Father involvement in the breastfeeding process: Determining contributing aspects

Katrina Moore, BA Honours Psychology

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Supervisor: Lynn Rempel, PhD

Faculty of Applied Health Science, Brock University
St. Catharines, Ontario

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Abstract

The importance of father involvement in the young family is increasingly evident. This research was conducted using the theory of planned behaviour to understand important aspects contributing to father involvement in the breastfeeding process.

Eighty mothers and 65 fathers of one-year-old children completed a questionnaire regarding father involvement (FI) in breastfeeding. Measures included attitudes, subjective norms, and perceived behaviour control regarding FI and the extent to which fathers demonstrated involvement by advocating for and affirming breastfeeding, being present during breastfeeding, providing household help, and being responsive to their partners’ needs.

Results suggest that mothers and fathers experience FI differently. Mothers’ perceptions are motivated by intrinsic attitudinal considerations, whereas fathers’ involvement is primarily motivated by the opinions of others. Interventions should focus on increasing fathers’ perception of societal approval through approaches such as peer-led groups, and increasing mothers’ approval through information of the value of fathers’ involvement in the breastfeeding process.
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Father Involvement in the Breastfeeding Process: Determining Contributing Aspects

Chapter 1: Introduction

Proper nourishment is vital for infants during their early stage of life. Although both breastfeeding and bottle-feeding are deemed adequate methods of nourishment (Noble & Emmett, 2006), breastfeeding provides additional health advantages to both infants and mothers, and encourages mother-infant bonding, attesting to breastfeeding’s superiority. For example, breastfeeding has been associated with many health benefits for infants including better visual acuity (Morale et al., 2005), lower infections and respiratory problems, and fewer incidences of sudden infant death syndrome (Ip et al., 2007). Associations have been found between breastfeeding and higher quality mother-infant relationships in 12 month olds who were breastfed, as compared to those who were bottle-fed (Else-Quest, Hyde & Clark, 2003). Breastfeeding has also been found to enhance mother-infant interactions both during and just after feeding (Lavelli & Poli, 1998). Further, breastfeeding has been associated with health benefits for the mother such as reductions in risk of breast cancer (Newcomb et al., 1994), and protection against pregnancy in the first six months after giving birth (Vanlandingham, Trussell, & Grummer-Strawn, 1991). Additional benefits of breastfeeding have been demonstrated to extend into adulthood. A systematic review conducted by Horta, Bahl, Martines, and Victora (2007) determined that breastfeeding was associated with long-term benefits including lower adult blood pressure and cholesterol, lower rates of obesity and type 2 diabetes, and higher scores on intelligence tests. The numerous immediate and long-term benefits of breastfeeding to infants and mothers warrant greater attention to breastfeeding behaviours.
Despite its superiority, current breastfeeding rates within North America fail to meet the World Health Organizations (WHO) recommendation of exclusive breastfeeding for a minimum of 6 months, and continued breastfeeding to 12 months (World Health Organization, 2003). Within Canada, of the 85% of women who initiated breastfeeding, only 17% followed the exclusive breastfeeding recommendations to six months (Millar & Maclean, 2005). Although initiation of breastfeeding has increased since 1965, current rates are far from adequate (Millar & Maclean, 2005).

Efforts to increase breastfeeding rates have focused on involving mothers in interventions and programs within hospitals and the community. Breastfeeding promotion efforts addressing maternal care practices in healthcare settings, maternal breastfeeding education, peer support, and social marketing campaigns have demonstrated their effectiveness (Shealy, Benton-Davis, & Grummer-Strawn, 2005), however, a growing body of literature suggests that fathers play a vital role in their partners’ breastfeeding decisions and behaviours through their involvement in the breastfeeding process. Thus interventions targeting fathers’ involvement in the breastfeeding process may provide a tangible and effective conduit through which breastfeeding initiation and duration may be impacted.

The current study aims to identify the important aspects contributing to father involvement in breastfeeding decisions and behaviours for the purpose of developing effective, theory-driven, breastfeeding interventions.
References


Chapter 2: Literature Review

Parameters of Literature Reviewed

In order to identify the possible aspects contributing to father involvement in the breastfeeding process, a review of the current literature was conducted. Articles presented in academic, peer-reviewed journals were obtained through searches in Scholars Portal, Cumulative Index to Nursing and Allied Health Literature, Medline, and PsychInfo. The general literature search was focused on articles with a combination of any two of the following key words: “father*” or “dad*”, “breastfeed*”, “influence*” or “Impact*”. Searches specifically for theory based literature involved combinations including the key terms: “father*” or “dad*”, “breastfeed*”, “theory”, “theory of planned behaviour”, “competence” or “confidence”, “self-efficacy”, “attitude*” or “opinions”, “norm*”. Specific searches aimed at finding breastfeeding interventions involving fathers were searched using the following key terms: “intervention” or “program”, “breastfeed”, “father” or “dad” and “theory”. Although reports from community-based sources were of interest for the searches regarding existing interventions or programs, a search outside of the academic literature revealed there to be no relevant literature available. Additional literature searches were conducted based on reference lists of several articles reviewed, and relevant articles from peer-reviewed journals to which K. Moore, and Dr. Lynn A. Rempel were previously aware have also been included. Further, research presented by Dr. Lynn A. Rempel at conferences, and unpublished research by Dr. Lynn A. Rempel has also been included.
Father Involvement

Literature investigating mothers’ breastfeeding decisions and behaviours suggest that fathers play a vital role in this process. Fathers’ involvement has been found to influence mothers’ breastfeeding decisions and behaviours through the breastfeeding support that they provide. Numerous studies in the literature indicate that mothers who breastfeed tend to have more breastfeeding support than women who choose other feeding methods (Bar-Yam & Darby, 1997; Pisacane, Continisio, Aldinucci, D’Amora, & Continisio, 2005; Scott & Binns, 1999). Investigating factors related to the duration of breastfeeding, Giugliani et al. (1992) concluded that support from a partner “is probably the most meaningful source of encouragement a woman may receive in terms of breastfeeding” (p.487). A later study found that fathers of breastfeeding infants were more aware of ways that a father may support a breastfeeding mother than other fathers (Giugliani, Caiaffa, Vogelhut, Witter, & Perman, 1994).

Father involvement in the breastfeeding process has been demonstrated to occur through several avenues including fathers’ attitudes toward breastfeeding. A review by Bar-Yam and Darby (1997) indicates that mothers’ perception of their partner’s breastfeeding attitudes as well as fathers’ actual attitudes are both important factors in the initiation and duration of breastfeeding. Investigating infant feeding attitudes of both parents, Shaker, Scott and Reid (2004) found that fathers of breastfed babies had higher attitude scores favouring breastfeeding as compared to fathers of bottle-fed babies. Freed, Fraley, and Schanler (1992) investigated whether women can accurately predict fathers’ breastfeeding attitudes and found that mothers who planned to breastfeed were more likely to predict their partners as having a more positive attitude than mothers who did
not plan to breastfeed. In their investigation of fathers’ support, Rempel and Rempel (2004) found that fathers’ breastfeeding beliefs influence mothers’ breastfeeding intentions beyond the mother’s own reasons and intentions. Further, fathers’ influence went beyond the mothers’ perceptions of father approval.

Breastfeeding knowledge exhibited by the fathers is another way that fathers may influentially be involved in the breastfeeding process. Breastfeeding knowledge has been associated with breastfeeding intentions (Matich & Sims, 1992), initiation and duration (Freed et al., 1992; Guigliani et al., 1994; Shaker et al., 2004; Susin et al., 1999). Further highlighting the importance of partners’ breastfeeding knowledge, Freed and Fraley (1993) found 25% of female participants reported that they would be more likely to breastfeed if their partners knew more about it. In an investigation of the mechanisms of fathers’ influence, Rempel, Moore, and Rempel (2006) found the importance of fathers’ breastfeeding knowledge to be a central theme reported by both mothers and fathers.

Despite this evidence of the valuable impact father involvement in the breastfeeding process has on mothers’ breastfeeding decisions and behaviours, to date no research has investigated the important aspects contributing to fathers’ active engagement in the breastfeeding process. Understanding why some fathers engage in the breastfeeding process, while others do not, will provide a valuable contribution to understanding the way in which fathers impact breastfeeding decisions and behaviours, while potentially contributing to breastfeeding intervention efforts already increasing in focus on father involvement.
Interventions

In light of the important impact that fathers’ involvement has on a mother’s decision to breastfeed, programs promoting, encouraging and supporting the involvement of fathers are beginning to gain some attention. Existing interventions involving fathers have largely been conducted within the parameters of information sessions (Cohen, Lange, & Slusser, 2002; Piscane et al., 2005; Sciacca, Dube, Phipps, Ratliff, 1995; Sciacca, Phipps, Dube, & Ratliff, 1995; Stremler, & Lovera, 2004; Susin, & Giugliani, 2008; Susin et al., 1999; Wolfberg et al., 2004). The majority of these interventions included information delivered by a trained facilitator (Piscane et al., 2005; Stremler & Lovera, 2004; Susin & Giugliani, 2008) through the use of media, such as videos, handouts, and slides, containing information about breastfeeding techniques, WHO recommendations, breastfeeding problem management, and ways fathers can support their breastfeeding partner (Susin & Giugliani, 2008; Wolfberg et al., 2004). A few interventions included the opportunity for open discussions largely directed and determined by the participants (Susin & Giugliani, 2008; Wolfberg et al., 2004), and one study involved role-playing as a teaching tool. Stremler and Lovera (2004) were unique in involving fathers as the facilitators in their peer support program for fathers of breastfed babies.

Topics most commonly covered in these interventions include benefits and advantages of breastfeeding (Cohen et al., 2002; Sciacca, Dube et al., 1995; Sciacca, Phipps et al., 1995; Stremler & Lovera, 2004; Wolfberg et al., 2004), breastfeeding fears and concerns (Cohen et al., 2002; Sciacca, Dube et al., 1995; Sciacca, Phipps et al., 1995; Wolfberg et al., 2004; Stremler & Lovera, 2004), breastfeeding problems and problem
management (Piscane et al., 2005; Sciacca, Dube et al., 1995; Sciacca, Phipps et al., 1995; Susin & Giugliani, 2008; Susin et al., 1999), and technical aspects of breastfeeding, such as WHO recommendations and the biology of breasts (Cohen et al., 2002; Susin & Giugliani, 2008; Wolfberg et al., 2004). A few interventions also addressed the importance of paternal involvement (Cohen et al., 2002; Piscane et al., 2005; Susin & Giugliani, 2008; Wolfberg et al., 2004), and skills for advocating breastfeeding as best to partners (Wolfberg et al., 2004).

Interventions involving fathers appear to be generally successful in impacting breastfeeding. Sciacca, Dube et al. (1995), and Sciacca, Phipps et al. (1995) conducted an intervention that used incentives such as a breast-pump and other baby paraphernalia for mothers, and university football tickets for dads, to foster participation in a breastfeeding education class addressing the benefits, myths and parental fears surrounding breastfeeding, aimed at increasing breastfeeding knowledge, attitudes, and support. Participants in this study were found to have increased breastfeeding knowledge and support for both mothers and fathers, relative to a comparison group of Women Infant, Children (WIC) participants. This study also revealed that the intervention impacted breastfeeding initiation and duration, such that those who received the information were more likely to initiate and continue breastfeeding for longer than they had intended.

Comparing mother only to father included interventions, Susin and Giugliani (2008) found similar results indicating that inclusion of fathers is associated with higher rates of exclusive breastfeeding rates in the first six months. Findings from Wolfberg et al. (2004) suggest that eliminating misconceptions through education, and teaching fathers how to advocate for breastfeeding impacts breastfeeding initiation. Piscane et al. (2005) found
that information on breastfeeding problem management delivered to fathers decreased their partners' perceived severity of problems, and increased the likelihood of exclusive breastfeeding to six months. The value of interventions implemented in corporate settings obtained support from the Cohen et al. (2002) investigation of a lactation program offered to male employees at the Los Angeles department of Water and Power, a public utility company. An extension of the breastfeeding program offered to female employees, this program provided breastfeeding education classes covering information on breastfeeding advantages, techniques, problem management, and breast pumps to male employees and their partners. This study determined that partners of fathers involved in this program had breastfeeding duration rates above the national average. In the qualitative evaluation of their peer support program, Stemler and Lovera (2004) found fathers who participated in the peer-facilitated intervention indicated that the information they received was important and helpful.

While the effectiveness of breastfeeding promotion efforts involving fathers is evident, there are several issues with these interventions. Though existing interventions do provide support for the important role that fathers play in the breastfeeding process, they fail to provide clear justification and backing for the method and content of the interventions employed. Some researchers did not provide any background information indicating why specific interventions methods were employed (Wolfberg et al., 2004). Others used intervention methods that were weakly connected to previous research, but failed to acknowledge and follow through on developing intervention methods employed from findings of previous literature (Piscane et al., 2005; Sciacca, Dube et al., 1995; Sciacca, Phipps et al., 1995; Stremler & Lovera 2004). Some researchers explained the
inclusion of some aspects of the intervention, but failed to include this justification for
other elements (Susin & Guigliani, 2008). Further, mechanisms of support that fathers
employ have not been identified, or targeted within these interventions. Mechanisms
through which fathers’ impact breastfeeding decisions and behaviours identified by both
mothers and fathers have been determined through a qualitative study by Rempel et al.
(2006). This study identified 37 themes of influential father behaviours, reported by both
mothers and fathers. Interventions targeting specific behavioural outcomes for fathers
may impact fathers more effectively, and in turn impact mothers’ breastfeeding decisions
and behaviours to a greater extent.

