of these types of ties sometimes serving different functions. In the following discussion I address how (or whether) these ties were elicited by the methods used, and I make recommendations for eliciting the social networks of first time mothers. Lastly, I discuss my use of combined methods in this study and the contribution that qualitative interview data made to quantitative social network data.

### ***5.3.1 Using the “important matters” name generator to elicit first time mothers’ social networks***

#### **5.3.1.1 Online generation of egocentered network data**

As might be expected, the “important matters” name generator elicited networks that consisted largely of “core” ties of family and friends (Burt, 1984; McPherson et al., 2006) who had been known for several years and with whom the new mothers were in frequent contact. The smaller average network size of the online survey respondents compared to the average network size in previous studies of first time mothers was somewhat unexpected; I had anticipated that the use of the “important matters” name generator would have elicited the expected core network ties plus additional peripheral ties related to the new mothers’ transition to motherhood, for example health care professionals and new friends with whom a new mother might discuss the “important matter” of her baby (Bailey & Marsden, 1999; see also Burt, 1984). The result that the networks of the women in my study were dominated by non-kin network members – in contrast to most of the studies on new mothers (Bost et al., 2002; Cronenwett, 1984, 1985a, 1985b; Gameiro et al., 2010; Goldstein et al 1996; Richardson & Kagan, 1979; Tarkka, 2003; Tarkka et al., 1999) and in contrast to the 2004 GSS results (McPherson et al., 2006) – suggests that although the average network size was smaller than that of new mothers in other studies, some weaker, peripheral ties were indeed being elicited. Additionally, 45% of respondents in my study named new ties in their networks; comparable data is not available for first time mothers, but the fact that three quarters of new network members named were also new mothers does suggest that for many of the mothers in this sample, the “important matters” name generator was tapping new, context specific ties.

#### **5.3.1.2 Comparison of online and in-person social network elicitation**

Although the small number of in-person combined interview participants makes statistical description of this group shaky at best, it is of interest to briefly compare

selected characteristics of the networks elicited by the online survey and during the in-person interviews in response to the “important matters” name generator.

The fact that the social networks of the new mothers interviewed in-person were, on average, larger than those of the new mothers who completed the online survey is perhaps a result of online survey respondents, without an interviewer present to prompt them for more information, answering questions in a time-saving manner by listing fewer network members (Matzat & Snijders, 2010). It is not clear why, although the percentage of new network members named by the online respondents and the in-person combined interview participants did not differ greatly, the percentage of new network members who were also first time mothers was vastly different between the two groups. Although five out of the seven combined interview participants named new network members, these were mostly health practitioners. One possibility is that online respondents received information about the survey from other new mothers whom they also listed as network members. It is also possible, however, that differences stem from the very small size of the in-person combined interview sample.

#### 5.3.1.3 In-person combined interviews: Comparison of the networks elicited by the “important matters” name generator and through qualitative interview data

The social networks elicited by the “important matters” name generator during the structured social network survey interview tended to be, like those elicited online, comprised of core network members. The supportive content and intimate quality of most of these ties was consistent with the qualities of affective and exchange relations that Milardo (1989, 1992) described as defining “psychological networks”. The network members who were mentioned in the qualitative interviews but who were not named in response to the “important matters” name generator were, in large part, peripheral network members whose relations with the new mothers could constitute the “interactive networks [that] represent day-to-day social experience” (Milardo, 1992, p. 456). These networks are defined primarily by episodes of social interaction; in this study, many of these interactions were at least partly based on the shared experience of parenthood. Although this describes the overall pattern of network relations, it should be noted that

not all networks fit this pattern exactly; for example, some peripheral network members provided support, while some core network members did not.

A few of the network members brought up during the qualitative interviews were core network members whom new mothers simply forgot to name during the network survey interview. This phenomenon is not unusual (Brewer, 2000; Feld & Carter, 2002; Marsden, 1990) and, as discussed in Section 5.3.2, a combined methods approach to social network elicitation might help address this common issue.

### ***5.3.2 Recommendations for eliciting the social networks of first time mothers***

One of the main findings to emerge from my study is that new mothers' social networks, especially those of mothers who are on extended maternity leave or who otherwise remain at home with baby throughout the first year, include a range of often-peripheral, context specific companionship ties that might be quite relevant to their day-to-day experience, but are not properly captured by the "important matters" name generator. Based on the online survey results it does appear that this name generator did elicit some context specific ties, but overall the new mothers appeared to translate the "important matters" name generator into a request for emotional intimates (Bailey & Marsden, 1999), or to describe their networks according to "an internalized cognitive frame of a network" (Hammer, 1984, p. 342). This highlights one of the challenges of studying the networks of first time mothers, particularly in a context where extended maternity leave is offered: Weak, context specific ties such as new friends, despite their relevance and potential importance to a new mother's day-to-day experience, may be missed because the new mother does not yet consciously consider them part of "the" social network in which she sees herself embedded (Butts, 2008). This is not to imply that new mothers are not capable of deciding who is and who is not important to them, but rather to emphasize the importance of clearly defining relations of interest so that they can be properly elicited.

New mothers need close supportive ties to help them cope with the challenges of caring for a new baby. As demonstrated by the women in my study, new mothers also need ties that provide day-to-day companionship, bases for comparison, and information

related to mothering and baby care. These functions can be performed by existing close network members, but relatively new acquaintances formed as part of the transition to motherhood might also fill these roles. Capturing the range of relevant ties may require the use of multiple name generators, a mixed methods approach, or a combination of both.

*Using multiple name generators.* The notion of using multiple name generators that tap ties of different strengths or ties that serve different functions is not new (e.g., Bailey & Marsden, 1999; Brewer, 2000; Donahue Jennings et al., 1991; Haines & Henderson, 2002; McCallister & Fischer, 1978; Milardo, 1989, 1992) but most studies on new mothers have focused primarily on close, supportive ties with little attention to contextual ties. The possible exception is Richardson and Kagan (1979), who also asked about people “frequently seen for visits and socialization” (p. 4), although they indicated only that their name generator was based on previous social network and support literature, without explicit reference to context specific relationships.

One approach to eliciting information about first time mothers’ networks is to use a name generator to capture the affective and exchange ties germane to new mothers’ “psychological networks” (Milardo, 1989, 1992), and a second name generator to capture the ties that form their “interactive networks”, and that might be more subject to change based on context. In selecting the “important matters” name generator I made the assumption that new mothers would name people with whom they discussed the “important matter” of their babies, even if these people were not (yet) considered close network members. This assumption was not borne out by my results, which suggest that a more direct approach is needed to elicit context specific ties. In particular, my study results suggest that specifically asking mothers on extended maternity leave about their “daytime” ties is important; however, other types of ties might be more relevant in different contexts.

*Using combined methods.* The need for a context specific name generator or the exact form of this name generator might not be obvious at the outset of a study. Existing literature, qualitative interviews, and pilot social network surveys can be used to establish the need for and inform the content of this type of name generator. Additionally, semi-



structured interviews can be used to tease out ties not elicited by a given name generator. It is not always possible or practical, however, to use qualitative interviews as a major data collection strategy, and it may be more practical to use these to inform the creation of one or two name generators. This highlights a challenge that is not unique to studying the networks of first time mothers: achieving a balance between obtaining detailed information but not greatly increasing respondent burden. Strategies such as multiple name generators or extended qualitative interviews (e.g., Bidart & Lavenu, 2005; Degenne & Lebeaux, 2005; McAllister & Fischer, 1978) might yield extremely detailed egocentric network data, but they also increase respondent burden. This point is particularly salient for new mothers, who might not be able to leave their babies for extended periods, or, when their babies are present, will be limited in the length of an interview during which the baby will remain content.

### ***5.3.3 The use of combined methods to study the social networks of first time mothers***

In Chapter 3, I described a framework for combining qualitative and quantitative approaches (Bryman, 1988, 2001). I now revisit this framework with examples of how the methods-related elements of my study fit within it. Note that while the quantitative online survey and the in-person interview data were separate samples, information from each can still be used to reinforce, explain or complement the other.

*The logic of triangulation.* Although triangulation is usually spoken of in terms of similar results from different methods confirming the accuracy of results, different results from different methods can also provide insight (Bryman, 1988). In my study, discrepancies between network members described during semi-structured qualitative interviews and those elicited by structured network survey techniques led to insights about the nature of new mothers' networks in the Canadian context and inspired me to add a more explicit methodological dimension to my research.

*Filling in the gaps.* In this study, information from qualitative semi-structured interviews was used to round out the quantitative description of new mothers' social networks, for example through descriptions of the types and usefulness of support provided by different network members. It also provided possible explanations for some

of the quantitative results and, although this was a cross-sectional study, helped to provide insight into the dynamics of new mothers' networks. Additionally, information about network members mentioned in qualitative segment of the combined interviews allowed me to achieve insights about the importance of context specific ties in first time mothers' networks. Lastly, conducting the qualitative interview after the structured social network interview during the combined interviews prompted some mothers to remember people they forgot to name during structured social network interview.

*Researchers' and participants' perspectives.* In this study, quantitative data allowed me to obtain systematic information about new mothers' social networks in Calgary based on my structured social network survey, while qualitative interview data provided insight into how new mothers perceived and managed their social networks, and how these networks figured into their experiences of new motherhood.

*Qualitative research facilitates quantitative research.* In the early stages of my research project, semi-structured interview data informed the development of the structured network survey. In addition, results stemming from the comparison of the social networks generated via qualitative and quantitative approaches have been used to make recommendations on how name generators might best be developed and put to use in the collection of quantitative social network data from first time mothers; as described above, one of these suggestions involved the use of qualitative interview data to inform name generator development.