Although, conceptually, breastfeeding efforts may effectively target both
breastfeeding initiation and duration, only Wolfberg et al. (2004), Piscane et al. (2005),
Sciacca, Dube et al. (1995), and Sciacca, Phipps et al. (1995) conducted interventions
prenatally. Susin and Giugliani (2008), Sciacca, Dube et al. (1995), and Sciacca, Phipps
et al. (1995) implement interventions postnatally. With limited resources available to
health promotion efforts, it is imperative that interventions aim to be as effective and
have as great an impact as possible. Breastfeeding is a decision that, physiologically,
must be made shortly after birth. Thus interventions targeting breastfeeding behaviours
need to be implemented prenatally for impacts in breastfeeding initiation to be realized.
Problems in the Wolfberg et al. (2004) and Piscane et al. (2005) interventions reflect this
issue. Although both evaluated interventions implemented prenatally Wolfberg et al.
(2004) found an impact on initiation but not duration, and Piscane et al. (2005) found an
impact on duration, without evaluating initiation rates. These studies demonstrate that
Interventions involving fathers in health promotion tend to reflect numerous biases that limit their applicability to other contexts. For example, participants in the intervention presented by Susin and Giugliani (2008) were recruited based on initiation of breastfeeding. Given that participants in this study had already initiated breastfeeding behaviour, it is fair to say that these participants might be more highly motivated breastfeeding duration. Of the six studies involving breastfeeding promotion efforts aimed at fathers, two were conducted outside of North America. Susin and Giugliani (2008) conducted their study with participants from a single hospital in Brazil, while Piscane et al, (2005) conducted their study using fathers from a hospital in Italy. North American interventions related to fathers and breastfeeding have all been conducted within the United States (Cohen et al, 2002; Sciacca, Dube et al, 1995; Sciacca, Phipps et al., 1995; Stremler & Lovera, 2004; Wolfberg et al, 2004). While studies conducted outside of North America provide more information and ideas on how fathers may be included in breastfeeding promotion efforts, cultural differences may impact the way in which fathers may be most effectively involved. Thus additional investigations into fathers’ involvement in the breastfeeding process within North America, and specifically within Canada, may provide more culturally relevant information that may be applied to understanding father involvement in efforts to increase fathers’ role in the breastfeeding process.
Another problem evident in the literature of father involved breastfeeding interventions is that these interventions have not been developed with a focus on fathers. Instead, existing interventions involving fathers developed out of interventions focused on mothers that permitted fathers to join their partner (Sciacca, Dube et al., 1995; Sciacca, Phipps et al., 1995). These interventions are still formatted for mothers, but aim to include fathers. For example, Susin and Giugliani, (2008) presented both mothers and fathers with the same intervention, but made included information in the fathers’ session that fathers could be supportive. Similarly, the extent to which Cohen et al. (2002), Wolfberg et al. (2004), Stremler and Lovera (2004), and Piscane et al. (2005) included father-relevant information extended to inclusion of information of how fathers could support their partners, and addressing their concerns and misconceptions surrounding breastfeeding.

While including fathers in the interventions is beneficial, specifically targeting fathers by including father-relevant information, and applying father-relevant information delivery systems in interventions, the effectiveness of these interventions in impacting father influence may be increased. The study conducted by Stremler and Lovera (2004) has attempted to do this, in their qualitative evaluation of peer-father facilitated interventions that had participants give feedback on the peer facilitated information sessions. While fathers’ reports indicate that they felt more able to assist and support their partners breastfeeding, and found the information provided to be ‘very important’, demonstrating the potential of peer-led interventions, they do not address the impact that these interventions have on fathers’ behaviour or, in turn on breastfeeding behaviours of these participants’ partners. Wolfberg et al. (2004) also attempted to create an
intervention geared specifically toward fathers, specifically aimed at changing attitude toward breastfeeding, and increase fathers’ perception of their ability to impact and support their partner’s breastfeeding.

Although these issues are problematic, of main concern is that current breastfeeding interventions focus on increasing the effectiveness of father involvement while failing to address the degree to which fathers are involved in the breastfeeding process. To date, no research has identified the relevant aspects contributing to fathers’ behaviour surrounding the infant feeding process. Efforts to impact breastfeeding rates through increasing father involvement require an understanding of the aspects that determine fathers’ degree of engagement in this process. As father involvement has been demonstrated to be influential in breastfeeding practices, efforts to increase breastfeeding initiation and duration may further benefit by focusing on increasing father involvement in the breastfeeding process by addressing factors that influence their decisions to become involved and by relating those decision-making factors to the ways in which they support their partners. Further, existing interventions tend to engage fathers who volunteer for these information-based interventions. Understanding aspects contributing to father involvement in the breastfeeding process may provide a way to reach fathers who normally would not have been included to become involved in the breastfeeding process.

Theory

Although interventions surrounding father support in the breastfeeding process possess varying limitations, one of the paramount issues with breastfeeding research and interventions, especially those involving fathers, is that it is largely atheoretical. The
The theoretical nature of this area of research is concerning because, as stated by Lippke and Ziegelman (2008) “theories are needed to explain and predict health behaviour, as well as for design and evaluation of interventions” (p. 698). Theories assist in intervention development by providing a framework from which to make decisions on key variables to target. Support for theory based interventions is evident in Noar, Bernac, and Harris (2007) meta-analysis indicating that interventions tailored on theoretical concepts were more effective than those tailored to a behaviour.

One theory that has been applied to understand numerous health behaviours, such as breastfeeding, is the theory of planned behaviour. Stemming from self-efficacy theory, the theory of planned behaviour (TPB) is a dispositional approach to understanding behaviour that posits intentions as the main predictor of human behaviour (Ajzen, 1991). Intentions are understood to “capture the motivational factors that influence a behaviour” (Ajzen 1991, p. 181), and are determined by three components: attitude (positive or negative evaluation of the behaviour), subjective norms (SN; social pressure to perform the behaviour), and perceived behavioural control (PBC; ease or difficulty of performing the behaviour; Ajzen & Madden, 1986). In turn these are determined by behavioural (attitudes), normative (SN), and control (PBC) beliefs.

According to the TPB, intentions are “indications of how hard people are willing to try, of how much of an effort they are planning to exert, in order to perform the behaviour” (Ajzen, 1991, p. 181). From this framework, the stronger the intentions are, the more likely the behavior is to be performed. Examining breastfeeding practices in Vietnamese American women, Mistry, Freedman, Sweeney and Hollenbeck (2008) found breastfeeding intentions to be significantly related to the method of infant feeding in the
hospital. Indicating a more complex concept of intentions, Rempel (2004) found that strength of intention to breastfeed for various durations over the first year of life was a stronger predictor of actual breastfeeding duration than intentions alone. Supporting the TPB’s contention that intention is determined by attitudes, SN, and PBC, Daneault, Beaudry, and Godin (2004) found all three components to be significantly correlated with intention to recommend breastfeeding for six months to new mothers.

As one of the determinants of intentions in the TPB, attitudes to the behaviour, refer to “the degree to which a person has a favorable or unfavorable evaluation of the behaviour in question” (Ajzen, 1991, p. 454). Existing breastfeeding literature indicates an association between attitudes and breastfeeding intentions and initiation (Koury, Moazzem, Jarjoura, Carothers, & Hinton, 2005). In hospital evaluations of beliefs, the type of feeding method chosen by mothers tends to be congruent with their beliefs about bottle and breastfeeding (Swanson & Power, 2008). Rempel (2004) found that breastfeeding attitudes are related to intended duration, and reasons for stopping. For example, mothers indicated that a salient reason for stopping breastfeeding was that they questioned the appropriateness of breastfeeding a toddler. As previously indicated, mothers’ breastfeeding behaviours are also impacted by the attitudes that their partner holds such that mothers who’s partners hold more favorable attitudes toward breastfeeding are more likely to initiate and continue breastfeeding.

Subjective norms refer to the perceived social pressure to perform or not to perform the behaviour. It is assumed that behaviours to which individuals feel pressured to comply to, and are motivated to comply to are more likely to occur. The relevance of social norms in determining behaviour is evident in the breastfeeding literature. Daneault
et al. (2008) found feeding intentions to significantly correlate with perceived social norms. Results from Rempel (2004) indicate an association of perceived breastfeeding approval with intended duration at nine months, such that mothers who perceived greater approval were more likely to breastfeed for longer. Similarly, Khoury et al. (2005) found subjective norms to be associated with breastfeeding initiation. Results from Mistry et al. (2008) indicate that mothers tend to follow the advice that they receive during pregnancy. In an investigation of teen mothers, Wambach and Koehn (2004) found that although teen mothers view infant feeding decisions as their own, they acknowledge the role of influential others. Investigating teen views on the TPB components, Giles et al. (2007) found that males attached more importance to the breastfeeding-related opinions of doctors. The importance of subjective norms in breastfeeding behaviour is further supported by findings indicating that feeding choices tend to be congruent with whichever social pressure the mother perceives more strongly (Swanson & Power, 2005). Further, partner, mother, and medical staff are important in influencing breastfeeding initiation and continuation (Swanson & Power, 2005).

The concept of perceived behaviour control in the TPB most closely resembles Bandura's (1997) concept of Self-Efficacy. Breastfeeding literature applying the TPB has found the degree to which mothers' perceived control of breastfeeding explained breastfeeding intentions (Daneault et al., 2004; Rempel, 2004). Investigations also indicate that perceptions of control influence breastfeeding initiation (Mistry et al., 2008), duration of breastfeeding (Rempel, 2004), and reasons for weaning (Rempel, 2004).

Evidence in the literature indicates that the theory of planned behaviour is useful to understanding mothers' breastfeeding behaviours, suggesting that this theory may
provide a good structure to understanding other areas impacting breastfeeding, such as father involvement in the breastfeeding process. As previously discussed, fathers’ attitudes toward breastfeeding has an impact on mothers’ breastfeeding behaviours (Bar-Yam & Darby, 1997; Freed, et al., 1992; Rempel & Rempel, 2004; Shaker et al., 2004). It is anticipated that fathers’ attitudes surrounding their own involvement will also influence breastfeeding such that fathers who believe that they should be involved in the breastfeeding process may be more likely to engage in mechanisms that influence their partner’s breastfeeding choices. Subjective norms surrounding father involvement are also expected to impact the degree to which fathers’ engage in mechanisms of support and influence. Thus, if a father perceives it to be part of his role as a father to be engaged in the breastfeeding process, he may be more likely to actively take part in breastfeeding. Further it is anticipated that fathers who believe that they are capable of becoming involved and having an impact in the breastfeeding process will be more likely to engage in the process.

**Purpose statement**

This study aimed to further the current literature by determining the relevant aspects contributing to the degree to which fathers’ become involved in the breastfeeding process.

Specifically this study aimed to answer the following questions:

1. Can the components of theory of planned behaviour (attitudes, subjective norms, perceived behavioural control, intentions) be used to understand the degree to which fathers’ become involved in the breastfeeding process?
2. Are mothers’ attitudes and SN surrounding father involvement in the breastfeeding process related to the degree to which they perceive their partner to be involved?

3. Are mothers’ perception of their male partners involvement congruent with fathers’ own reports of his involvement?

4. Are attitudes, SN, PBC surrounding father involvement and the degree of fathers’ reported involvement in the breastfeeding process associated with breastfeeding outcomes such as breastfeeding duration?

The proposed research will advance this area of literature by providing a theoretical framework, specifically, the theory of planned behaviour. Further contributions to the literature surrounding breastfeeding will be the inclusion of empirically identified father support mechanisms (Rempel et al., 2006) as the desired outcome behaviour. This study will also contribute a greater understanding of the impact of the complexities of interpersonal relationships on health related behaviours.
References


Chapter 3: Methods

Participants & Procedures

To determine the relevant aspects contributing to the degree to which fathers' become involved in the breastfeeding process mothers (N=124; age 16-43) who gave birth one year prior (October 18th 2008 to November 26th 2008), and their male partners were obtained through contacting mothers who participated in the Breastfeeding Best Practice Guidelines Evaluation in the Niagara region in the fall of 2008 (Rempel, unpublished), and agreed to be contacted for the purposes of this study.

The original sample of participants (N=140) were recruited from the Niagara region hospitals by liaison public health nurses who met with the mothers who gave birth over a 5-week period from October to November 2008 before they left hospital to inform them of the study and request permission to provide information to the researchers. At approximately two weeks postpartum, research assistants contacted mothers via telephone. Their participation involved completing a 20-30 minute survey via telephone interview. Of these women, fourteen percent were born outside of Canada, and 89% reported English as their first language. Ninety-seven percent were married or in common-law relationships, and 58% (n=81) were multiparas. At two weeks postpartum 57% (n=80) were breastfeeding only, while 29% (n=41) were feeding a combination of formula and breastmilk. Two months postpartum, 66% (n=92) of mothers were still breastfeeding, of which 33% (n=46) were breastfeeding only. At six months, 40% (n=56) of mothers were still breastfeeding their infants.

For the current study both mothers who indicated they would like to participate in future breastfeeding research, and their partners were contacted by a research assistant via
telephone (see Appendix A: Phone Script and Appendix A2: Phone Log), and invited to participate (see Appendix B: Letter of Invitation, Appendix C: Consent Form, and Appendix D: RA Consent Form). Those who were interested in participating completed the questionnaire packet via telephone interview conducted by the research assistant (see Appendix E: Fathers’ Questionnaire, and Appendix F: Mothers’ Questionnaire). Anyone who requested an alternate method of participating was mailed the questionnaire packet.

*Measures*

Participants completed a demographic questionnaire, and measures of their breastfeeding expectations and intentions for their child. Fathers also completed measures on their attitudes, SN, and PBC surrounding breastfeeding and their involvement in the breastfeeding process. Fathers and mothers were also given a list of breastfeeding supportive behaviours that fathers may engage in. Fathers were asked to indicate which behaviours they have engaged in, while mothers were asked to indicate the behaviours that their partner has engaged in.

*Demographics:*

*Fathers and Mothers:* Participants were asked to indicate their child’s age, their own age, education level, employment situation, country of birth, first language, relationship with their child’s other parent (i.e., girlfriend/boyfriend, fiancé, spouse, common-law spouse, separated, divorced), and whether they were living with the other parent. Where relevant, participants were asked the age to which their infant was exclusively breastfed, and age to which their child was breastfed at all.

Participants were also asked to complete relationship measures of trust (Rempel & Rempel, 2008), satisfaction and commitment (Agnew, Van Lange, Rusbult, & Langston,
Trust was measured on a 9-point scale from *not at all* to *completely* assessing participants’ agreement with 6 trust relevant questions such as “although there may be times of conflict and tension, how confident are you that your partner will always value you and appreciate you as a partner”. Originally developed by Rempel and Holmes (1986), this shortened version was taken from Rempel and Rempel (2008). The relationship satisfaction and commitment scales, both developed by Agnew et al. (1998), included 3 items each, both measured on 9-point scales from *not at all* to *completely* and include items such as “all things considered, to what degree do you feel satisfied with your relationship” and “for how much longer do you want your relationship to last”, respectively. These items were selected based on support in previous research, and minimal conceptual overlap ($\alpha = .87$, $\alpha = .80$, respectively).

*Mothers:* Additionally, mothers who indicated that they were not living with the father of their child were asked if there is another male partner in their life, and whether they were living with them. Mothers who stopped breastfeeding were asked how long their baby was breastfed for, and their reasons for stopping. Mothers who were still breastfeeding were asked how their baby was currently receiving breastmilk, while both current and previously breastfeeding mothers were asked how much their baby was being fed breastmilk, and formula at 9 months and 12 months.

*Theory of Planned Behaviour Measures:*

These measures are taken from, and, adapted for the current study from Rempel (2004). The original study for which these measures were created aimed to determine the usefulness of the TPB in explaining the breastfeeding intentions of mothers 9 months postpartum. These measures were developed for use in a study in which all three are
applied, alongside the breastfeeding intention measure that will also be applied in the current study, thus decreasing the possibility of construct overlap.

**Breastfeeding Intentions:** The measure of breastfeeding intentions was originally developed by Rempel (2004) for a study investigating the ability of TPB to explain breastfeeding intentions of breastfeeding mothers at 9 months postpartum. The scale asks participants to indicate how much they would like to (or would have liked to) be breastfeeding their baby at various time points on a scale from 0 (*not at all*) to 10 (*definitely*). Mothers who were still breastfeeding were asked to complete this scale in its original form for 12 months, 15 months, 18 months, 24 months and more than 24 months, while fathers were asked to complete an adapted measure asking them how much they would have liked their partner to be breastfeeding at 1 month, 2 months, 4 months, 6 months, and 9 months in addition to the time points that mothers complete. Duration intention scores were obtained by summing the intention strength for each time point. Higher scores indicated stronger intentions to breastfeed for longer.

**Attitude:** Breastfeeding attitudes were assessed using a 1-10 semantic differential scale. Fathers and mothers were asked to indicate the degree to which the anchor words *good-bad, foolish-wise, pleasant-unpleasant,* and *negative-positive* describe fathers’ involvement in the breastfeeding process. Scores for reverse ordered items were converted so that low scores on each of the items reflected lower attitudes, and high scores reflected more positive attitudes. Scores on the four items were then averaged to form an attitude score for each participant. In addition, both mothers and fathers completed an adapted version of the scale asking them to indicate the degree to which the anchor words described breastfeeding.
Perceived Behavioural Control (PBC): Three questions were used to determine perceived behavioural control. Ease of providing support for breastfeeding mothers was measured using a 7-point scale ranging from very easy to very difficult. Fathers' belief in their ability to support their partner for as long as she wants to breastfeed was measured using a 7-point scale ranging from strongly disagree to strongly agree. Father's ability to provide support no matter what happens was measured on a 7-point scale ranging from very unsure to very sure. A score for PBC was obtained for each participant by averaging the scores from these three items.

Subjective Norm (SN): Fathers' normative beliefs for both breastfeeding, and father involvement in the breastfeeding process were measured. Fathers indicated the degree to which significant others, such as partner, father, father-in-law, friend, and co-workers approved of breastfeeding, and of father involvement in the breastfeeding process. Fathers' answers for each important other were averaged to create a composite perceived approval score. Motivation to comply was measured by determining the importance of the opinion of each of the significant others using a 5-point scale ranging from not at all important to extremely important. Mothers completed the same measures in regard to the degree to which their partner, mother and friends approved of breastfeeding, and father involvement in the breastfeeding process.

Breastfeeding Support Strategies:

This measure consists of 37 items evaluating the ways that fathers help mothers breastfeed. Developed through qualitative interviews with 21 mothers and fathers in breastfeeding families (Rempel, Moore & Rempel, 2006), subscales measure breastfeeding advocacy (showing how much he knows about and cares about
breastfeeding), *household support* (such as changing diapers, cleaning, or cooking supper), *breastfeeding affirmation* (affirming the mother's breastfeeding decisions, especially when breastfeeding is hard), *breastfeeding assistance* (being present, involved, and helpful while the mother is breastfeeding), and *responsiveness to the mothers' needs* (caring for her physical and emotional health, and having realistic expectations of the mother's time and energy). Using this scale, participants were asked to indicate the degree to which they (or their partner) engaged in these behaviours on a 7-point scale ranging from *not at all* to *almost all of the time*. Subscale items are listed in Table 3-1. A mean score was calculated for each of the subscales, as well as an overall mean score for engagement in breastfeeding support strategies.

Table 3-1.

<table>
<thead>
<tr>
<th>Breastfeeding Support Strategy items by Subscale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Support Strategy Subscale</td>
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<tr>
<td>Items</td>
</tr>
<tr>
<td>Breastfeeding Advocacy</td>
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<tr>
<td>Household Support</td>
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<tr>
<td>Presence while Breastfeeding</td>
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<td>Breastfeeding Affirmation</td>
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<tr>
<td>Responsiveness to Mothers Needs</td>
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</tbody>
</table>
Be patient and understanding of the time it takes to breastfeed and don't get upset if the other household work is not done

Pay attention to how and how much your partner wants you to participate in breastfeeding

Try to improve your partners health and nutrition

Give your partner a break from the baby

Show patience and a willingness to wait for your opportunity to feed the baby

Support your partners attendance at a breastfeeding support group

Statistical Analysis

Quantitative data analysis was conducted using SPSS 17.0. Correlation analysis was conducted between the theory of planned behaviour variables of intentions, attitudes, SN, and PBC (fathers only).

Correlation analysis was run to determine the relationship between the 5 subcategories of the support strategies questionnaire, and the relationship of these 5 subcategories with the TPB variables (intentions, attitudes, SN and PBC) and reported breastfeeding duration. Further correlation analysis was conducted between mother's reports and father's reports on the TPB variables and fathers' engagement in the 5 subscales of the support strategies questionnaire.

Multiple regression analysis was conducted to determine the ability of the TPB to explain fathers' involvement in breastfeeding support. Specifically, regressions were conducted to determine the degree to which attitudes, SN, and PBC as reported by mothers and as reported by fathers predict intentions, the degree to which intentions predict fathers' use of the breastfeeding support strategies overall, and of each of the
support strategy subscales, and whether attitudes, SN, and PBC predict behavior in addition to intentions.
References


Chapter 4: Results

Descriptive Analyses

Demographic descriptives

Eighty mothers, and 66 fathers, of which 64 were couples, completed the questionnaire package. Casewise diagnostics were run through regression analyses between the independent variables (theory of planned behaviour variables of attitudes, SN, and PBC) and dependent variables (father involvement strategies) to identify any significant outliers (Stockburger, n.d.). Based on these analyses one father’s data was excluded from further analyses as analyses consistently identified this participants data as being close to, or greater than 3 standard deviations from the mean. Thus, further analyses are based on the responses of 65 fathers. Measures for father involvement attitudes and subjective norms mimicked those used to measure breastfeeding attitudes. The degree of similarity in the two measures led a research assistant to confuse father involvement attitude and subjective norm scales for a misprint. Before this misinterpretation of the measures was clarified data for father involvement attitudes and SN was lost for ten fathers. Thus analyses conducted involving fathers’ attitudes toward their involvement and fathers’ subjective norms surrounding their involvement are limited to 55 fathers responses.

Mothers’ mean age was 32.0 years (range 20-41 years, $SD=0.46$), while fathers’ mean age was 34.3 years (range 26-46 years, $SD=4.28$). Of the 80 mothers who indicated the nature of their relationship with the father of their child, 81% were married, 11% common-law, 5% engaged, 1% dating, and 1% separated. Fifty-four fathers, representing 83% indicated that they were in a marital relationship with the mother of their child,
while seven (11%) indicated common-law, and four (6%) indicated that they were engaged. On average, mothers had completed 4.3 years \( (n=78, SD=0.48) \) of high-school education, and 80% of mothers had post-secondary education \( (n=69, M=4.0 \text{ years}, SD=2.21) \), while fathers had completed an average of 4.1 years high-school, and 82% of fathers had post-secondary education \( (n=54, SD=1.73, M=3.9 \text{ years}) \).

At twelve months post-birth, 62 (78%) mothers had returned to work. Forty-one percent of mothers were working full time, 26% part-time, 5% were working at home, and 20% were not employed outside the home. Five percent of mothers were full-time students, and 3% part-time students. The children of mothers who had returned to work were an average of 9.6 \( (SD=3.36) \) months old at time of return. Ninety-two percent of fathers were employed full-time and, 5% were not employed outside the home. One father was employed part-time and one was on disability. Household income, as reported by fathers, showed 28% earning over $100 000, 22% between $80 000 and $99 000, 19% between $60 000 and $79 000, 19% between $40 000 and $59 000, and 8% between $20 000 and $39 000.

Research assistants attempted to contact participants just following the first birthday of the participants' children. At the time of data collection, the 44 male and 38 female children were an average of 12.5 months old \( (SD=0.61) \). Based on mothers' responses 1% of babies had not received any breastmilk at all. Of those who had breastfed, the average length of breastfeeding was 8 months \( (n=82, SD=4.63) \), with 26 mothers (32%) still breastfeeding at 12 months. The children who were still being breastfed at 12 months had received breastmilk via breast only (51%), breast and bottle (43%), and bottle only (6%) in the week prior to data collection. Mothers' breastfeeding
at nine months estimated at that time they had been feeding an average of 48%
breastmilk, and 48% formula. At twelve months, breastfed babies were receiving 28%
breastmilk, and 57% formula.

*Relationship scales*

On 9-point scales, mothers had an average relationship trust rating of 8.39 \((n=80, SD=0.95)\), relationship satisfaction of 8.15 \((n=80, SD=1.11)\), and relationship commitment of 8.85 \((n=80, SD=0.62)\). Fathers rated relationship trust at 8.56 \((n=65, SD=0.60)\), relationship satisfaction as 8.34 \((n=65, SD=0.75)\), and relationship commitment as 8.89 \((n=65, SD=0.40)\).

*Theory of planned behaviour descriptives*

Breastfeeding intentions: Two variables were created for mothers’ breastfeeding intentions. First, mothers’ total breastfeeding score summed mothers’ intentions out of ten at each of the following; 2 months (measured at 2 weeks), 4 months, 6 months (measured at 2 months), 9 months, 12 months (measured at 6 months), 15 months, 18 months, 24 months, over 24 months (measured at 12 months) for a total score out of ninety. Mothers’ mean summed total breastfeeding intentions score (MTBI) was 43.44 \((n=75, SD=18.16)\). Figure 4-1 shows mothers’ breastfeeding intentions, and fathers’ preferred breastfeeding beliefs at each time point. Second, mothers’ breastfeeding intentions for 15 months, 18 months, 24 months, and over 24 months as measured at 12 months were summed (BI12m) with a mean score of 12.54 \((n=26, SD=13.7)\) from a possible total score of 40.

Two separate scores were created for fathers’ desired breastfeeding duration. Fathers’ total breastfeeding duration (FTBD) score summed fathers’ desired
breastfeeding duration for 2 months, 4 months, 6 months, 9 months, 12 months, 15 months, 18 months, 24 months, and over 24 months (measured at 12 months). Of a possible 90, fathers’ mean FTBD score was 47.89 (n=65, SD=18.05). Fathers’ desired duration is reported in Figure 1, alongside mothers’ intentions. For fathers whose child was still being breastfed at 12 months, a score was created summing these fathers’ desire for their child to still be breastfed at 15 months, 18 months, 24 months, and over 24 months (DBD12m). The mean score for fathers’ DBD12m was 15.29 (n=21, SD=12.72). An additional mean score was created for fathers’ preferred breastfeeding duration as indicated at 12 months. The mean score for this preferred breastfeeding duration was 47.33 weeks (n=51, SD=22.82).

Figure 4-1

Mother’s intentions and fathers’ breastfeeding preference at different time points

Attitudes: Mothers’ mean attitude toward breastfeeding was 8.8 (n=79, SD=1.65) of a possible 10, while their mean attitude toward father involvement was 8.7 (n=78, SD=1.70). Fathers’ mean attitude toward breastfeeding was 9.49 (n=65, SD=1.09), while
their mean attitude toward their own involvement in breastfeeding was 9.0 (n=57, SD=1.44).