*Summary.* Social network analysis is primarily associated with structured quantitative approaches (despite calls to do things otherwise, e.g., Crossley (2010)), and therefore much of the focus in this section has been on what qualitative data adds to quantitative data when studying social networks. It is important to acknowledge, however, that qualitative approaches by themselves are not as efficient for eliciting and summarizing social network data. Quantitative techniques remain powerful ways to efficiently elicit, organize, and describe social network data, and to find patterns and make connections. These elements of social network analysis are often more cumbersome, if not impossible, to achieve using qualitative methods alone (Bryman, 1988; Crossley, 2010).

The social networks of first time mothers in Canada consist of core and peripheral ties; many of the latter types of ties are context specific. While the “important matters” name generator appeared to elicit some of these peripheral ties, evidence from qualitative interviews suggests that new mothers tend to report their close ties in response to this name generator, with details on peripheral ties only emerging during the course of a semi-structured interview. To elicit both core and peripheral (context specific) ties, it is recommended that multiple name generators, a combined methods approach, or a combination of both be used.

#### **5.4 Contributions of research**

With this combined methods exploratory study I have contributed to knowledge about Canadian first time mothers’ social networks through detailed quantitative and qualitative descriptions of their social networks, and through detailed accounts of how these networks relate to new mothers’ experiences of early motherhood. I have also contributed to knowledge about how new mothers’ networks might change during the transition to motherhood and to what is known about some of the context specific ties that are of importance during this transition, particularly for new mothers on extended maternity leave. In addition, I have contributed to SNA methods by examining the application of a name generator developed for a general population to a specific population, and by recommending a multi-pronged, context aware approach to network elicitation and study.

Knowing more about what first time mothers need from their social networks can help service providers better support new mothers in finding and filling these gaps by giving them information on available groups and activities, or perhaps by facilitating the formation of networks among new mothers by creating their own mothers’ groups. Given the importance of daytime companionship for new mothers who are at home with their babies for an extended period, early connections with daytime companions could improve the experience of early motherhood for many first time mothers.

## **5.5 Limitations of study**

Because of the convenience sampling methods, and the relative homogeneity of study participants with respect to age, education, and employment status, the results of this study cannot be generalized to other populations. Additionally, the quantitative online sample was small, but such small sample sizes are not unusual in social network studies (see for example, Cronenwett, 1984; Haines & Henderson, 2002; Richardson & Kagan, 1979).

The online egocentric network survey was subject to the usual issues of network elicitation such as name generator interpretation and effectiveness in eliciting the appropriate ties, forgetting, and respondent burden, as well as other issues related to the use of an online survey. Like any self-administered questionnaire it is not possible to know how honest or thorough people are being, especially when an incentive is being offered and in the absence of an interviewer to clarify questions or prompt for more responses; respondents might list fewer network members in order to finish the survey more quickly and enter their names in the incentive prize draw (Matzat & Snijders, 2010). Another issue is that the use of an online survey effectively restricts participation to individuals who have access to computers. The anonymity afforded by the online survey, however, may also have increased the reliability of the data, as per Kogovšek and Ferligoj's (2005) findings that that network surveys administered over the telephone were more reliable than those conducted in person.

Ideally, the study of a group in transition would take place within a longitudinal study design, but this was not feasible for this exploratory research. The use of network data such as relationship duration, however, combined with new mothers' accounts of changes in their relationships and networks since their babies' birth allowed me to gain insight about network change during the transition to motherhood.

## **5.6 Suggestions for future research**

All of the women I spoke with in person were heterosexual, most were relatively well educated, and with the exception of one mother, were partnered. The online network survey respondents largely seemed to fit this profile as well. Studying new mothers from

a broader range of social and economic backgrounds (e.g., single mothers, very young mothers, lesbian mothers, adoptive mothers) is necessary to find out if and how new mothers' social networks and experiences vary across these groups. Other suggestions for future work include

- further research into the importance of daytime companionship for first time mothers on extended maternity leave;
- exploratory research to tease out other relevant context specific ties for first time mothers; and,
- longitudinal studies that track changes in both core and peripheral ties over the transition to motherhood through the end of maternity leave and beyond, to provide information on the long-term importance and permanence of context specific ties.

Such research can inform how to support a broad range of new mothers in ensuring they have sufficient network support and interaction during early motherhood.

## **5.7 Conclusion**

The social networks of first time mothers play an important part in their early experiences of motherhood. Dominated by a core group of close family and friends, who provide a range of social support, these networks also contain a small number of newer, more peripheral ties that are specific to the transition to motherhood. An important function of these context specific ties is to provide daytime companionship to new mothers who, because of extended maternity leave and benefits available in Canada, are removed from their pre-motherhood daily work settings, relationships, and interactions. Understanding the importance of both core and peripheral (context specific) ties to new mothers' experiences can inform how to support them and improve their wellbeing during the transition to motherhood. A key insight from this study is that to ensure a more complete description of first time mothers' social networks, researchers need to account for the presence of context specific relationships and employ methods that allow them to emerge alongside core relationships. Such methods might include multiple name generators, employing a combined methods approach, or a combination of both.

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## APPENDIX A: INTERVIEW GUIDES

### A.1. Interview Guide V1

#### General Information

1. What is your baby's date of birth?
2. What age category do you fall into?  
☐ 18 – 19    ☐ 20 – 24    ☐ 25 – 29    ☐ 30 – 34  
☐ 35 – 39    ☐ 40 – 44    ☐ 45 – 49
3. What is your **highest** level of education achieved?  
☐ elementary            ☐ some high school            ☐ high school grad  
☐ some post-secondary    ☐ post-secondary certificate  
☐ bachelor's degree            ☐ postgraduate degree
4. What is your marital status?  
☐ married    ☐ living common-law            ☐ widowed  
☐ separated    ☐ divorced    ☐ single (never married)
5. How long have you lived in Calgary?
6. Have you returned to work?

#### Interview guide

1. Tell me about your experience of being a new mom – overall, how have the last few months been?
  - 1a. Tell me about your baby – what is she/he like? *(Include here or later on.)*
  2. Who are the people in your life right now that you consider most important?
    - In general?
    - How are they important to you in your role as a mother?
    - Are they parents themselves? First-time mothers?
    - How long have you known them? How did you meet?
    - How often do you connect with the important people in your life?
  - 2a. Which organizations/services/groups do you access or are you in touch with for information, services, support or leisure related to being a new mom?

3. Do you feel supported in your role as a mother? How so? In what ways do you experience support, and from whom? Tell me about a time when you felt particularly supported. (*“Support” is what she finds meaningful to her.*)
- 4a. Do you provide support to other new mothers? In what ways? How does this make you feel about your own experience of being a mother?
5. How do you feel about how you’re doing as a mother?
  - Your own assessment?
  - Have you received feedback from others?
- 5a. What do you like best about being a mother? Tell me about a particularly good day.
- 5b. What do you find most difficult about being a mother? Tell me about a particularly difficult day.
6. Is there anything that you would change about your experience as a new mother? If so, what would you change? Why?

## **A.2. Interview Guide V2 and V3**

(Interview Guide V2 was a shorter version of Interview Guide V3, and thus only Interview Guide V3 is shown here.)

### **(General information collected during structured social network survey)**

1. Tell me about your experience of being a new mom – overall, how have the last few months been?
  - 1a. Tell me about your baby – what is she/he like? (*Include here or later on.*)
2. Who are the people in your life right now that you consider most important?
  - In general?
  - How are they important to you in your role as a mother?
  - Are they parents themselves? First-time mothers?
  - If they have children, how old are they?
  - How long have you known them? How did you meet?
  - New friends?



- How often do you connect with the important people in your life?

2a. Which organizations/services/groups do you access or are you in touch with for information, services, support or leisure related to being a new mom?

- Have you met other mothers through these activities? Have you maintained a connection with them? How so?
- What about activities without baby?

3. Do you feel supported in your role as a mother? How so? In what ways do you experience support, and from whom? Tell me about a time when you felt particularly supported. (*“Support” is what she finds meaningful to her.*)

4a. Do you provide support to other new mothers? In what ways? How does this make you feel about your own experience of being a mother?

5. *If anyone mentioned on NW survey is not mentioned here, or if someone mentioned here is not mentioned on NW survey – explore:*

- I noticed you have mentioned \_\_\_\_\_ several times, but he/she was not on the list of people you named in response to the “important matters” question. Why? When you were naming people during the survey portion of this conversation, what criteria were you using to decide who to put on the list? What held you back from naming certain people?

OR

- You mentioned \_\_\_\_\_ as someone with whom you discuss important matters, but I notice that you have not mentioned him/her so far in this conversation. Can you tell me more about that? Thoughts?

OR

- You have mentioned several friends in general with whom you get together, etc. Are any of these on your network list that we created at the beginning of this conversation? Why, or why not?

OR

- Now that we’ve talked a bit about your experience so far as a new mom, about the people in your life, and about some of your activities, would the people on your

network list change if I asked you the “important matters” question again? (re-read for her). Why or why not?

---

6. How do you feel about how you’re doing as a mother?

- Your own assessment?
- Have you received feedback from others?

6a. What do you like best about being a mother? Tell me about a particularly good day.

6b. What do you find most difficult about being a mother? Tell me about a particularly difficult day.

7. Is there anything that you would change about your experience as a new mother? If so, what would you change? Why?

*Time permitting:*

8. What comes to mind when you hear the term “social network”? What did you think I would be asking you about?

## APPENDIX B: SOCIAL NETWORK SURVEYS

### B.1. Network Survey V1

#### General Information

Q1. What is your baby's date of birth? \_\_\_\_\_

Q2. What age category do you fall into? (Check one)

☐ 18 – 19    ☐ 20 – 24    ☐ 25 – 29    ☐ 30 – 34

☐ 35 – 39    ☐ 40 – 44    ☐ 45 – 49

Q3. What is your **highest** level of education achieved? (Check one)

☐ elementary    ☐ some high school    ☐ high school grad

☐ some post-secondary    ☐ post-secondary certificate

☐ bachelor's degree    ☐ postgraduate degree

Q4. What is your marital status? (Check one)

☐ married    ☐ living common-law    ☐ widowed

☐ separated    ☐ divorced    ☐ single (never married)

Q5. How long have you lived in Calgary? \_\_\_\_\_

Q6. Are you employed? (Check one)

☐ No

☐ Yes - have returned to work

☐ Yes - on maternity leave planning to return to work

☐ Yes - on maternity leave and not planning to return to work

☐ Yes - on maternity leave and undecided about whether to return to work

### Network Survey: Network Members

Looking back over the last **six** months who are the people with whom you discussed matters important to you? This might include family, friends, health care professionals, neighbours, HealthLink phone calls, and looking on websites for information (whether or not a two-way conversation took place). For each person listed (provide their initials only), please indicate their relationship to you by checking the appropriate box next to their initials.

Initials	Relationship <sup>32</sup>	Sex
	(Relationship choices: Spouse, Mother, Father, Sister, Brother, Mother-in-law, Father-in-law, Sister-in-law, Brother-in-law, Other relative, Friend, Co-worker, Religious Leader, Doctor, Nurse, Midwife, Doula, Lactation Consultant, Health Link, Website, Web Forum, Other (please specify))	

### Network Members: Questions

*In the following questions, I will ask you for more information about the people or resources that you named. For each question, answer to the best of your knowledge.*<sup>33</sup>

Q1. How long have you known/used/visited \_\_\_\_\_?

- ☐ Less than 3 months      ☐ 3 to 6 months      ☐ 6 months to 1 year  
☐ 1 to 5 years      ☐ Longer than 5 years

Q2. How often do you see in person, speak with on the phone, email, text message, visit (websites) or otherwise communicate with \_\_\_\_\_?

- ☐ Every day      ☐ A few times a week      ☐ Once a week  
☐ 2 or 3 times a month      ☐ Once a month      ☐ Not in the past month

Q2a. Does \_\_\_\_\_ live in Calgary? (Y/N)

\_\_\_\_\_

<sup>32</sup> Relationship choices were listed across the row of a matrix created in MS Excel, and the survey printed in landscape orientation on 8 ½" x 14" paper. To conserve space, the full matrix is not reproduced here.

<sup>33</sup> For each network member named, answers to these name interpreter questions were entered into a matrix. To conserve space, the answer matrix is not reproduced here.

Q3. To the best of your knowledge, and if applicable, how old is \_\_\_\_\_?

- ☐ 15 – 17    ☐ 18 – 19    ☐ 20 – 24    ☐ 25 – 29    ☐ 30 – 34    ☐ 35 – 39  
☐ 40 – 44    ☐ 45 – 49    ☐ 50 – 59    ☐ 60 – 69    ☐ 70 – 79    ☐ 80 – 89  
☐ 90+

Q4. To the best of your knowledge, and if applicable, what is \_\_\_\_\_'s highest level of education?

- ☐ elementary    ☐ some high school    ☐ high school grad  
☐ some post-secondary    ☐ post-secondary certificate  
☐ bachelor's degree    ☐ postgraduate degree

Q5. To the best of your knowledge, and if applicable, what is \_\_\_\_\_'s employment status?

- ☐ Not employed/retired  
☐ Employed and is currently working  
☐ Employed - on maternity leave planning to return to work  
☐ Employed - on maternity leave and **not** planning to return to work  
☐ Employed - on maternity leave and **undecided** about whether to return to work

Q6. To the best of your knowledge, and if applicable, what is \_\_\_\_\_'s marital status?

- ☐ married    ☐ living common-law    ☐ widowed  
☐ separated    ☐ divorced    ☐ single (never married)

Q7. To the best of your knowledge, and if applicable, how many children does \_\_\_\_\_ have?

Q8. Is \_\_\_\_\_ a first time parent? (Y/N)

Q9. Did you meet \_\_\_\_\_ through a group specifically geared toward parents (e.g., prenatal group, playgroup, mom & tot fitness class)? (Y/N)

Q10. Do you discuss your baby with \_\_\_\_\_? (Y/N)

*The next few questions ask about the types of child care and motherhood related support you have given to and received from the people in your network **over the past 6 months**. All questions are (Y/N).*

Q11. Have you **provided information** to \_\_\_\_\_ about child care and/or parenthood? Such information might include tips on feeding, sleeping, where to find certain baby equipment, etc.

Q12. Have you **received information** from \_\_\_\_\_ about child care and/or parenthood? Such information might include tips on feeding, sleeping, where to find certain baby equipment, etc.

Q12a. Overall, did you find this information supportive?

Q12b. Were there ever times when you found that receiving information from \_\_\_\_\_ was not supportive?

Q13. Have you **provided emotional support** (e.g., listening, comfort, comparing notes, encouragement) to \_\_\_\_\_ in relation to child care or being a parent?

Q14. Have you **received emotional support** (e.g., listening, comfort, comparing notes, encouragement) from \_\_\_\_\_ in relation to child care or being a parent?

Q14a. Overall, did you find this type of support helpful or welcome?

Q14b. Were there ever times when you found that this type of support from \_\_\_\_\_ was **not** helpful or welcome?

Q15. Have you **provided child-related help** such as babysitting, money, clothes, etc., to \_\_\_\_\_?

Q16. Have you **received child-related help** such as babysitting, money, clothes, etc., from \_\_\_\_\_?

Q16a. Overall, did you find this help supportive?

Q16b. Were there ever times when you found that this type of help from \_\_\_\_\_ was **not** supportive?

Q17. Have you **provided feedback** to \_\_\_\_\_ in relation to how they are doing as a parent (e.g., giving feedback on feeding techniques or saying things like, "your baby is so happy, what a credit to you")?

Q18. Have you **received feedback** from \_\_\_\_\_ in relation to how you are doing as a parent (e.g., giving feedback on feeding techniques or saying things like, "your baby is so happy, what a credit to you")?

Q18a. Overall, did you find this type of feedback supportive?

Q18b. Were there ever times when you found that this type of feedback from \_\_\_\_\_ was **not** supportive?

### Network members: Connections

It is possible that some of the people and resources that you named are connected to each other. Please indicate, to the best of your knowledge, which people know each other, and how well (see guidelines below). In the case of resources such as websites and phone lines, please indicate which of your contacts, to the best of your knowledge, consult the same resources. (*Names and strength of relationship values entered in a matrix similar to the one below*):

	Person 1	Person 2	Person 3	Person 4
Person 1				
Person 2				
Person 3				
Person 4				

How well do network members know each other - guidelines:

*People:*

- 0: Strangers - wouldn't know each other if they ran into each other on the street
- 1: Acquaintances/casual friends or relations - but not especially close
- 2: Close - for example, might consider themselves about as close to each other as they are to you

*Resources:*

- 0: Person does not use this resource
- 1: Person does use this resource, but not as often as you do
- 2: Person does use this resource about as often as (or more than) you do

## B.2. Network Survey V2

Network Survey V2 identical to Network Survey V1 except for the following changes to role relationship categories:

- “Spouse” changed to “Spouse/Partner”
- “Baby’s Father” added
- “Religious leader” added

## B.3. Network Survey V3

### General Information

*Same as Network Surveys V1 & V2*

### Network Survey: Network Members

*Same as Network Survey V2*

### Network Members: Questions

*In the following questions, I will ask you for more information about the people or resources that you named. For each question, answer to the best of your knowledge.<sup>34</sup>*

Q1. How long have you known/used/visited \_\_\_\_\_?

- ☐ Less than 3 months      ☐ 3 to 6 months      ☐ 6 months to 1 year  
☐ 1 to 5 years      ☐ Longer than 5 years

Q2. How often do you see in person, speak with on the phone, email, text message, visit (websites) or otherwise communicate with \_\_\_\_\_?

- ☐ Every day      ☐ A few times a week      ☐ Once a week  
☐ 2 or 3 times a month      ☐ Once a month      ☐ Not in the past month

Q2a. Does \_\_\_\_\_ live in Calgary? (Y/N)

Q3. To the best of your knowledge, and if applicable, how old is \_\_\_\_\_?

- ☐ 15 – 17    ☐ 18 – 19    ☐ 20 – 24    ☐ 25 – 29    ☐ 30 – 34    ☐ 35 – 39

\_\_\_\_\_

<sup>34</sup> For each network member named, answers to these name interpreter questions were entered into a matrix. To conserve space, the answer matrix is not reproduced here.



☐ 40 – 44    ☐ 45 – 49    ☐ 50 – 59    ☐ 60 – 69    ☐ 70 – 79    ☐ 80 – 89  
☐ 90+

Q4. To the best of your knowledge, and if applicable, what is \_\_\_\_\_'s highest level of education?

☐ elementary        ☐ some high school        ☐ high school grad  
☐ some post-secondary    ☐ post-secondary certificate  
☐ bachelor's degree        ☐ postgraduate degree

Q5. To the best of your knowledge, and if applicable, what is \_\_\_\_\_'s employment status?

☐ Not employed/retired  
☐ Employed and is currently working  
☐ Employed - on maternity leave planning to return to work  
☐ Employed - on maternity leave and **not** planning to return to work  
☐ Employed - on maternity leave and **undecided** about whether to return to work

Q6. To the best of your knowledge, and if applicable, what is \_\_\_\_\_'s marital status?