Subjective Norms: Mothers’ perceived approval of breastfeeding from others (most people, partner, mother, friends) had a mean of 4.73 (n=80, SD=0.47) on a 5-point likert scale. Figure 4-2 shows mothers’ perceived breastfeeding approval from most people, their partner, mother, and friends. Mothers’ perceived level of others’ (most people, mother, friends) approval toward father involvement was 4.38 (n=75, SD=0.80). Figure 4-3 shows mothers’ perceived approval for father’s involvement from most people, mother and friends. On average, fathers perceived others (most people, mother, father, father-in-law, friends, co-workers) approval of breastfeeding to be 4.51 (n=65, SD=0.59). Figure 4-4 shows fathers’ perception of most people, their mother, father, father-in-law’s, friends, co-workers approval of breastfeeding. Fathers’ perceived approval (most people, mother, father, father-in-law, friends, co-workers) of father involvement had a mean score of 4.28 (n=55, SD=0.68). Figure 4-5 shows fathers’ perceived approval of their involvement from relevant others, most people, mother, father, father-in-law, friends, and co-workers.
Figure 4-2

*Mother’s perceived breastfeeding approval*

Figure 4-3

*Mothers perceived father involvement approval*
Perceived behaviour control: On average, fathers' confidence in their ability to become involved in the breastfeeding process was 4.92 (n=63, SD=0.63) out of a possible score of 7.
Breastfeeding support strategies:

Mothers' and fathers' mean scores for overall breastfeeding support strategies were 3.43 (n=80, SD=0.80) and 3.72 (n=65, SD=0.67) respectively (refer to Table 4-1). Mothers' and fathers' score on each of the subscales was as follows; breastfeeding advocacy (mothers, n=80: M=2.90, SD=1.07; fathers, n=65: M=3.08, SD=0.92), household tasks (mothers, n=80: M=3.56, SD=0.91; fathers, n=65: M=4.02, SD=0.69), presence while breastfeeding (mothers, n=80: M=3.13, SD=1.02; fathers, n=65: M=3.58, SD=0.95), breastfeeding affirmation (mothers, n=80: M=3.74, SD=0.91; fathers, n=65: M=3.89, SD=0.73), and responsiveness to mothers’ needs (mothers, n=80: M=3.60, SD=0.86; fathers, n=65: M=3.92, SD=0.72).

Table 4-1

<table>
<thead>
<tr>
<th></th>
<th>Overall</th>
<th>Advocacy</th>
<th>Household</th>
<th>Presence</th>
<th>Affirmation</th>
<th>Responsive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>3.43</td>
<td>2.90</td>
<td>3.56</td>
<td>3.13</td>
<td>3.74</td>
<td>3.60</td>
</tr>
<tr>
<td>Father</td>
<td>3.72</td>
<td>3.08</td>
<td>4.02</td>
<td>3.58</td>
<td>3.89</td>
<td>3.92</td>
</tr>
</tbody>
</table>

To determine whether the theory of planned behaviour (attitudes, SN, and PBC) can be used to understand the degree to which fathers become involved in the breastfeeding process, several analyses were conducted; intercorrelations between father involvement TPB variables, correlational analyses between father involvement TPB variables and father support strategies, and multiple linear regression analyses using father involvement to predict fathers’ engagement in breastfeeding support strategies. The results of these analyses are presented below.
Correlation analyses: Applying the theory of planned behaviour to understand father engagement in breastfeeding support strategies

Father involvement TPB: Analyses intercorrelating the TPB variables surrounding father involvement were conducted. The results are presented in Table 4-2, along with results for mothers, which are presented later. No significant intercorrelations were found for fathers’ TPB variables regarding father involvement.

Table 4-2

<table>
<thead>
<tr>
<th>Theory of Planned FI</th>
<th>FI Attitudes</th>
<th>FI SN</th>
<th>PBC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Behaviour</td>
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<td>Father</td>
<td>Mother</td>
</tr>
<tr>
<td>FI Attitudes</td>
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<td>.43*</td>
<td>.20</td>
</tr>
<tr>
<td></td>
<td>.16</td>
<td>.21</td>
<td>.06</td>
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<tr>
<td>FI Subjective Norms</td>
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<tr>
<td>Mother</td>
<td>.05</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Father</td>
<td>.09</td>
<td></td>
<td></td>
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</tbody>
</table>

Note: n’s for mothers are 75 to 78, n’s for fathers are 55 to 63, depending on the correlation *p < .001

Father involvement TPB correlated with father support strategies: Analyses were conducted correlating father involvement TPB variables with the breastfeeding support strategies scale, and subscales. Table 4-3 contains the results of these analyses, along with analyses for mothers, which are presented later. Fathers’ attitudes toward their involvement in breastfeeding significantly correlated with fathers’ breastfeeding support strategy subscales household tasks (n=57, r=.27, p<.05), and presence in the breastfeeding moment (n=57, r=.30, p<.05). Fathers’ SN regarding their involvement correlated with breastfeeding support strategies overall (n=55, r=.36, p=.01), and subscales of household support (n=55, r=.43, p<.01), presence in the breastfeeding
moment \((n=55, r=.33, p<.05)\), breastfeeding affirmation \((n=55, r=.33, p<.05)\), and responsiveness to mothers’ needs \((n=55, r=.28, p<.05)\).

Table 4-3

**Father involvement (FI) attitudes, SN and PBC correlated with father support strategies overall and subscales**

<table>
<thead>
<tr>
<th>Breastfeeding support strategies</th>
<th>Father Involvement Theory of Planned Behaviour</th>
<th>Perceived Behavioural Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Attitudes</td>
<td>Subjective Norms</td>
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<tr>
<td></td>
<td>Mother FI</td>
<td>Father FI</td>
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<tr>
<td>Overall</td>
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<tr>
<td>Mothers</td>
<td>.29*</td>
<td>.04</td>
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<tr>
<td>Fathers</td>
<td>.07</td>
<td>.17</td>
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<tr>
<td>Advocacy</td>
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<tr>
<td>Mothers</td>
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<td>Fathers</td>
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<tr>
<td>Household</td>
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<td>Mothers</td>
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</tr>
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<td>Fathers</td>
<td>.08</td>
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</tr>
<tr>
<td>Presence</td>
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<tr>
<td>Mothers</td>
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<td>.12</td>
</tr>
<tr>
<td>Fathers</td>
<td>.08</td>
<td>.30*</td>
</tr>
<tr>
<td>Affirmation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>.29*</td>
<td>.04</td>
</tr>
<tr>
<td>Fathers</td>
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<td>.12</td>
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<tr>
<td>Responsive</td>
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<tr>
<td>Mothers</td>
<td>.20</td>
<td>-.01</td>
</tr>
<tr>
<td>Fathers</td>
<td>.03</td>
<td>-.04</td>
</tr>
</tbody>
</table>

Note: *n’s for mothers are 75 to 80, n’s for fathers are 55 to 65, depending on the correlation.

*p < .05. **p < .01. ***p < .001.

**Multiple regression analyses: Using the theory of planned behaviour to predict father engagement in breastfeeding support strategies**

To test the ability of the TPB to predict fathers’ involvement in breastfeeding support strategies, multiple regression analyses were conducted. Specifically, fathers’ attitudes, SN, and PBC regarding father involvement were used to predict fathers’
reported support. Table 4-4 presents these analyses, as well as analyses for mothers, which are presented later. Analyses reveal that fathers’ overall breastfeeding support strategy score was significantly predicted by their TPB variables, (R²=.11, F(3)=3.29, p<.05), with SN as the only significant predictor (β=.34, p<.05). Combined, the TPB variables also predicted fathers’ support strategy subscales of household support (R²=.21, F(3)=5.80, p<.01), with SN as the only significant predictor (β=.40, p<.01), and presence in the breastfeeding moment (R²=.13, F(3)=3.69, p<.05), with SN as the only significant predictor (β=.30, p<.05).

Table 4-4

<table>
<thead>
<tr>
<th>TPB Variable</th>
<th>Overall</th>
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<th>Household</th>
<th>Presence</th>
<th>Affirmation</th>
<th>Responsive</th>
</tr>
</thead>
<tbody>
<tr>
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<tr>
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<td>.12</td>
<td>.05</td>
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<tr>
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<td>.40**</td>
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<td>.03</td>
<td>.07*</td>
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<tr>
<td>Father</td>
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<td>.00</td>
<td>.21**</td>
<td>.13*</td>
<td>.07</td>
<td>.04</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01.

Correlation analyses: Applying the theory of planned behaviour surrounding breastfeeding to understand father engagement in breastfeeding support strategies

Further analyses were conducted to determine whether the theory of planned behaviour variables (attitudes, and SN) regarding breastfeeding could also be useful in understanding fathers’ involvement in breastfeeding support strategies.
Correlation analyses were conducted between breastfeeding TPB variables, and father involvement TPB variables. Table 4-5 presents these correlation analyses. Fathers' breastfeeding attitudes significantly correlated with fathers' attitudes \((n=57, r=.55, p<.001)\) surrounding their involvement. Fathers' breastfeeding SN correlated significantly with their father involvement SN \((n=55, r=.70, p<.001)\).

Table 4-5

**Breastfeeding (BF) attitudes, SN, and PBC correlated with father involvement attitudes, SN, and PBC**

<table>
<thead>
<tr>
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<th>Attitudes</th>
<th>Father Involvement</th>
</tr>
</thead>
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<td>BF Intentions all</td>
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<td>Mother</td>
<td>.10</td>
<td>-.15</td>
</tr>
<tr>
<td>Father</td>
<td>-.31</td>
<td>.34</td>
</tr>
<tr>
<td>BF Attitudes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>.55***</td>
<td>.05</td>
</tr>
<tr>
<td>Father</td>
<td>-.06</td>
<td>.55***</td>
</tr>
<tr>
<td>BF Subjective Norms</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>.33**</td>
<td>.04</td>
</tr>
<tr>
<td>Father</td>
<td>.18</td>
<td>.24</td>
</tr>
</tbody>
</table>

Note: n's for mothers are 75 to 80 except for Intentions at 12m for which \(n=26\) while n's for fathers are 55 to 65 expect for Intentions at 12m for which \(n=21\), depending on the correlation. **p < .01. ***p < .001.

Analyses correlating the TPB variables with father support strategies. Results of these analyses are presented in Table 4-6. Fathers' breastfeeding SN significantly correlated with fathers' breastfeeding support strategy subscales presence in the breastfeeding moment \((n=65, r=.25, p<.05)\). Further, fathers' SN correlated significantly with mothers' breastfeeding affirmation support strategy subscale \((n=63, r=.28, p<.05)\).
Table 4-6

Breastfeeding (BF) attitudes, SN, and PBC correlated with father support strategies overall and subscales

<table>
<thead>
<tr>
<th>Breastfeeding support strategies</th>
<th>BF Intentions (all)</th>
<th>BF Intentions at 12m</th>
<th>BF Attitudes</th>
<th>BF Subjective Norms</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>Overall</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>.09</td>
<td>.06</td>
<td>-.02</td>
<td>.02</td>
</tr>
<tr>
<td>Fathers</td>
<td>-.23</td>
<td>-.13</td>
<td>-.32</td>
<td>-.01</td>
</tr>
<tr>
<td>Advocacy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>-.14</td>
<td>.05</td>
<td>-.21</td>
<td>.13</td>
</tr>
<tr>
<td>Fathers</td>
<td>-.20</td>
<td>-.10</td>
<td>-.29</td>
<td>.03</td>
</tr>
<tr>
<td>Household</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>.23*</td>
<td>.11</td>
<td>.22</td>
<td>.19</td>
</tr>
<tr>
<td>Fathers</td>
<td>-.16</td>
<td>-.12</td>
<td>-.14</td>
<td>.09</td>
</tr>
<tr>
<td>Presence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mothers</td>
<td>.00</td>
<td>.01</td>
<td>-.19</td>
<td>.02</td>
</tr>
<tr>
<td>Fathers</td>
<td>-.27*</td>
<td>-.14</td>
<td>-.31</td>
<td>.06</td>
</tr>
<tr>
<td>Affirmation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>.23*</td>
<td>.11</td>
<td>.21</td>
<td>-.03</td>
</tr>
<tr>
<td>Father</td>
<td>-.23</td>
<td>-.11</td>
<td>-.46*</td>
<td>-.09</td>
</tr>
<tr>
<td>Responsive</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>.05</td>
<td>-.02</td>
<td>-.05</td>
<td>-.15</td>
</tr>
<tr>
<td>Father</td>
<td>-.13</td>
<td>-.13</td>
<td>-.12</td>
<td>-.09</td>
</tr>
</tbody>
</table>

Note: n's for mothers are 26 for Intentions at 12m, and 75 to 80 for other correlations, n's for fathers are 21 for Intentions at 12M, and 65 for other correlations.

*p < .05. **p < .01.

Multiple regression analyses: Applying the theory of planned behaviour surrounding breastfeeding to predict father engagement in breastfeeding support strategies

Multiple regression analyses were conducted to test the ability of breastfeeding TPB (attitudes and SN) to predict fathers’ involvement in breastfeeding support strategies. Specifically, fathers’ attitudes and SN regarding breastfeeding were used to predict fathers’ reported support. Table 4-7 presents these analyses. Analyses revealed the theory of planned behaviour variables regarding breastfeeding did not significantly
predict fathers’ engagement in breastfeeding support strategies, or breastfeeding support strategy subscales.