☐ married    ☐ living common-law        ☐ widowed  
☐ separated    ☐ divorced    ☐ single (never married)

Q7. To the best of your knowledge, and if applicable, how many children does \_\_\_\_\_ have?

Q8. Is \_\_\_\_\_ a first time parent? (Y/N)

Q9. Did you meet \_\_\_\_\_ through a group specifically geared toward parents (e.g., prenatal group, playgroup, mom & tot fitness class)? (Y/N)

Q10. Do you discuss your baby with \_\_\_\_\_? (Y/N)

#### **Network members: Connections**

*Same as Network Surveys V1& V2*

#### **B.4. Network Survey V4 – Online survey**

The survey was accessed online via [www.surveymonkey.com/s/calgarymums](http://www.surveymonkey.com/s/calgarymums).

Because of the lengthy online survey layout, the survey questions are presented here without the online formatting.

**Confirmation of Eligibility:**

This is a study of first time mothers who live in Calgary. To confirm that you are a first time mother living in Calgary, and that your baby is under 12 months old and does not have any major health issues, please check "Yes" below.

\*This online survey is open only to those who have not participated in my in-person interviews or social network survey completion. If you have already participated I thank you for your interest but ask you to click "No" below and exit the survey.\*

☐ Yes

☐ No

**Redirect page if answer to Q1 is “No”:**

You have been redirected to this page either because you did not agree to the informed consent, or because you checked "No" when asked to confirm that you are a first time mother living in Calgary whose baby is under 12 months old and does not have any major health issues.

If you feel you have reached this page in error, please feel free to start the survey again. If you have any questions or concerns, please do not hesitate to contact Carol Cullingham (Principal Investigator) at [carol.cullingham@ucalgary.ca](mailto:carol.cullingham@ucalgary.ca), or her supervisor Dr. Jenny Godley, at [jgodley@ucalgary.ca](mailto:jgodley@ucalgary.ca).

Thank you for your interest!

**Background Questions:**

Q1. What is today's date?

DD MM YYYY  
Date  /  /

Q2. What is your baby's date of birth?

DD MM YYYY  
Date  /  /

Q3. What age category do you fall into?

- ☐ 18-19
- ☐ 20-24
- ☐ 25-29
- ☐ 30-34
- ☐ 35-39
- ☐ 40-44
- ☐ 45-49

Q4. What is your highest level of education achieved?

- ☐ Elementary school
- ☐ Some high school
- ☐ High school graduate
- ☐ Some post-secondary
- ☐ Post-secondary certificate
- ☐ Bachelor's degree
- ☐ Postgraduate degree

Q5. What is your marital status?

- ☐ Married
- ☐ Living common-law
- ☐ Widowed
- ☐ Separated
- ☐ Divorced
- ☐ Single (never married)

Q6. How long have you lived in Calgary (in years)? \_\_\_\_\_

Q7. Are you employed?

- ☐ No
- ☐ Yes - have returned to work
- ☐ Yes - on maternity leave, planning to return to work
- ☐ Yes - on maternity leave and not planning to return to work
- ☐ Yes – on maternity leave and undecided about whether to return to work

## Network Questions

This page contains questions asking you about people with whom you discuss important matters. First, we ask you to list these people. We are not going to keep the names you list - we provide you with a section to enter names merely as a memory tool. Feel free to enter just first names, or initials if it is easier for you. Next, we will ask you for more information about each of the people you list.

Q8. Looking back over the past SIX months, who are the people with whom you discussed matters important to you? This might include family, friends, health care professionals, neighbours, etc. You can list up to 15 people.

Person 1 \_\_\_\_\_

Person 2 \_\_\_\_\_

Person 3 \_\_\_\_\_

.

.

.

Person 15 \_\_\_\_\_

### Person 1

The following questions ask you about the first person you listed.

Q9. What is your relationship to (Person 1)?<sup>35</sup> (You may pick more than one answer).

☐ Spouse / Partner

☐ Baby's Father

☐ Mother

☐ Father

☐ Sister

☐ Brother

☐ Mother-in-law

☐ Father-in-law

Other (please specify) \_\_\_\_\_

☐ Sister-in-law

☐ Brother-in-law

☐ Other relative

☐ Friend

☐ Co-worker

☐ Neighbour

☐ Co-member of a group

☐ Religious leader

☐ Doctor

☐ Nurse

☐ Midwife

☐ Doula

☐ Lactation Consultant

☐ Health Link

☐ Website contact

☐ Web forum contact

<sup>35</sup> The name entered under Person 1 in Q8 is displayed wherever (Person 1) is indicated; similarly, the name entered under Person 2 is displayed wherever (Person 2) is indicated, and so on for all names entered from Person 1 to Person 15.

Q10. What is (Person 1)'s gender?

- ☐ Male
- ☐ Female

Q11. How long have you known / consulted / visited (Person 1)?

- ☐ Less than 3 months
- ☐ 3-6 months
- ☐ 6 months to 1 year
- ☐ 1 to 5 years
- ☐ Over 5 years

Q12. How often do you communicate with (Person 1)? This includes all types of communication: face-to-face, telephone, email, texting, etc..

- ☐ Every day
- ☐ A few times a week
- ☐ Once a week
- ☐ 2 or 3 times a month
- ☐ Once a month
- ☐ Not in the past month

Q13. Does (Person 1) live in Calgary?

- ☐ Yes
- ☐ No

Q14. To the best of your knowledge, what is (Person 1)'s employment status?

- ☐ Not employed/retired
- ☐ Employed and currently working
- ☐ Employed - on maternity leave and planning to return to work
- ☐ Employed - on maternity leave and NOT planning to return to work
- ☐ Employed - on maternity leave and UNDECIDED about returning to work

Q15. To the best of your knowledge, does (Person 1) have children?

- ☐ Yes
- ☐ No

Q16. If you answered "yes" to the previous question, and to the best of your knowledge, is (Person 1) a first time parent?

- ☐ Yes  
☐ No

Q17. Did you meet, or were you referred to (Person 1) through a group specifically geared towards parents?

- ☐ Yes  
☐ No

Q18. If you named a second person in your list, his or her name will be inserted here:

(Person 2)

If you see a name, please click YES below. If you do not see a name, please click NO.<sup>36</sup>

- ☐ Yes  
☐ No

## **Person 2**

(All questions identical to questions for Person 1, with the addition of the following question about alter connections):

### **Connections among your connections**

It is possible that the people you named also know each other. "Knowing" can mean people who are close (e.g., they might be as close to each other as they are to you), and can also mean people who know each other but are not especially close (e.g., casual friends or relations).

Q28. Does (Person 2) know (Person 1)?

- ☐ Yes  
☐ No

Q29. If you named a third person in your list, his or her name will be inserted here:

(Person 3)

---

<sup>36</sup> "Yes" takes respondent to questions for Person 2; "No" takes respondent to the Cash Draw Prize page.

If you see a name, please click YES below. If you do not see a name, please click NO.

☐ Yes

☐ No

### **Person 3**

(All questions identical to questions for Person 1 and Person 2, with the addition of the following question about alter connections):

#### **Connections among your connections**

Q39. It is possible that the people you named also know each other. Please indicate, by checking the appropriate boxes below, which of the people listed below (Person 3) knows. "Knowing" can mean people who are close (e.g., they might be as close to each other as they are to you), and can also mean people who know each other but are not especially close (e.g., casual friends or relations).

☐ (Person 1)

☐ (Person 2)

(Questions for Person 4 through Person 15 are the same, with additional network members added as possible selections under "Connections" with each question.)

#### **Cash Draw Prize Entry**

Thank you - your survey is complete!

If you wish to be entered in the draw for 1 of 3 draw prizes of \$75 cash, please enter your first name and email address in the fields below. Please note that this information will be stored separately from your survey responses, and will in no way be linked to your survey data.

First name \_\_\_\_\_

Email address \_\_\_\_\_

#### **Questions and Concerns**

Thank you very much for completing the survey.

If you have any comments about the survey, or things that came to mind as you completed your responses, please write them here. Thank you!

## APPENDIX C: CONSENT FORMS

### C.1. Sample qualitative interview consent

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**Name of Researcher, Faculty, Department, Telephone & Email:**

Carol Cullingham, Graduate Student (MA), Faculty of Arts, Department of Sociology,  
(403) 561-6107, [carol.cullingham@ucalgary.ca](mailto:carol.cullingham@ucalgary.ca)

***Supervisors:***

Dr. Jenny Godley, U of C Department of Sociology

Dr. Cathie Scott, Executive Director, Knowledge Management, Alberta Health Services  
and U of C Department of Sociology/Community Health Sciences

**Title of Project:**

The Relationship Between Social Network Characteristics and First Time Mothers'  
Maternal Experience

***Sponsor:***

Social Sciences and Humanities Research Council of Canada (SSHRC)

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This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study.

**Purpose of the Study:**

The purpose of this study is to explore what the social networks of first time mothers look like, and how these networks influence their experience of motherhood. As a first time mother, you have been invited to take part in this study.

**What Will I Be Asked To Do?**

Participation in the study will involve participating in an interview in which I will ask you some basic information about yourself and your baby, followed by other questions about your experience so far as a mother. The entire process will take between 30 and 60 minutes.

Your participation in this study is entirely voluntary, and you can refuse to participate. You may withdraw from the study at any time. Whether or not you choose to participate in this study will not affect the care that you receive through the low risk maternity clinic.



**What Type of Personal Information Will Be Collected?**

Should you agree to participate, you will be asked to provide your baby's date of birth, your age, level of education achieved, marital status, and employment status. None of this information will be used to identify individuals. All questions are voluntary and you can skip any question. To preserve confidentiality, your interview data will be identified by a code, and where desired, a pseudonym. Interview data will not be linked to your name in any way.

There are several options for you to consider if you decide to take part in this research. You can choose all, some or none of them. Please put a check mark on the corresponding line(s) that grants me your permission to:

I grant permission to be audio taped: Yes: \_\_\_\_ No: \_\_\_\_

I wish to remain anonymous, but you may refer to me by a pseudonym: Yes: \_\_\_\_ No: \_\_\_\_

**Are there Risks or Benefits if I Participate?**

There are no expected risks related to this interview. There is a chance, however, that you may find some of the questions of this study upsetting, in particular those regarding your experiences as a new mother. If you experience any distress as a result of your participation in this study, I advise you that I will be leaving you a list of support resources appropriate to new mothers. Keep in mind that you may refuse to answer specific questions and may withdraw from the study at any time. If you choose to withdraw, any information that you have provided will be permanently destroyed.

Please be advised that in the unlikely event that research reveals information that is required by law to be revealed to a law enforcement or other agency I am legally obligated to do so.

There will be no financial costs to you should you choose to participate in this study. All participants will be given the opportunity to enter their names in a draw to win one of three \$100 gift cards for Child at Heart children's store.

**What Happens to the Information I Provide?**

The primary use of data will be to inform a Masters Degree project in Sociology, although I am also affiliated, as a research assistant, with the CoMPaIR\* program of research for which my thesis co-supervisor Dr. Cathie Scott is the Principal Investigator. While I am conducting my thesis research independently, my research topic is consistent with CoMPaIR's primary health care focus, and is a subproject within that program of research. I will be sharing my anonymized raw data with Dr. Scott as well as with Laura Lagendyk, Project Manager for CoMPaIR, who is bound by CoMPaIR's ethics and confidentiality policies. The use of data within the CoMPaIR program of research will primarily be for comparison purposes should similar studies be conducted 1) at a future date within the South Calgary Primary Care Network; or 2) in another Primary Care Network. Any further CoMPaIR-related analysis of the data collected during this study will be performed by me.

\*CoMPaIR = Contexts and Models in Primary health care and their impact on Interprofessional Relationships

Participation is completely voluntary and confidential. I guarantee that I will not tell anyone whether you decided to participate or not. You are free to discontinue participation at any time during the study, at which time any information you have provided will be permanently destroyed. No one except myself, my supervisors and Ms. Lagendyk will be allowed to see any of the interview transcripts. There are no names on the transcripts – all individuals will be assigned a code (and a pseudonym where desired) and will be identified by this code and pseudonym only. Only group information will be summarized for any presentation or publication of results. Copies of electronic data held by CoMPaIR will be stored for a minimum of seven years on a computer disk, after which time they will be archived indefinitely. The anonymous data will be also archived indefinitely for potential future secondary use by other researchers according to the Social Sciences and Humanities Research Council of Canada's policy on research data archiving.

Should you choose to participate and you would like your name entered in the draw for a gift card, you will fill out a ballot with your name and phone number which will be stored in a location separate from all data collected – it will in no way be linked to the information that you provide in the interview. All ballots will be destroyed once the draw has taken place and the winners contacted.

*Signatures (written consent)*

Your signature on this form indicates that you 1) understand to your satisfaction the information provided to you about your participation in this research project, and 2) agree to participate as a research subject.

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Participant's Name: (please print)

Participant's Signature \_\_\_\_\_ Date: \_\_\_\_\_

Researcher's Name: (please print)

Researcher's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

**Questions/Concerns**

If you have any further questions or want clarification regarding this research and/or your participation, please contact:

Ms. Carol Cullingham  
Department of Sociology  
(403) 561-6107, carol.cullingham@ucalgary.ca

And Dr. Jenny Godley, Department of Sociology, (403) 220-7566, [jgodley@ucalgary.ca](mailto:jgodley@ucalgary.ca)

Or Dr. Cathie Scott, Executive Director, Knowledge Management, Alberta Health Services, (403) 944-7700, [cathie.scott@albertahealthservices.ca](mailto:cathie.scott@albertahealthservices.ca)

If you have any concerns about the way you've been treated as a participant, please contact the Senior Ethics Resource Officer, Research Services Office, University of Calgary at (403) 220-3782; email [rburrows@ucalgary.ca](mailto:rburrows@ucalgary.ca).

A copy of this consent form has been given to you to keep for your records and reference. The investigator has kept a copy of the consent form.

## **C.2. Sample in-person social network survey consent**

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### **Name of Researcher, Faculty, Department, Telephone & Email:**

Carol Cullingham, Graduate Student (MA), Faculty of Arts, Department of Sociology,  
(403) 561-6107, carol.cullingham@ucalgary.ca

### **Supervisors:**

Dr. Jenny Godley, Department of Sociology

Dr. Cathie Scott, Executive Director, Knowledge Management, Alberta Health Services  
and U of C Department of Sociology/Community Health Sciences

### **Title of Project:**

The Relationship Between Social Network Characteristics and First Time Mothers'  
Maternal Experience

### **Sponsor:**

Social Sciences and Humanities Research Council of Canada (SSHRC)

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This consent form, a copy of which has been given to you, is only part of the process of informed consent. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study.

### **Purpose of the Study:**

The purpose of this study is to explore what the social networks of first time mothers look like, and how these networks influence their experience of motherhood. As a first time mother, you have been invited to take part in this study.

### **What Will I Be Asked To Do?**

Participation in the study will involve responding to a social network survey in which I will ask you some basic information about yourself and your baby, and then about the people in your life. The entire process will take between 15 and 30 minutes.

Your participation in this study is entirely voluntary, and you can refuse to participate. You may withdraw from the study at any time. Whether or not you choose to participate in this study will not affect the care that you receive through the low risk maternity clinic.

### **What Type of Personal Information Will Be Collected?**

Should you agree to participate, you will be asked to provide your baby's date of birth, your age, level of education achieved, marital status, and employment status. None of this

information will be used to identify individuals. All questions are voluntary and you can skip any question. To preserve confidentiality, all questionnaires will be identified by a code only, and data will not be linked to your name in any way.

### **Are there Risks or Benefits if I Participate?**

There are no expected risks related to these questionnaires. There is a chance, however, that you may find some of the questions of this study upsetting, in particular those regarding your experiences as a new mother. If you experience any distress as a result of your participation in this study, I advise you that I will be leaving you a list of support resources appropriate to new mothers. Keep in mind that you may refuse to answer specific questions and may withdraw from the study at any time. If you choose to withdraw, any information that you have provided will be permanently destroyed.

Please be advised that in the unlikely event that research reveals information that is required by law to be revealed to a law enforcement or other agency I am legally obligated to do so.

There will be no financial costs to you should you choose to participate in this study. All participants will be given the opportunity to enter their names in a draw to win one of three \$100 gift cards for Child at Heart children's store.

### **What Happens to the Information I Provide?**

The primary use of data will be to inform a Masters Degree project in Sociology, although I am also affiliated, as a research assistant, with the CoMPaIR\* program of research for which my thesis co-supervisor Dr. Cathie Scott is the Principal Investigator. While I am conducting my thesis research independently, my research topic is consistent with CoMPaIR's primary health care focus, and is a subproject within that program of research. I will be sharing my anonymized raw data with Dr. Scott as well as with Ms. Laura Lagendyk, Project Manager for CoMPaIR, who is bound by CoMPaIR's ethics and confidentiality policies. The use of data within the CoMPaIR program of research will primarily be for comparison purposes should similar studies be conducted 1) at a future date within the South Calgary Primary Care Network; or 2) in another Primary Care Network. Any further CoMPaIR-related analysis of the data collected during this study will be performed by me.

\*CoMPaIR = Contexts and Models in Primary health care and their impact on Interprofessional Relationships

Participation is completely voluntary and confidential. I guarantee that I will not tell anyone whether you decided to participate or not. You are free to discontinue participation at any time during the study, at which time any information you have provided will be permanently destroyed. No one except myself, my supervisors, and Ms. Lagendyk will be allowed to see any of the answers to the questionnaires. There are no names on the questionnaires – all individuals will be assigned a code, and your questionnaire will be identified by this code only. Only group information will be summarized for any presentation or publication of results. The questionnaires are kept in

a locked cabinet only accessible by myself, my supervisors, and Ms. Lagendyk. They will be stored for a minimum of 7 years, after which time they will be archived indefinitely. Copies of electronic data held by CoMPaIR will be stored for a minimum of seven years on a computer disk, after which time they will be archived indefinitely. The anonymous electronic data will also be archived indefinitely for potential future secondary use by other researchers according to the Social Sciences and Humanities Research Council of Canada's policy on research data archiving.

Should you choose to participate and you would like your name entered in the draw for a gift card, you will fill out a ballot with your name and phone number which will be stored in a location separate from all data collected – it will in no way be linked to the information that you provide in the questionnaires. All ballots will be destroyed once the draw has taken place and the winners contacted.

### **Signatures (written consent)**

Your signature on this form indicates that you 1) understand to your satisfaction the information provided to you about your participation in this research project, and 2) agree to participate as a research subject.

In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

Participant's Name: (please print)

Participant's Signature \_\_\_\_\_ Date: \_\_\_\_\_

Researcher's Name: (please print)

Researcher's Signature: \_\_\_\_\_ Date: \_\_\_\_\_

### **Questions/Concerns**

If you have any further questions or want clarification regarding this research and/or your participation, please contact:

Ms. Carol Cullingham  
Department of Sociology  
(403) 561-6107, carol.cullingham@ucalgary.ca

And Dr. Jenny Godley, Department of Sociology, (403) 220-7566, jgodley@ucalgary.ca

Or Dr. Cathie Scott, Executive Director, Knowledge Management, Alberta Health Services, (403)944-7700, cathie.scott@albertahealthservices.ca

If you have any concerns about the way you've been treated as a participant, please contact the Senior Ethics Resource Officer, Research Services Office, University of Calgary at (403) 220-3782; email [rburrows@ucalgary.ca](mailto:rburrows@ucalgary.ca).