Table 4-7

*Theory of planned behaviour variables (attitudes and SN) regarding breastfeeding (BF) as predictors of father engagement in breastfeeding support strategies*

<table>
<thead>
<tr>
<th>TPB Variable</th>
<th>Overall</th>
<th>Advocacy</th>
<th>Household</th>
<th>Presence</th>
<th>Affirmation</th>
<th>Responsive</th>
</tr>
</thead>
<tbody>
<tr>
<td>BF Attitudes</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>-.05</td>
<td>-.18</td>
<td>-.03</td>
<td>-.04</td>
<td>.01</td>
<td>-.03</td>
</tr>
<tr>
<td>Father</td>
<td>-.05</td>
<td>-.09</td>
<td>-.02</td>
<td>-.02</td>
<td>-.07</td>
<td>-.08</td>
</tr>
<tr>
<td>BF Subjective Norms</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mother</td>
<td>.38**</td>
<td>.26*</td>
<td>.37**</td>
<td>.35**</td>
<td>.34**</td>
<td>.33**</td>
</tr>
<tr>
<td>Father</td>
<td>.20</td>
<td>.03</td>
<td>.20</td>
<td>.26</td>
<td>.18</td>
<td>.17</td>
</tr>
<tr>
<td>Adjusted R²</td>
<td>.11</td>
<td>.05</td>
<td>.11</td>
<td>.09</td>
<td>.09</td>
<td>.08</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01

Correlation analyses: Applying the theory of planned behaviour to understand mothers’ perception of father engagement in the breastfeeding process

To determine whether mothers’ TPB variables regarding father involvement are related to the degree to which they perceive their partner to be involved, several analyses were conducted. Specifically, intercorrelation analyses between mothers’ own TPB variables, correlations between mothers’ TPB variables and their reports of fathers engaging in breastfeeding support strategies, and multiple linear regression analyses using mothers’ TPB variables to determine the degree to which they predict mothers’ perceived breastfeeding support from their partner. The results of these analyses are presented below.

Father involvement TPB: Analyses intercorrelating mothers’ TPB variables surrounding father involvement were conducted. The results are presented in Table 4-2,
along with fathers' TPB intercorrelations. Mothers’ attitudes regarding father involvement was found to significantly correlate with mothers’ subjective norms for father involvement ($n=74$, $r=.43$, $p<.001$).

Mothers’ TPB regarding father involvement correlated with mothers’ perceived support strategies: Analyses were conducted correlating mothers’ father involvement TPB variables with the breastfeeding support strategies scale, and subscales. Table 4-3 contains the results of these analyses. Mothers’ attitudes toward father involvement significantly correlated with mothers’ reports for breastfeeding support strategies overall ($n=78$, $r=.29$, $p<.05$), and subscales of household tasks ($n=78$, $r=.24$, $p<.05$), presence while breastfeeding ($n=78$, $r=.28$, $p<.05$), and breastfeeding affirmation ($n=78$, $r=.29$, $p<.05$).

*Multiple regression analyses: Using the theory of planned behaviour to predict mothers’ perception of father engagement in the breastfeeding process*

To test the ability of mothers’ TPB to predict mothers’ perception of the degree to which their partners engage in breastfeeding support strategies, multiple regression analyses were conducted. Specifically, mothers’ attitudes and SN regarding father involvement were used to predict mothers’ perceived support. Table 4-4 presents these analyses. Analyses reveal that mothers’ overall breastfeeding support strategy score was significantly predicted by their TPB variables ($R^2=.08$, $F(2)=4.14$, $p<.05$), with attitudes as the only significant predictor ($β=.26$, $p<.05$). Broken into its subscales, mothers’ breastfeeding support strategies were also significantly predicted by the TPB variables, specifically, mothers’ presence in the breastfeeding moment ($R^2=.07$, $F(2)=3.58$, $p<.05$) with attitudes as the only significant predictor ($β=.27$, $p<.05$), and breastfeeding
affirmation ($R^2 = .09, F(2) = 4.58, p < .05$), with attitudes as the only significant predictor ($\beta = .29, p < .05$).

**Correlation analyses: Comparing mothers’ perception of fathers’ engagement in breastfeeding support strategies to fathers’ reports of engaging in breastfeeding support strategies**

Intercorrelations between mothers’ and fathers’ breastfeeding support strategies, were conducted, revealing significant agreement between mothers and fathers on the involvement of fathers in breastfeeding support strategies. Table 4-8 contains correlations between mothers’ and fathers’ breastfeeding subscales. Mothers’ and fathers’ overall breastfeeding support strategy scores were found to be significantly correlated ($n = 64, r = .39, p = .01$). Specific subscales mothers’ and fathers’ reports significantly correlated were breastfeeding advocacy ($n = 64, r = .53, p < .001$), household support ($n = 63, r = .27, p < .05$), and presence in the breastfeeding moment ($n = 63, r = .35, p < .01$). Mothers’ and fathers’ reports of the frequency of breastfeeding affirmation and responsiveness to mothers’ needs were not significantly correlated.

Table 4-8

*Mothers’ perceived engagement in breastfeeding support strategies by their partner correlated with fathers’ reported provision of breastfeeding support strategies*

<table>
<thead>
<tr>
<th></th>
<th>Fathers</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Overall</td>
<td>Advocacy</td>
<td>Household</td>
<td>Presence</td>
<td>Affirmation</td>
<td>Responsiveness</td>
</tr>
<tr>
<td>Mothers</td>
<td>.39**</td>
<td>.33**</td>
<td>.25*</td>
<td>.36**</td>
<td>.28**</td>
<td>.17</td>
</tr>
<tr>
<td>Advocacy</td>
<td>.44***</td>
<td>.53***</td>
<td>.25*</td>
<td>.36**</td>
<td>.41**</td>
<td>.24</td>
</tr>
<tr>
<td>Household</td>
<td>.27*</td>
<td>.17</td>
<td>.27*</td>
<td>.21</td>
<td>.10</td>
<td>.14</td>
</tr>
<tr>
<td>Presence</td>
<td>.33**</td>
<td>.27*</td>
<td>.22</td>
<td>.35**</td>
<td>.31*</td>
<td>.13</td>
</tr>
<tr>
<td>Affirmation</td>
<td>.32*</td>
<td>.16</td>
<td>.21</td>
<td>.29*</td>
<td>.24</td>
<td>.10</td>
</tr>
<tr>
<td>Responsive-ness</td>
<td>.28*</td>
<td>.25</td>
<td>.12</td>
<td>.27</td>
<td>.08</td>
<td>.12</td>
</tr>
</tbody>
</table>

*p < .05. **p < .01. ***p < .001.
Mothers' breastfeeding advocacy also positively correlated with fathers' breastfeeding support strategy subscales household support ($n=63$, $r=.25$, $p<.05$), presence in the breastfeeding moment ($n=63$, $r=.36$, $p<.01$), and breastfeeding affirmation ($n=63$, $r=.41$, $p<.01$). Further, mothers' presence in the breastfeeding moment positively correlated with fathers' breastfeeding advocacy ($n=63$, $r=.27$, $p<.05$), household support ($n=63$, $r=.22$, $p<.05$), and breastfeeding affirmation ($n=63$, $r=.31$, $p<.05$). Mothers' breastfeeding affirmation was found to be significantly correlated with fathers' presence in the breastfeeding moment ($n=63$, $r=.29$, $p<.05$), while mothers' responsiveness to mothers' needs significantly correlated with fathers' presence in the breastfeeding moment ($n=63$, $r=.27$, $p<.05$).

**Breastfeeding duration**

Breastfeeding duration with father support strategies: Correlation analyses were conducted between breastfeeding duration, and mothers' and fathers' breastfeeding support strategies. Table 4-9 contains the results of these analyses. Breastfeeding duration was found to negatively correlate with fathers' household support ($n=63$, $r=-.27$, $p=.05$), and fathers' presence in the breastfeeding moment ($n=65$, $r=-.30$, $p<.05$).

<table>
<thead>
<tr>
<th>Duration</th>
<th>Overall</th>
<th>Advocacy</th>
<th>Household</th>
<th>Presence</th>
<th>Affirmation</th>
<th>Responsive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>.12</td>
<td>-.05</td>
<td>.13</td>
<td>.04</td>
<td>.19</td>
<td>.15</td>
</tr>
<tr>
<td>Father</td>
<td>-.13</td>
<td>-.14</td>
<td>-.27*</td>
<td>-.30*</td>
<td>-.17</td>
<td>-.17</td>
</tr>
</tbody>
</table>

*p < .05

Cox regression analyses were conducted for each of the mothers' and fathers' overall breastfeeding support strategies scale, as well as the subscales to adjust for the
high percentage of mothers still breastfeeding at 12 months. Table 4-10 presents these analyses. Findings indicate that the more fathers’ were engaged and present in the breastfeeding moment the more likely their partner had ceased breastfeeding early.

Table 4-10

*Relative risk of earlier breastfeeding cessation with father support strategies*

<table>
<thead>
<tr>
<th>Risk</th>
<th>Overall</th>
<th>Advocacy</th>
<th>Household</th>
<th>Presence</th>
<th>Affirmation</th>
<th>Responsive</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mother</td>
<td>.91</td>
<td>1.15</td>
<td>.80</td>
<td>1.02</td>
<td>.88</td>
<td>.82</td>
</tr>
<tr>
<td>Father</td>
<td>1.43</td>
<td>1.23</td>
<td>1.21</td>
<td>1.39*</td>
<td>1.42</td>
<td>1.25</td>
</tr>
</tbody>
</table>

*p < .05*
References


http://www.psychstat.missouristate.edu/introbook/sbk17.htm
Chapter 5: Discussion

This study found that the theory of planned behaviour is useful in understanding father involvement in the breastfeeding process. Specifically, fathers who perceive more societal approval to be involved are more likely to engage in breastfeeding supportive behaviors. Further, mothers who hold more positive attitudes toward father involvement were more likely to perceive their partners to engage in breastfeeding supportive behaviours.

*Demographic Descriptives*

The rate of mothers who had initiated breastfeeding and were still breastfeeding at 12 months (32%) is unexpectedly high. Previous studies have found the percentage of mothers still breastfeeding at 12 months to be 14% (Rempel, 2004). The higher rates of breastfeeding found in the current study may be accounted for by the recruitment process. Participants in the current study were recruited from a previous study investigating the results of breastfeeding best practice guidelines (BPG) implemented in the public health unit in the Niagara Region. Thus, the higher rates of continued breastfeeding may be an indication that increased breastfeeding duration is one of the positive impacts of breastfeeding BPG implemented by Niagara Region Public Health Nurses. However, participants were recruited approximately one year after the birth of their child. Thus it is possible that mothers and fathers who were more invested in breastfeeding, and specifically long-term breastfeeding were more likely to participate, resulting in the higher rates of continued breastfeeding at 12 months.

Couples who participated in this study had well-adjusted relationships. Both mothers and fathers reported high levels of trust, relationship satisfaction, and
relationship commitment. Given the well-adjusted nature of the relationships of the participants in this study, fathers may be more likely to be aware of provide for their partners needs in the breastfeeding process. Further, mothers in these positive relationships may be more open to perceive, and receive, the assistance that their partner provides.

Theory of planned behaviour descriptives

Breastfeeding duration beliefs:

Mothers' mean breastfeeding intentions and fathers' mean desired breastfeeding duration at the various time points were quite similar, indicating that mothers and fathers in this study had fairly similar beliefs on how long their child was to be breastfed.

Mothers' attitudes and subjective norms:

Consistent with previous literature by Rempel (2004), mothers' breastfeeding attitudes were found to be very positive, and all referent others were perceived to be highly approving of breastfeeding, with mothers' perceiving their partner to be the most approving, followed by mother, and friends. New contributions to the literature from this study show that mothers also hold positive attitudes toward their partners' involvement in the breastfeeding process and that they perceive others to be approving of fathers' contributions to the breastfeeding process. While mothers appear to be quite open to receiving assistance from their partners, mothers' perception of their friends approval of partner involvement was lower than mothers' perception of both of their own mothers and 'most people's' approval, suggesting that mothers' friends may be a socially relevant group to target in attempts to increase mothers' perception of others approval of fathers' involvement in the breastfeeding process. For example, efforts to increase mothers'
perception of their friends approval of father involvement may include peer-led group interventions that provide mothers with a 'friends' group who discuss the value and importance of father involvement in the breastfeeding process.

**Fathers’ attitudes, subjective norms and perceived behavioural control:**

Like mothers, fathers seem to hold very positive attitudes toward breastfeeding, and perceive society to be quite approving of children being breastfed. Similarly, fathers’ attitudes surrounding their involvement in the breastfeeding process were quite high, indicating that although the role of fathers in the breastfeeding process is one that is being recognized within society, new fathers are already viewing their involvement as a positive contribution. Further, fathers’ perception of referent others’ approval of their involvement in the breastfeeding process tended to be fairly positive, although fathers’ perception of approval from their father, father-in-law, friends and coworkers were all lower than fathers’ perception of approval from most people in society. Thus, while fathers tend to perceive others as more approving than disproving of their involvement, the perceived approval that fathers receive from important men in their lives may be a beneficial area to begin efforts to increase fathers’ perception of others approval of their involvement. For example, peer-led groups where men are able to connect with other men, learning about and discussing the importance of their role in the breastfeeding process, is one possible approach to improving fathers perception of others approval of their involvement in the breastfeeding process. These interventions could also give fathers tools such as information pamphlets to enable them to share the vital role they may play in the breastfeeding process with important people in their lives. Despite the lower approval of some referent others, fathers’ confidence in their ability to provide
support for breastfeeding was positive, although there was room for increased confidence. Given that the role of fathers in the process of child raising is one that has experienced change since previous generations (Cabrera et al., 2000), it is encouraging that fathers are already feeling more confident regarding their ability to have a positive impact on the feeding process of their children right from birth.