A copy of this consent form has been given to you to keep for your records and reference. The investigator has kept a copy of the consent form.

### **C.3. Online social network survey consent**

Please read the informed consent form before you begin.

This consent form is only part of the process of informed consent. You may print a copy of this consent form by selecting File, then Print, from your browser menus or obtain a print copy from the researcher. If you want more details about something mentioned here, or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information. The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study.

#### **Purpose of the Study:**

The purpose of this study is to explore what the social networks of first time mothers look like, and how these networks relate to their experience of motherhood. As a first time mother, you have been invited to take part in this study.

#### **What Will I Be Asked To Do?**

Participation in the study will involve responding to a social network survey in which you will be asked to provide some basic information about yourself and your baby, and then about the people in your life. The entire process will take between 15 and 20 minutes.

Your participation in this study is entirely voluntary, and you can refuse to participate.

#### **What Type of Personal Information Will Be Collected?**

Should you agree to participate, you will be asked to provide your baby's date of birth, your age, level of education achieved, marital status, and employment status. None of this information will be used to identify individuals. All questions are voluntary and you can skip any question. To preserve confidentiality, all questionnaires will be identified by a code only, and should you choose to provide an email address to enter the draw for one of three cash prizes (see below), data will not be linked to your name in any way.

#### **Are there Risks or Benefits if I Participate?**

There are no expected risks related to this questionnaire.

There will be no financial costs to you should you choose to participate in this study. All participants will be given the opportunity to enter their names in a draw to win one of three draw prizes of \$75 cash each.

#### **What Happens to the Information I Provide?**

Carol Cullingham, a graduate student in the Department of Sociology at the University of



Calgary, has designed the survey in consultation with Dr. Jenny Godley, a professor in the department of Sociology at the University of Calgary. The primary use of data will be to inform a Masters Degree project in Sociology, conducted by Carol Cullingham.

Carol Cullingham and Dr. Godley will be the only people who have access to the data, which will be stored on two secure, password-protected computers. All identifying material will be removed from the data. Your data will be stored with a random identification number before data analysis begins. Your responses will be kept completely anonymous – this means that neither the researchers nor anyone else will be able to tie your survey responses to any information that identifies you (such as name or email address). If you wish to be entered into the random draw for one of three cash prizes of \$75 each, you can provide your email address at the end of the survey. The email addresses will be stored separately from your survey responses. The email address you provide will only be used for the purpose of conducting the prize draw and informing chosen participants of their winning. After the prize draw, all email information will be destroyed.

Carol Cullingham will prepare a report based on the survey results. The data will also be used for academic presentations and possible future publications. No individual will be identifiable in any academic presentations or publications.

In order to allow time for the development of future publications, the raw survey data will be retained indefinitely.

You are free to refuse to participate or to withdraw at any time. If you choose to withdraw from the study before it is submitted, we will remove all data you have provided up to that point. After you have submitted your survey responses, you will no longer be able to withdraw or change your responses.

This online survey is being administered by SurveyMonkey, an American software company. As such, your responses are subject to US laws, including the US Patriot Act. The risks associated with participation are minimal and similar to those associated with many e-mail programs, such as Hotmail, and social utilities spaces, such as Facebook.

By clicking on the 'YES' button at the end of this page, it indicates that you 1) understand to your satisfaction the information provided to you about your participation in this research project, and 2) agree to participate as a research subject. In no way does this waive your legal rights nor release the investigators, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from this research project at any time. You should feel free to ask for clarification or new information throughout your participation.

### **Questions/Concerns**

If you have any further questions or want clarification regarding this research and/or your

participation, please contact:

Carol Cullingham (Principal Investigator)  
Department of Sociology / Faculty of Arts  
University of Calgary  
403 561 6107  
carol.cullingham@ucalgary.ca

Dr. Jenny Godley  
Department of Sociology / Faculty of Arts  
University of Calgary  
403 220 7566  
jgodley@ucalgary.ca

The University of Calgary Conjoint Faculties Research Ethics Board has approved this research study. If you have any concerns about the way you've been treated as a participant, please contact:

Russell Burrows  
Senior Ethics Resource Officer  
Research Services Office  
University of Calgary  
(403) 220-3782; email rburrows@ucalgary.ca.

## APPENDIX D: RESOURCE CARD

### D.1. Resource card front

#### Resources for New Moms

Family doctor name and number: \_\_\_\_\_

**HealthLink:** 403-943-LINK (5465); Toll-Free 1-866-408-LINK (5465)

#### **Fever**

Normal temperature (taken under the arm): 36.3 °C to 37.5 °C (97.3 °F to 99.5 °F)

#### **211 (Dial 211 direct)**

*Information and referral to community, government, and social services*

[www.informalberta.ca](http://www.informalberta.ca)

#### **Children's Cottage/Crisis Nursery (403) 233 – 2273**

*Free child care for parents who have a crisis and who have no other means of child care; for children 8 years old and younger; maximum 72 hours.*

[www.childrencottage.ab.ca](http://www.childrencottage.ab.ca)

#### **Families Matter – Postpartum Support (403) 205-5177**

*Provides support to women or couples following the birth of a child.*

[www.familiesmatter.ca](http://www.familiesmatter.ca)

#### **Canadian Mental Health Association – Calgary Region**

*Provides information on postpartum depression (PPD) as well as a list of links to various PPD websites.*

[http://www.cmha.calgary.ab.ca/mentalhealth/types\\_of\\_mental\\_illness/post%20partum.aspx](http://www.cmha.calgary.ab.ca/mentalhealth/types_of_mental_illness/post%20partum.aspx)

#### **The Lifestyles Wellness Group**

*A female focused multidisciplinary clinic in NW Calgary.*

[www.drformoms.com](http://www.drformoms.com)

## D.2. Resource card back

### **Bikini Boot Camp**

*A function-based program created specifically for women by women. Using exercise techniques aimed at developing core strength and balance, agility and flexibility, Bikini Boot Camp will challenge you to try something new. Post-Natal classes offered.*

[www.bikinibootcamp.ca](http://www.bikinibootcamp.ca)

### **Fitness with Kids**

*Fitness with Kids is a Calgary based fitness company focused on providing challenging fitness classes to parents with children of all ages, encouraging an active lifestyle for both generations! Fitness with Kids offers some unique classes catered to moms with toddlers and preschoolers as well as babies.*

[www.fitnesswithkids.com](http://www.fitnesswithkids.com)

### **Brilliant Beginnings**

*Brilliant Beginnings Educational Centre is a one-stop developmental resource centre for parents, infants, and toddlers (newborn-4-years) in the Calgary area. Our goal is to equip parents with the tools to understand early development and how to optimize this crucial time of learning.*

[www.brilliantbeginnings.ca](http://www.brilliantbeginnings.ca)

### **Best Beginnings Educational Consulting Inc. – Kindermusik**

*Offering Kindermusik in Calgary since 2003. Calgary Kindermusik classes take place at various locations throughout the city. We are certain to have a music and movement class to accommodate your baby, toddler, preschooler, or early primary (Kindergarten or grade one) student. Or, bring everyone with you to one Family Class for all!*

[www.best-beginnings.com](http://www.best-beginnings.com)

### **WholesomeBabyFood.com**

*A website with information on and recipes for homemade baby food. Includes sample menus up to 12 months.*

[www.wholesomebabyfood.com](http://www.wholesomebabyfood.com)

Resources compiled from various sources, including *From Here Through Maternity* (Alberta Health Services).