*Father influence strategies:*

Fathers' reports of their engagement in overall breastfeeding support strategies was closer to the response of *sometimes*, while mothers tended to perceive their partners as engaging in breastfeeding support strategies *often*. Mothers and fathers both indicated that fathers at least *sometimes* engaged in each of the breastfeeding support strategies subscales, but neither mothers nor fathers indicated that fathers’ engaged in any of the subscales more than *often*. This indicates that there is room for fathers to increase the degree to which they actively and consciously engage in breastfeeding support strategies. This conscious awareness from fathers is important as it may impact the degree to which fathers feel they are engaged in their child’s life, supporting the benefits that their child receives from breastfeeding. Further, these results indicate that there is room for mothers to further their awareness of the support that their partner provides in the breastfeeding process. Thus efforts should be made to increase the degree to which fathers engage in, and mothers perceive their partner engaging in breastfeeding support strategies. For example interventions should provide examples for both mothers and fathers of ways in which fathers may best support their partner in the breastfeeding process.
Can the components of theory of planned behaviour (attitude, SN, PBC, intentions) be used to understand the degree to which fathers become involved in the breastfeeding process?

According to the theory of planned behaviour, fathers’ actual engagement in breastfeeding support strategies should be determined by fathers’ intentions to be involved, which in turn should be determined by fathers’ attitudes, SN, and PBC regarding their involvement in the breastfeeding process. While the completion of measures approximately one-year postnatal, did not permit fathers’ intentions to be included in these analyses, multiple regression analyses provide support for the use of the TPB in explaining father involvement in the breastfeeding process. Findings suggest that for overall breastfeeding support strategies, fathers’ subjective norms regarding their involvement in the breastfeeding process significantly predict the degree to which fathers are involved. Further, broken into its subscales, fathers’ reported engagement in breastfeeding supportive strategies of household support, presence in the breastfeeding moment, breastfeeding affirmation, and responsiveness to mothers’ needs were significantly predicted by fathers’ subjective norms regarding their involvement. Thus fathers who perceive referent others as approving of their involvement are more likely to engage in breastfeeding support strategies as a whole, but more specifically to help out with other responsibilities at home, to provide assistance during breastfeeding, to encourage and support their partners breastfeeding, and to ensure their partners needs are being met. Fathers’ overall reports of engaging in breastfeeding support strategies were not significantly predicted by fathers’ attitudes regarding their involvement.
Applying the theory of planned behaviour to understand mothers’ perception of father engagement in the breastfeeding process

While support exists for the use of TPB in explaining father involvement in the breastfeeding process from the fathers’ perspective, there also exists support for the use of the TPB in predicting mothers’ perception of fathers’ engagement in breastfeeding support. Based on this theory it would be expected that mothers with more positive attitudes and perceive greater societal approval toward father involvement would be more likely to perceive breastfeeding involvement behaviours from their partner. Unlike fathers, mothers’ perception of others approval of fathers’ involvement did not significantly predict their perception of the degree to which their partner engaged in supporting their breastfeeding. This was true for both the overall breastfeeding strategies, as well as its subscales. Instead mothers’ perception of breastfeeding support strategies overall, and breastfeeding support strategy subscales of presence in the breastfeeding moment and breastfeeding affirmation were significantly predicted by their own attitudes toward father involvement.

While these findings suggest the TPB may be useful in explaining father involvement, it also suggests that interventions aimed at increasing father involvement in the breastfeeding process should include elements aimed at increasing fathers’ perception of referent others approval of their involvement in the breastfeeding process. Further, efforts aimed at increasing mothers’ perceived breastfeeding support would benefit from elements aimed at improving mothers’ attitudes toward father involvement.
Comparing mothers’ perception of fathers’ engagement in breastfeeding support strategies to fathers’ reports of engaging in breastfeeding support strategies

Analyses investigating the relationship between mothers’ perceived, and fathers’ reported engagement in breastfeeding support strategies indicate that mothers typically perceive the support that their partners report providing. However, while mothers tend to be generally aware of the types of support their partner provides, the correlations are not very strong. Thus, while efforts to increase fathers’ engagement in breastfeeding support strategies would not be wasted on their partners, as this study suggests that mothers are quite aware of the types of support their partners provide, this study also suggests that it is important to also attend to fathers’ reported contribution.

Theory of planned behaviour applied to breastfeeding outcomes

Findings suggest that the TPB may also be applied to the behaviour of breastfeeding. Significant breastfeeding duration associations demonstrate that consistent with the theory of planned behaviour, breastfeeding outcomes are associated with breastfeeding intentions such that mothers’ breastfeeding duration behaviour reflected their breastfeeding intentions.

Connecting father involvement to breastfeeding behaviour: There appears to be a connection between fathers’ involvement and breastfeeding with the TPB. Specifically, mothers’ attitudes regarding father involvement were significantly related to breastfeeding duration such that mothers who view father involvement more positively are more likely to continue breastfeeding for longer than those who do not. Further, although fathers’ overall reported engagement in breastfeeding support strategies were not found to directly correlate with breastfeeding duration, fathers’ reports of their
presence in the breastfeeding moment were, such that fathers who reported being more present in the breastfeeding moment were more likely to have partners who ceased breastfeeding earlier. This negative association is surprising as it was anticipated that greater father reports of actively contributing in the breastfeeding moment would be associated with longer breastfeeding duration. Presence in the breastfeeding moment is a very involved, ‘in your space’ type subscale with items investigating how attentive a father is during the breastfeeding moment, and whether he sits with his partner while she breastfeeds. While some women may appreciate this to a certain degree this negative association may be coming from fathers who are highly motivated to have their child breastfed who are engaged in the breastfeeding moment to the degree that their partners feel smothered and begin to feel that the breastfeeding experience is not authentic to them.

**Recommendations for Practice**

Theories assist in intervention development by providing a framework from which to make decisions on key variables to target. Through its investigation of father involvement in the breastfeeding process using the framework of the TPB, findings from this study indicate that the key variable to target in increasing father involvement is fathers perception of others approval of his involvement in the breastfeeding process. Further, this study has highlighted the importance of increasing mothers’ attitudes surrounding father involvement in the breastfeeding process in order to increase mothers’ perception of their partners support.

Existing breastfeeding interventions are typically geared towards mothers, and at best, include fathers as a secondary element (Cohen et al., 2002; Piscane et al., 2005;
Sciacca, Dube et al., 1995; Sciacca, Phipps et al., 1995; Stremler & Lovera, 2004; Susin & Giugliani, 2008; Wolfberg et al., 2004). These results indicate the importance of creating interventions specifically for fathers. Interventions driven by the TPB, geared specifically for fathers should aim to impact fathers’ involvement in the breastfeeding process through focusing on increasing fathers’ perception of others approval of this involvement. The literature indicates that fathers appreciate interventions structured as peer-led group sessions geared to provide information and support (Stremler & Lovera, 2004). Such interventions would benefit from emphasizing the importance of a fathers role in the breastfeeding process, while also providing fathers with information regarding the ways in which they may provide breastfeeding support for their partner. Such interventions may be run in the public health setting, or in the work place as demonstrated by Cohen et al. (2002). These interventions would highlight for fathers the importance of their role, while also providing a group of peers who also understand the importance of their involvement, thereby increasing a fathers subjective norms surrounding father involvement in the breastfeeding process.

When providing breastfeeding education to both mothers and fathers, results from this study suggest that it is important to actively recruit fathers to be involved, and provide father-relevant information. Interventions should provide information regarding the important role fathers play in the breastfeeding process, with specific examples of how fathers may be involved. Highlighting the importance of father involvement will positively impact mothers’ attitudes surrounding their partner’s involvement in the breastfeeding process. Further, giving couples examples of ways that fathers may provide
support in the breastfeeding process will highlight for fathers the ways that they may be involved.

Given that fathers' perception of their partners needs may not match mothers support needs, interventions could include activities where mothers identify their specific needs for support in the breastfeeding process. Such interventions strategies would be useful in prenatal interventions given that it may be helpful for couples to discuss in advance the support needs and abilities they anticipate needing, and also in postnatal interventions given that breastfeeding support needs may change once the baby is born, and as it develops. Such communication between mothers and fathers is important to avoid smothering mothers with too much help in ways that are actually unwanted.

Findings from this study also indicate that mothers’ attitudes surrounding father involvement in the breastfeeding process impact the extent to which mothers perceive their partner to be providing support. Thus efforts to increase mothers’ perception of their friends’ approval could include peer support programs (Rempel & Moore, 2008) that promote father involvement in the breastfeeding process. This type of intervention would not only impact a mother’s perception of her partner’s involvement, but also provide mothers with a peer group that has also been informed of the value of fathers’ involvement in the breastfeeding process.

Additional efforts to increase public awareness of the importance of a father’s role in the breastfeeding process may include advertizing, and media releases aimed at increasing the general public’s knowledge of a fathers’ role. Further, visual examples on billboards, bus stops, and the sides of buses within communities of fathers with breastfeeding mothers may increase the society’s general awareness and approval of
father involvement. Information promoting the role of fathers in their newborn's life may
impact mothers' attitudes toward their partners' involvement, increase society's general
approval of father involvement, and increase society's awareness that an important role of
a father is to support breastfeeding so that their baby receives the benefits of
breastfeeding, thus increasing the perception fathers of new children have of societies
approval of his involvement in the breastfeeding process.

Limitations

One drawback of this study was the small sample size, especially the small
number of fathers who completed all of the measures. However, despite the small sample
size, there was a consistent medium effect for mothers' attitudes, and fathers' subjective
norms as they related to father involvement in the breastfeeding process. Confidence in
the existence of this effect is high given the consistency of this effect despite the small
sample size. Future research with a larger sample may support analyses that produce
trending results in this study, such as the role of fathers' attitudes to their involvement,
mothers' SN in their perception of support from their partner, and the potentially positive
impact on breastfeeding duration of mothers' perception of their partner engaging in
breastfeeding support strategies.

Further limitations of this study stem from the methodology, specifically that that
the study was conducted one year postnatal. This methodology resulted in breastfeeding
outcome measures being limited to breastfeeding duration, and the inability to investigate
fathers' intentions to engage in breastfeeding supportive behaviours. Future
investigations should apply a pre-post methodology allowing for inclusion of fathers'
intentions through prenatal assessment, and the ability to determine whether the
breastfeeding outcome of initiation may be understood through the components of the TPB.

For the most part, the current study investigated fathers' and mothers' retrospective reports of their engagement in breastfeeding supportive strategies. While mothers' perceived similar support to that reported by fathers, more accurate representations of father involvement in the breastfeeding process may be obtained through interviews conducted at various time points, such as at 2 weeks, 2 months, 6 months, 9 months, and 12 months. Such methodology will reduce the degree of recall required regarding father's engagement in breastfeeding support strategies. This type of methodology would also provide more insight into how father support changes as a breastfed child develops.

This study had a unique group of participants who were highly motivated breastfeeders. Additional information on the aspects determining father involvement in groups who are less likely to breastfeed would be interesting. Further, the participants in this study were in well-adjusted relationships. Studies investigating the determining aspects of fathers' involvement in breastfeeding may benefit from looking at couples who are in less well-adjusted relationships as the determining aspects may be more pronounced in this population, or may be different altogether.

While previous literature has demonstrated the impact that fathers' involvement has on mothers' breastfeeding decisions and behaviour (Bar-Yam & Darby, 1997; Freed et al., 1992; Giugliani et al., 1992; Giugliani et al., 1994; Pisacane et al., 2005; Rempel et al., 2006; Scott & Binns, 1999; Shaker et al., 2004; Susin et al., 1999), the current study has identified determining aspects that contribute to father involvement in the
breastfeeding process. This study identified the importance of fathers’ perception of others approval to their involvement in the breastfeeding process. This suggests that efforts to increase father involvement should include elements focused on increasing fathers’ own perception of societal approval, while also attempting to create societal change increasing the expectations and understanding that fathers may play an active role in their breastfed child’s life, thereby increasing their experience of fatherhood. Further, the current study identified the importance of mothers’ positive attitudes regarding father involvement to mothers’ perception of their partners providing breastfeeding support. Thus efforts to increase fathers’ involvement should be paralleled with efforts to increase mother’s approval of their partner’s involvement in the breastfeeding process so that father’s efforts may be more likely to be recognized by breastfeeding mothers. In summation, the theory of planned behaviour is a useful framework for understanding and identifying the relevant aspects contributing to fathers’ involvement in the breastfeeding process.
References


*Birth*, 26, 149-156.

Conclusions

Findings from this study suggest the theory of planned behaviour is a useful tool to understanding both fathers' involvement, and mothers' perception of their partner's involvement in the breastfeeding process. Further, findings of this study indicate that mothers and fathers experience father involvement differently.

New contributions to the literature indicate that mothers hold positive attitudes toward their partners' involvement in the breastfeeding process and that they perceive others to be approving of fathers' contributions to the breastfeeding process. Further, mothers with more positive attitudes toward father involvement are more likely to perceive their partner to be engaging in breastfeeding supportive behaviours. While mothers perceive society to generally approve of their partners involvement, mothers felt that their friends would be the least approving. Thus this may be a socially relevant group to target in attempts to increase mothers' perception of others approval of fathers' involvement in the breastfeeding process.

Findings from this study suggest that fathers' involvement is primarily motivated by the opinions of others. Thus fathers who perceive others to approve of their involvement are more likely to engage in breastfeeding supportive behaviours. These findings indicate that the support fathers receive from important men in their lives may be a beneficial area to begin efforts to increase fathers' perception of others approval of their involvement. Further, this study indicates that fathers hold positive attitudes toward their involvement in the breastfeeding process. Thus, while the role of fathers in the breastfeeding process is one that is just being recognized within society, new fathers are already viewing their involvement as a positive contribution.
Findings from this study also highlight the importance of measuring the experiences of both partners and suggest that in order to make effective decisions about involvement, fathers should be aware of the degree to which mothers desire them to be present and involved in the breastfeeding process, and that fathers should be given appropriate information on how they may provide breastfeeding support and contribute positively to a mothers’ breastfeeding process.
Appendix A: Phone Script

Hello my name is ___________ and I am a research assistant in the Nursing Department at Brock University. I am contacting you about a research study being conducted by Katrina Moore, a Masters student, under the supervision of Dr. Lynn Rempel. A package containing an information letter and consent form should have arrived recently in the mail. May I please speak with [Insert Mother’s name].

Last fall you participated in a study investigating the effect breastfeeding best practice guidelines implemented in a public health agency had on maternal breastfeeding experiences. At that time, you agreed to be contacted for future research relating to your breastfeeding experiences. We are currently conducting a follow up study, while also investigating father’s involvement in the breastfeeding process, and the aspects contributing to the degree to which fathers become involved. We are seeking both mothers and fathers as volunteer participants in this study, and wondered if you and the father of your baby would be interested in hearing more about it.

[IF NO] Thank you for your time. If you were still breastfeeding at 6 months, would you be willing to answer a couple of questions regarding your breastfeeding practices since then?

[If NO] Again, thank you for your time. [skip to next section asking to speak with father of baby]

[IF YES] Are you currently breastfeeding?

[if not] How old was your child when you stop breastfeeding?

Again, thank you for your time. [skip to next section asking to speak with the father of the baby]

[if yes] How long do you intend to continue breastfeeding?

Again, thank you for your time. [skip to next section asking to speak with the father of the baby]

Would it be possible to speak with the father of your baby to invite them to participate?

[IF NO]. Again, thank you for your time. Good-bye.

[IF YES] Again, thank you for your time. Good-bye

[IF YES but not available] Could you please share the Letter of Invitation with him, and ask him to contact Dr. Lynn Rempel at 905-688-5550 ext 4774, or at irempel@brocku.ca. Also, would it be possible for me to try calling back at another time to see if I can connect with him?

[If YES and available] Research has indicated that fathers play an important role in the breastfeeding process. However, little is known about the aspects contributing to the degree to which fathers become involved. This research will help us understand how
fathers may be encouraged to become involved in the breastfeeding process in the hopes of developing breastfeeding interventions geared towards getting fathers involved.

If you agree to participate in this study, you will be asked to complete a questionnaire package at your convenience via telephone interview. You will be asked about the father of your babies/your attitudes surrounding breastfeeding, breastfeeding social norms, and your perception of your babies/your ability to effectively contribute to the breastfeeding process. You will also be asked how long you/the mother of your baby breastfed for, or intend to breastfeed for.

The expected duration of participation in this study is about 30 minutes. When you finish the study the father's name will be placed in a draw for one of two $100 contributions towards a Registered Education Savings Plan (RESP) or personal savings plan for your child.

I would also like to give you some information about the ethics of the study. This study has been approved by the Research Ethics Board at Brock University (file number _____, Rempel) and the Niagara Region Public Health Department Research Evaluation Committee. As you have been told, your answers will be used to understand father involvement, and the aspects contributing to fathers' involvement. You may refuse to answer some of the questions or stop at any time.

Your answers will be kept confidential. Your name will not be attached to your responses. We will use a code number to identify your questionnaires. The only people who will know your code number are those researchers and research assistants who are directly involved in this study. Your answers will be combined with those of other couples who take part in this study. Your individual answers will not be reported to anyone.

To let you know where the results of the study will be going, the combined results of this study may be published in academic journals, news media, and reported at conferences and to community health care agencies. You may receive a summary of the study upon request.

Do you have any questions? If you have any concerns about the ethics of this study, please contact the Brock University Research Ethics Officer, Office of Research Services (905) 688-5550, ext 3035.

Would you be interested in participating in this study?

[IF NO] Thank you for your time. Good-bye.

[If YES] Is this a good time to conduct the interview? Or would you prefer to schedule a different time to conduct the interview.

[IF Now] In the package sent to you in the mail there is a letter with further information about the study and a consent letter. Please take a few moments to read this over, and ask any questions or clarifications you may have. Once you have done that please sign the
consent form provided for your records. [Go through the questions in the questionnaire package with the participant, answering any questions/clarifications they may need. Upon completion:] Given that this study is interested in the opinions of both mothers and fathers, if the father of your baby is available, may I please speak with him to invite him to participate as well?

[If yes]. Thank you for your time. Good-bye. Start at beginning with father of the baby.

[If no]. Thank you for your time. Good-bye.

[IF Alternate Time] What time would be convenient for you to conduct the study?

Date: _______

Time: _______

Given that this study is interested in the opinions of both mothers and fathers, if the father of your baby is available, may I please speak with him to invite him to participate as well?

[If yes]. Thank you for your willingness to participate in this study. Good-bye. Start at beginning with father of the baby.

[If no]. Thank you for your willingness to participate in this study. Good-bye.
# Appendix A2: Phone Log

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Appendix B: Letter of Invitation

Title of Study: Father Involvement in the Breastfeeding Process

Principal Student Investigator: Katrina Moore, Applied Health Sciences, Brock University
Faculty Supervisor: Dr. Lynn Rempel, Chair, Department of Nursing, Brock University

Katrina Moore, an Applied Health Science Masters student and Dr. Lynn A. Rempel from the Department of Nursing, Brock University would like to invite you to participate in a research project entitled Father Involvement in the Breastfeeding Process.

Last fall you participated in a study investigating the effect breastfeeding best practice guidelines implemented in a public health agency had on maternal breastfeeding experiences. At that time, you agreed to be contacted for future research relating to your breastfeeding experiences. In the next week, a Research Assistant will be contacting you regarding a follow up study we are currently conducting that is also investigating father’s involvement in the breastfeeding process, and the aspects contributing to the degree to which fathers become involved. We are interested in including both mothers and fathers in this investigation and would appreciate it if you would also share this letter with the father of your child.

Learning about the aspects that get fathers to be more involved in the breastfeeding process will help gain a better understanding why some fathers are more involved than others. We hope that this study will contribute information to assist in the eventual development of a breastfeeding promotion program specifically designed to increase fathers’ involvement in the breastfeeding process, which in turn will impact mothers’ breastfeeding decisions and behaviours.

This study will involve completing a questionnaire at your convenience via telephone interview. Mothers will be asked about the father of your baby’s and your own attitudes surrounding breastfeeding, breastfeeding social norms, and your perception of the father of your baby’s ability to effectively contribute to the breastfeeding process. Fathers will be asked about your own attitudes surrounding breastfeeding, breastfeeding social norms, and your perception of your ability to effectively contribute to the breastfeeding process. Each will also be asked how long your baby breastfed for, or how long you intend to continue to breastfeed. Participants will also be asked questions about their relationship and interactions.

The expected duration of participation in this study is about 20 to 30 minutes. When you finish the study the father’s name will be placed in a draw for one of two $100 contributions towards a Registered Education Savings Plan (RESP) or personal savings plan for your child.
Further details about the study may be found on the consent form that came along with this letter.

If you have any pertinent questions about your rights as a research participant, please contact the Brock University Research Ethics Officer (905 688-5550 ext 3035, reb@brocku.ca).

If you have any questions, please feel free to contact us.

Thank you

Katrina Moore
MA Graduate student
Department of Applied Health Science
Brock University

km08jt@brocku.ca

Dr. Lynn A. Rempel
Associate Professor
Department of Nursing
Brock University

(905) 688-5550, Ext. 4774
lrempel@brocku.ca

This study has been reviewed and received ethics clearance through Brock University’s Research Ethics Board (file # XXX).
Appendix C: Consent Form

Date: Fall 2009

Project Title: Father Involvement in the Breastfeeding Process

Principal Investigator:
Lynn Rempel RN, PhD, Chair, Department of Nursing
Brock University
500 Glenridge Ave.
St. Catharines, ON L2S 3A1
905 688-5550 ext 4774

Student-Principal Investigator:
Katrina Moore, Masters Student, Department of Applied Health Science, Brock University

Funder:
Registered Nurses Association of Ontario

INVITATION
You are being invited to take part in a research study about father involvement in breastfeeding.

1. The purpose of this study is to find out about the aspects contributing to the involvement of fathers in the breastfeeding process.
2. This is part of a follow up to a study conducted in 2008.
3. At that time you agreed to be contacted for a follow up study.

WHAT IS INVOLVED?

1. This project is being conducted as part of a Masters thesis.
2. About 120 couples will take part in the study.
3. This study will involve completing a questionnaire at your convenience via telephone interview.
4. The expected duration of participation in this study is about 20 to 30 minutes for each individual.
5. Mothers will be asked about the father of your baby’s and your own attitudes surrounding breastfeeding, breastfeeding social norms, and your perception of the father of your baby’s ability to effectively contribute to the breastfeeding process. Fathers will be asked about your own attitudes surrounding breastfeeding, breastfeeding social norms, and your perception of your ability to effectively contribute to the breastfeeding process. Each will also be asked how long your baby breastfed for, or how long you intend to continue to breastfeed.
6. Mothers and fathers will be asked questions about their, relationship with their partner, and breastfeeding-related experiences.
7. You may refuse to answer any question that you feel uncomfortable answering.

POTENTIAL BENEFITS AND RISKS
Being in the study has some possible benefits for you:

1. You will help change the understanding of the roles of fathers in breastfeeding support.
2. You will help professionals know more about how to help women breastfeed successfully.
3. You may benefit by increasing awareness of your relationship with your partner, and specifically how fathers can support breastfeeding.

4. You may benefit by receiving one of two $100 contributions toward a Registered Education Savings Plan (RESP) or personal savings plan for your child.

Some couples may disagree about fathers provision of breastfeeding support. We believe that this survey should not cause any more conflict than is normal in couple relationship. If you do experience conflict you may contact the researchers for support information.

CONFIDENTIALITY

All information you provide is considered confidential. Your name will not be on any data collected in the study. Your data will be given a code number that will be linked to your name. Only Dr Rempel, Katrina Moore and other members of the research team will have access to the data. This will make sure data is kept confidential. The research team only wants to know the experiences of the whole group of mothers and fathers. They do not plan to report the answers of any one mother or father. You will not be identified in any way in reports of this research.

The only reason that your answers would not be kept confidential is if mandatory reporting laws (e.g. suspected child abuse) required the researchers to provide data from this study.

Hard copy data collected during this study will be stored securely in a locked drawer in Dr. Rempel’s office. Electronic identifying information will be stored on a computer drive that is only accessible by researchers and research assistants involved in the study. Data will be kept for 7 years after any articles about this study are published. After the 7 years, Dr. Rempel will shred any hardcopy data and delete electronic data.

VOLUNTARY PARTICIPATION

Whether you take part in the study is voluntary. You may decline to answer any questions. You can refuse to do any part of the study. You may withdraw participation at any time by speaking with the research assistant, or contacting the researchers. There will be no penalty if you refuse to take part. There will be no effect on any health care you might need. You will not lose any benefits to which you are entitled.

PUBLICATION OF RESULTS

The results will be shared with anyone who is interested in learning more about breastfeeding education and breastfeeding support. This includes the RNAO (Registered Nurses Association of Ontario), Niagara Health System, other agencies, community members, researchers, and health professionals. Results of this study may be presented at conferences. Results also may be published in professional journals. You will be able to get feedback about this study from Dr. Lynn Rempel (905) 688-5550 ext 4774.

CONTACT INFORMATION AND ETHICS CLEARANCE

If you have any questions about this study or require further information, please contact Dr. Lynn Rempel, (905) 688-5550 ext 4774. This study has been reviewed and received ethics clearance through the Research Ethics Board at Brock University (file #___). The study has also received ethics clearance from the Niagara Region Public Health Department Research and Evaluation Review Committee. If you have any comments or concerns about your rights as a research participant, please contact the Brock University Research Ethics Office at (905) 688-5550 Ext. 3035, reb@brocku.ca.
Dr Lynn A. Rempel  
Principal Investigator  
(905) 688-5550, ext 4774  
lrempel@brocku.ca

Katrina Moore  
Student Principal Investigator  
km08jt@brocku.ca

Thank you for helping with this project. Please sign and keep a copy of this form for your records.

CONSENT FORM

1. I agree to take part in this study described above.  
2. I have read and understood the information regarding this research project.  
3. I understand that I may ask questions in the future.  
4. I understand that I may take away this consent at any time.  
5. I will have a signed copy of this form.

Name: ____________________________ __

Signature: __________________________ _ Date: __________________________

CONSENT FOR SECONDARY USE OF DATA

I permit the researcher to use the data in secondary use of data studies. These studies would also be about breastfeeding. For example, my answers from this study may be used to compare answers given by women in other breastfeeding studies.

Signature: __________________________ _ Date: __________________________

TELEPHONE CONSENT FORM (to be completed by the research assistant)

The person named below agrees to take part in this study.  
She has stated that she has read and understood the information regarding this research project.  
She has stated that she understands that she may ask questions in the future.  
She has stated that she understands that she may take away her consent at any time.

Name of Participant: ____________________________ 
CONSENT FOR SECONDARY USE OF DATA

Permission for secondary use of data permits the researcher to use the data in secondary use of data studies. These studies would also be about breastfeeding. For example, her answers from this study may be used to compare answers given by women in other breastfeeding studies.