# APPENDIX E: SOCIAL NETWORK DIAGRAMS

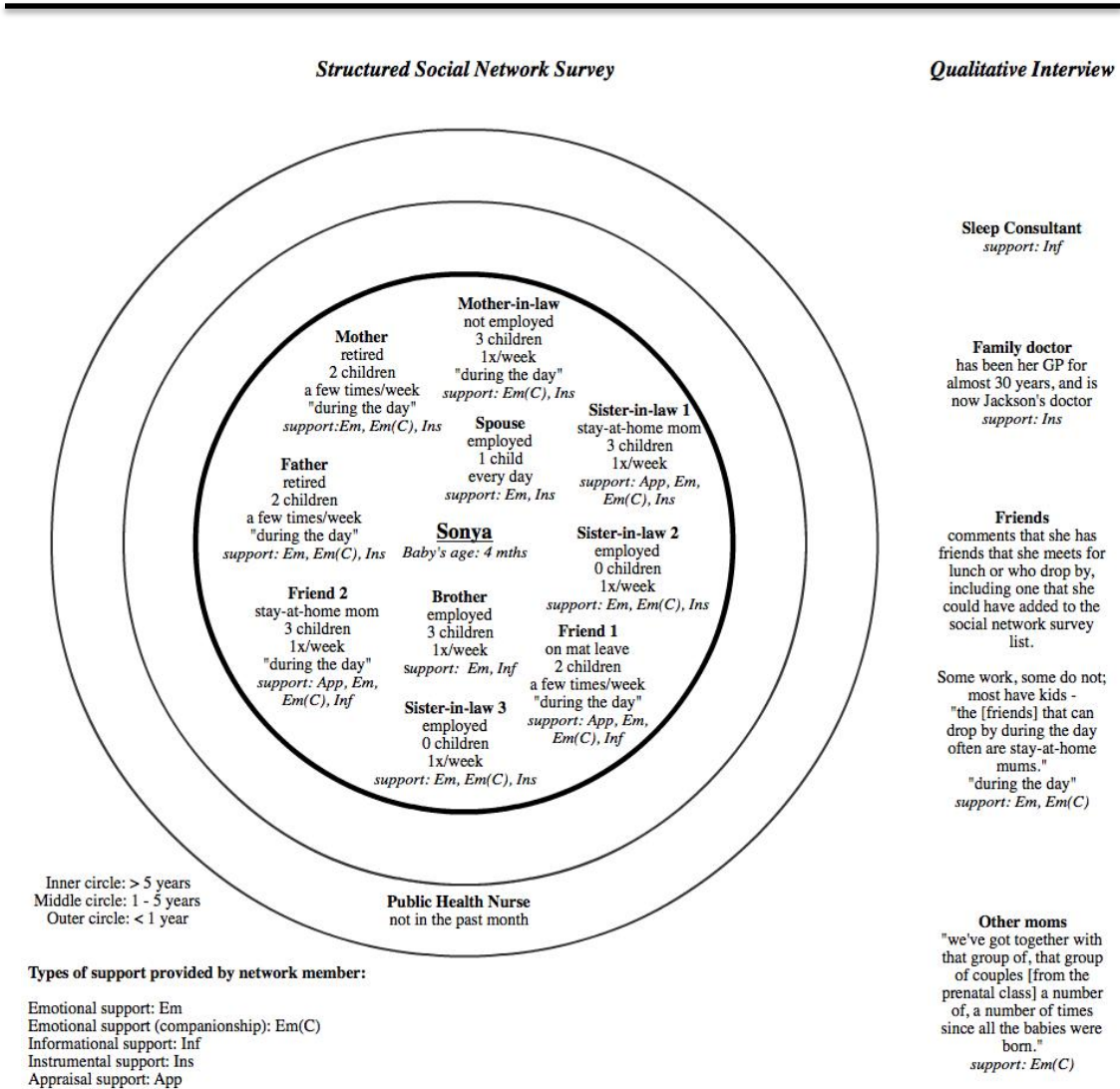


Figure E.1 Combined social network diagram: Sonya

## Structured Social Network Survey

## Qualitative Interview

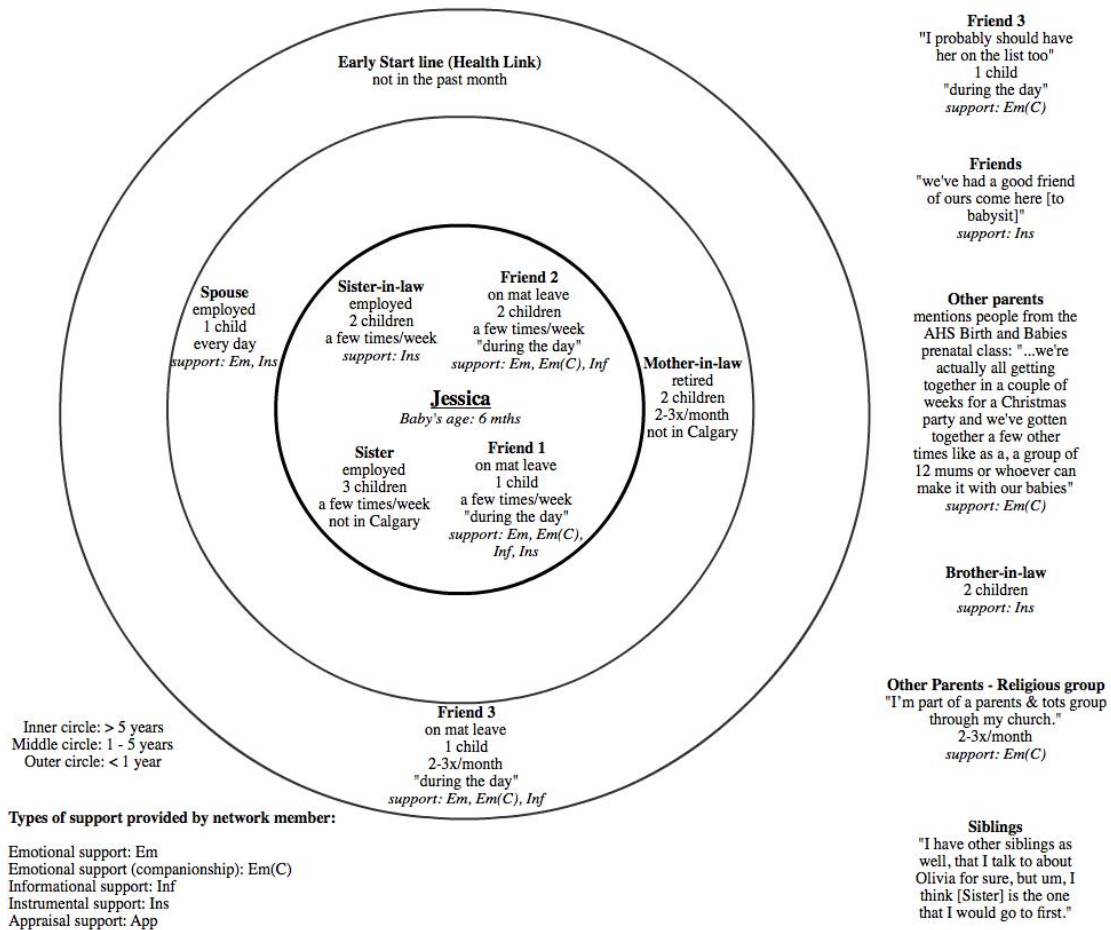


Figure E.2 Combined social network diagram: Jessica

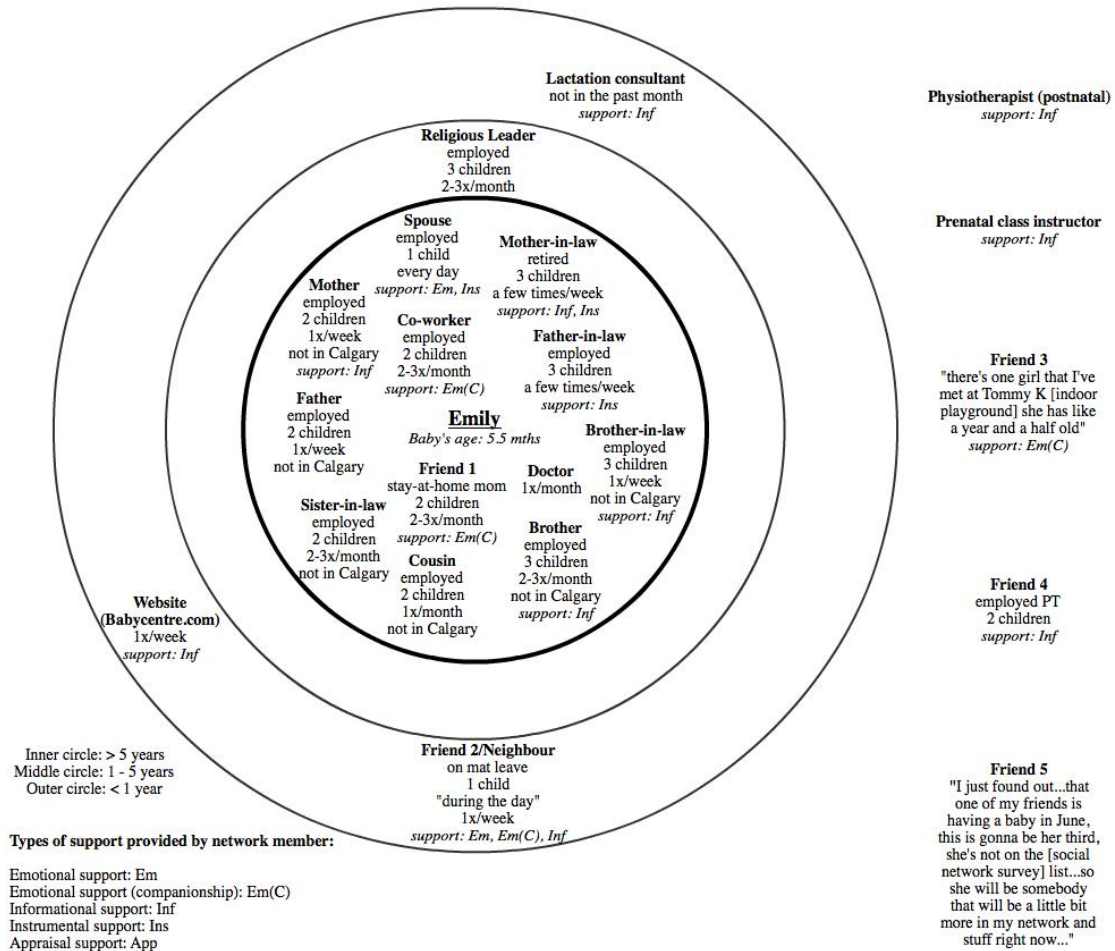
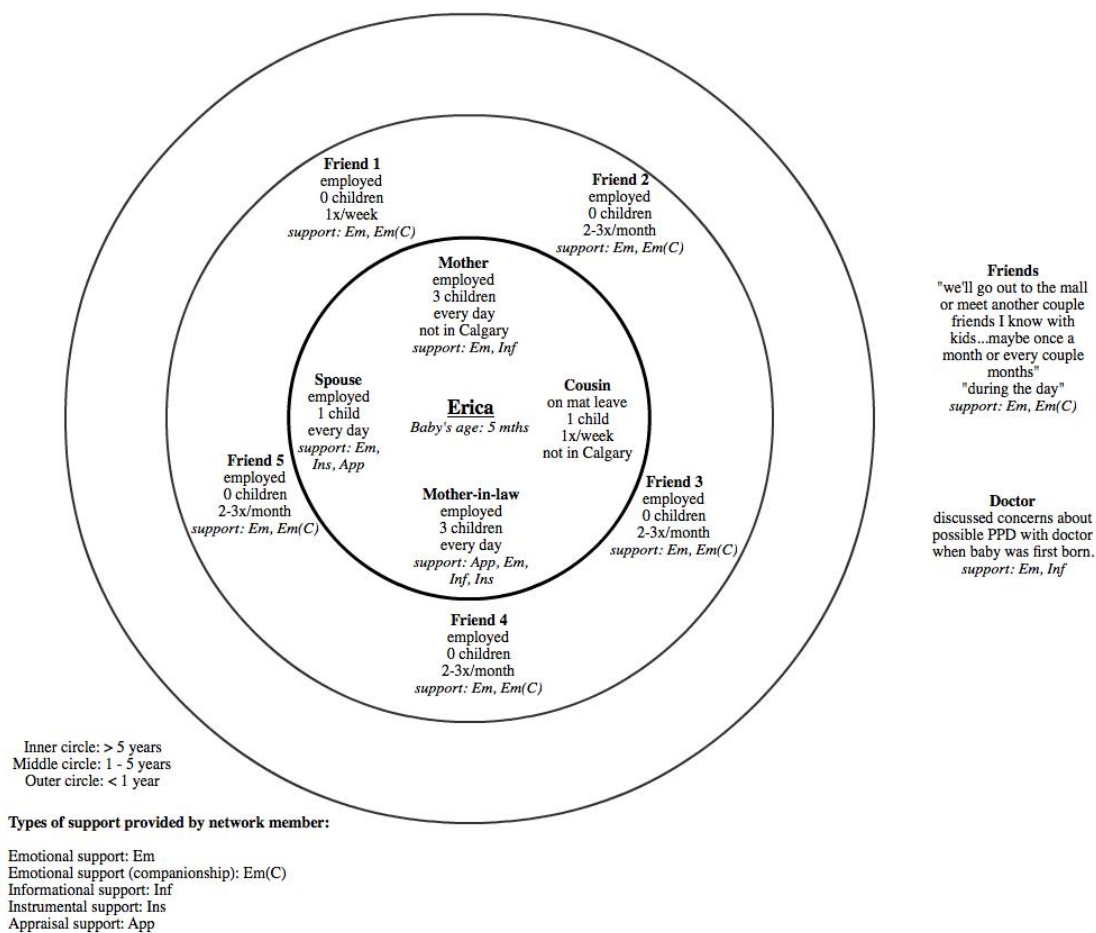


Figure E.3 Combined social network diagram: Emily



**Figure E.4 Combined social network diagram: Erica**



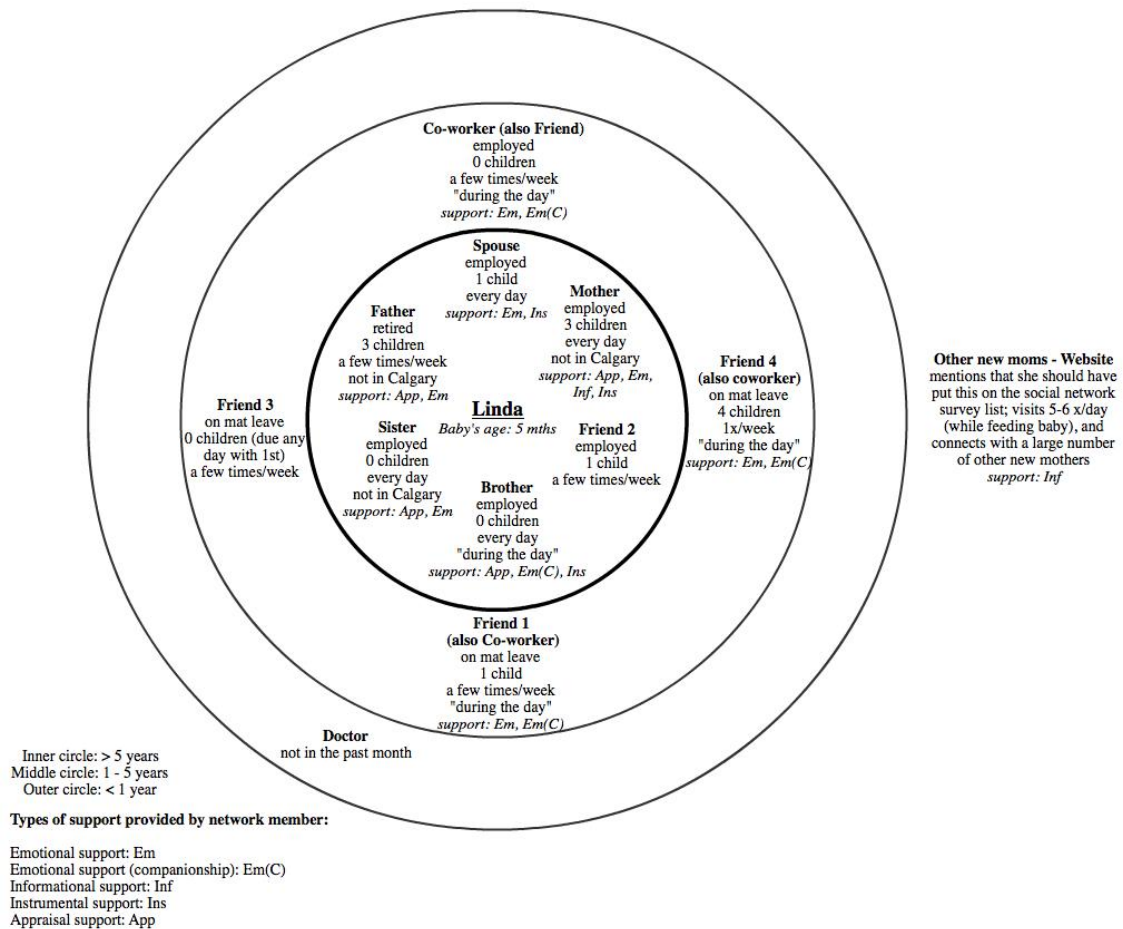


Figure E.5 Combined social network diagram: Linda

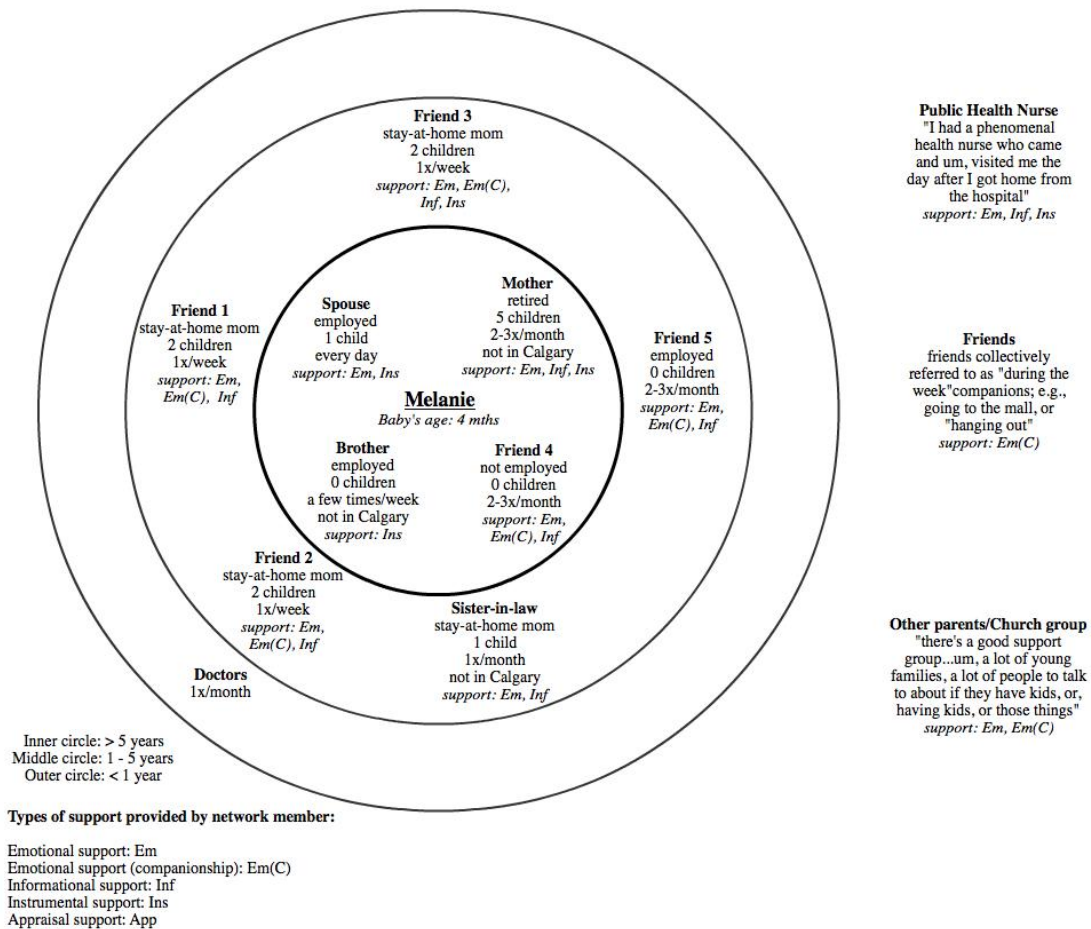


Figure E.6 Combined social network diagram: Melanie