Name of Participant: ____________________________

I have explained this study to the participant. The participant has consented to participate.

Researcher Assistant’s Signature: ____________________________

Date: ____________________________
Appendix D: RA Consent Form

FATHER

Code: ______________________

TELEPHONE CONSENT FORM (to be completed by the research assistant)

The person named below agrees to take part in this study.
S/he has stated that she has read and understood the information regarding this research project.
S/he has stated that she understands that she may ask questions in the future.
S/he has stated that she understands that she may take away her consent at any time.

Name of Participant: ______________________

MOTHER

Code: ______________________

TELEPHONE CONSENT FORM (to be completed by the research assistant)

The person named below agrees to take part in this study.
S/he has stated that she has read and understood the information regarding this research project.
S/he has stated that she understands that she may ask questions in the future.
S/he has stated that she understands that she may take away her consent at any time.

Name of Participant: ______________________
Appendix E: Fathers' Questionnaire

Demographic Measures

The following questions are designed to provide us with demographic information that has been found to be relevant in previous breastfeeding research. As stated earlier, be assured that this information will be kept confidential.

1. What gender is your baby?  M   F

2. a) How old is your baby? _____ months    b) How old are you? _____ years

3. Which of the following best describes your relationship with your child's mother?
   - Girlfriend
   - Fiancé
   - Spouse
   - Common-law
   - Separated
   - Divorced

4. Do you currently live with the mother of your child?  Yes   No

5. How many years of schooling have you completed?  high school? _____ college or university? _____

6. Employment Situation:  _____ Full-time (35 or more hours / week)  _____ Part-time
   - Paid work at home
   - Part-time Student
   - Full-time Student
   - Not employed outside the home

7. If your partner is a student or working, what age was your child when she returned to school or paid work? _____

8. a) If your partner is not currently working, does she intend to return to paid work or school?  
   - Yes  ______ No  ______ Unsure  
   b) If yes, approximately what age will your child be when she returns to school or paid work? _____

9. What is your family’s annual income? (circle one)
   - Less than $6,000...
   - $6,000-
   - $19,999
   - $20,000-
   - $39,999
   - $40,000-
   - $59,999
   - $60,000-
   - $79,999
   - $80,000-
   - $99,999
   - More than $100,000
   - Refused

10. a) In what country were you born?  ________________
    b) What is your first language?  ________________

Relationship Confidence Scale

The following questionnaire asks you about how you expect your partner will respond to you in the future. Based on what you know, believe and feel about your partner, please indicate your “best guess” about how you expect your partner to act in the future.

1. Although there may be times of conflict and tension, how confident are you that your partner will always value you and appreciate you as a partner?
   - not at all  1   2   3   4   5   6   7   8   9   completely

2. When you and your partner discuss sensitive issues in the future, how certain are you that your partner will honestly tell you what he or she is thinking and feeling?
   - not at all  1   2   3   4   5   6   7   8   9   completely

3. In the future, when your partner makes important promises to you, do you believe that your partner will do his or her utmost to keep them?
4. How certain are you that your partner will care about you, come what may?

not at all 1 2 3 4 5 6 7 8 9 completely

5. Do you feel certain that your partner will be willing to listen when you express your feelings or share problems that trouble you?

not at all 1 2 3 4 5 6 7 8 9 completely

6. Do you believe that your partner will work with you so that your relationship will be able to weather any storm?

not at all 1 2 3 4 5 6 7 8 9 completely

**Relationship Satisfaction**

1. All things considered, to what degree do you feel satisfied with your relationship?

not at all 1 2 3 4 5 6 7 8 9 completely

2. Talking into account all of the qualities that are most important to you, how does your relationship compare to other people's?

not at all 1 2 3 4 5 6 7 8 9 completely

3. All things considered, how does your relationship compare to your ideal?

not at all 1 2 3 4 5 6 7 8 9 completely

**Commitment**

1. For how much longer do you want your relationship to last?

not at all 1 2 3 4 5 6 7 8 9 completely

2. Do you feel committed to maintaining your relationship with your partner?

not at all 1 2 3 4 5 6 7 8 9 completely

3. Do you feel attached to your relationship with your partner (like you are "linked" to your partner, whether or not you're happy with the relationship)?

not at all 1 2 3 4 5 6 7 8 9 completely
Breastfeeding Expectations

1. Is your partner currently breastfeeding? Yes No

2. If your partner is no longer breastfeeding, how old was your baby when she stopped? __________

3. How long would you like (or would have liked) your partner to breastfeed your baby? _____ months _____ weeks

Prescriptive BF Beliefs

For the following questions, please choose a number from 0 to 10 that best indicates how strongly you would like (or would have liked) your partner to breastfeed for each of the following time periods.

0 means you definitely would not like (or would not have liked) your partner to breastfeed
10 means you definitely do want (or did want) your partner to breastfeed for that long

You may choose any number between 0 and 10 if you do not (or did not) have definite preferences one way or the other.

How much would you like (or would have liked) your partner to still be breastfeeding when your baby is:

2 months old? _____ 4 months old? _____
6 months old? _____ 9 months old? _____
12 months old? _____ 15 months old? _____
18 months old? _____ 24 months old? _____
Older than 24 months? _____
The following questionnaire is about breastfeeding in general. Please indicate where on the scale most describes breastfeeding to you:

**Attitudes Toward Breastfeeding**

Please choose a number that will tell us how well these words describe breastfeeding for you. For example, if you think breastfeeding is all bad, you would choose 10. If you think that breastfeeding is all good, you would choose 1. If you think that breastfeeding is more good than bad, you would choose a smaller number. If you think that breastfeeding is more bad than good, you would choose a larger number.

- **Good**: 1 2 3 4 5 6 7 8 9 10 **Bad**
- **Foolish**: 1 2 3 4 5 6 7 8 9 10 **Wise**
- **Pleasant**: 1 2 3 4 5 6 7 8 9 10 **Unpleasant**
- **Negative**: 2 3 4 5 6 7 8 9 10 **Positive**

**Subjective Norms Surrounding Breastfeeding**

Use the following scale to indicate how much the people who are important to you approve of breastfeeding.

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<tr>
<td>Disapprove</td>
<td>Disapprove</td>
<td>Neutral</td>
<td>Approve</td>
<td>Strongly approve</td>
<td>Does not apply</td>
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1. Would most people who are important to you approve of your partner breastfeeding?
2. Would your mother approve of your partner breastfeeding?
3. Would your father approve of your partner breastfeeding?
4. Would your father-in-law approve of your partner breastfeeding?
5. Would your friends approve of your partner breastfeeding?
6. Would your co-workers approve of your partner breastfeeding?
7. How important to you are your mother’s opinions about breastfeeding?
8. How important to you are your father’s opinions about breastfeeding?
9. How important to you are your father-in-law’s opinions about breastfeeding?
10. How important to you are your friend’s opinions about breastfeeding?
11. How important to you are your co-workers opinions about breastfeeding?
The following questionnaire is about fathers involvement in the breastfeeding process. Please indicate where on the scale most describes father involvement in the breastfeeding process to you.

**Attitudes toward Father Involvement in the Breastfeeding Process**

Please choose a number that will tell us how well these words describe fathers involvement in the breastfeeding process for you. For example, if you think Fathers involvement in the breastfeeding process is all bad, you would choose 10. If you think that fathers involvement in the breastfeeding process is all good, you would choose 1. If you think that fathers involvement in the breastfeeding process is more good than bad, you would choose a smaller number. If you think that fathers involvement in the breastfeeding process is more bad than good, you would choose a larger number.

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<tr>
<td>Foolish</td>
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</tr>
<tr>
<td>Pleasant</td>
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<td>10</td>
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<tr>
<td>Negative</td>
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<td>2</td>
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<td>4</td>
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<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>10</td>
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</tbody>
</table>

**Subjective Norms Surrounding Father Involvement in the Breastfeeding Process**

Use the following scale to indicate how much the people who are important to you approve of you being involved in the breastfeeding process.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>Does not apply</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disapprove strongly</td>
<td>Disapprove</td>
<td>Neutral</td>
<td>Approve</td>
<td>Strongly approve</td>
<td></td>
<td></td>
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</tr>
</tbody>
</table>

1. Would most people who are important to you approve of you being involved in your partner’s breastfeeding process?

2. Would your mother approve of your involvement in the breastfeeding process?

3. Would your father approve of your involvement in the breastfeeding process?

4. Would your father-in-law approve of your involvement in the breastfeeding process?

5. Would your friends approve of your involvement in the breastfeeding process?

6. Would your co-workers approve of your involvement in the breastfeeding process?

7. How important to you are your mother’s opinions about your involvement in the breastfeeding process?

8. How important to you are your fathers opinions about your involvement in the breastfeeding process?

9. How important to you are your father-in-law’s opinions about your involvement in the breastfeeding process?

10. How important to you are your friend’s opinions about your involvement in the breastfeeding process?
11. How important to you are your co-workers opinions about your involvement in the breastfeeding process?

Not at all important  Slightly important  Somewhat important  Very important  Extremely important  Does not apply

*Perceived Behaviour Control for Father involvement in the Breastfeeding process*

For each of the following please indicate on the scale which best represents how you feel about your ability to do the following:

**How easy is (was) it for you to provide support for breastfeeding partner.**

<table>
<thead>
<tr>
<th>Very Easy</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Very Difficult</th>
</tr>
</thead>
</table>

I am (was) able to provide support to my partner for as long as she wants(ed) to breastfeed.

<table>
<thead>
<tr>
<th>Strongly Disagree</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Strongly Agree</th>
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</thead>
</table>

I am (was) able to provide support to my partner no matter what happens(ed)

<table>
<thead>
<tr>
<th>Very Unsure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>Very Sure</th>
</tr>
</thead>
</table>
Breastfeeding Influence Scale

Please use the following scale to indicate how often you did each of the following activities by writing your answer in the space beside each activity. If your partner is still breastfeeding your child, please use the scale to indicate how often you did the activity during the past month. If your partner has stopped breastfeeding, please use the scale to indicate how often you (your partner) did the activity during the time that your partner was breastfeeding.

1 = not at all  2 = rarely  3 = sometimes  4 = often  5 = very often

1. discuss or negotiate with your partner about how long to continue breastfeeding
2. make it easy for your partner to breastfeed while entertaining company or visiting others (for example, by entertaining company while your partner breastfeeds or by joining your partner in a private place at a social event)
3. discuss with your partner ideas for trying to solve breastfeeding problems or make suggestions for creative or different ways to make breastfeeding work better
4. help out with or take care of other childcare tasks with the baby (for example, rocking, soothing, responding to the baby’s cries, change diapers)
5. try to improve the breastfeeding experience by getting equipment or supplies ready for breastfeeding (for example, preparing a breastfeeding pump, get things such as a pillow that will make your partner comfortable)
6. act attentively towards your partner during breastfeeding (for example, bring your partner food or drink, a book, or massage your partner’s shoulders or back)
7. give something up in order to make breastfeeding easier (for example, be willing to set aside hobbies or preferred activities, take time off work, stop on a car trip)
8. respond sensitively and positively to sexual issues (for example, understand your partner’s feelings about not having sexual relations more than she wants, understand her feelings about touching her breasts, be flexible in sleeping arrangements and allow the baby to sleep in your bed)
9. help out with other household tasks and responsibilities to free up your partner’s time and energy.
10. learn more about breastfeeding by reading books or articles on breastfeeding.
11. tell your partner your opinion about how long you think that she should breastfeed.
12. encourage your partner to do her best when it comes to breastfeeding and let her know that she is not less of a mother if she feels like quitting
13. quietly share time and watch or hold your partner during breastfeeding
14. speak up in support of your partner or defend breastfeeding when someone makes a negative breastfeeding comment
15. help your partner get assistance from others for solving breastfeeding problems or improving breastfeeding (for example, by asking others for advice, getting professional help, or going along to get help)
16. help out with breastfeeding at night (for example, bring the baby, put the baby back to bed)
17. care for your baby during and after breastfeeding is done (for example, burp the baby, change the diaper)
18. praise your partner for breastfeeding and let her know that what she is doing is a beautiful, worthwhile thing
19. let your partner know that breastfeeding is natural and/or give her the message that she is breastfeeding because that is who she is?
20. physically help with breastfeeding related activities (for example, check the baby’s latch or position, breast massage, hold a breast pump, help with breastfeeding aids)
21. help create a quiet, pleasant environment for breastfeeding
22. listen to and encourage your partner when she is feeling frustrated or discouraged about breastfeeding
23. remind your partner of the benefits that breastfeeding has for her or for your baby (for example, it saves money, it is easier than bottle feeding)
24. show pleasure and satisfaction while your partner is breastfeeding (for example, watch, smile)
25. be patient and understanding of the time it takes to breastfeed and don’t get upset if the other housework is not done
26. show your comfort with breastfeeding in public (for example, malls, restaurants) and help her feel comfortable too
27. pay attention to how and how much your partner wants you to participate in breastfeeding
28. try to improve your partner’s health and nutrition (for example, cook nutritious meals, help avoid foods as agreed)
29. give your partner a break from the baby (for example, encourage personal time away, take care of the baby so that she can have time to herself)
30. show patience and a willingness to wait for your opportunity to feed the baby.
31. support your partner’s attendance at a breastfeeding support group
32. show appreciation that your partner is breastfeeding (for example, bring her flowers, take her out for dinner)
33. notice and show dislike or take offense at formula advertisements or marketing practices
34. encourage your partner to breastfeed as a way to calm the baby
35. discourage or disagree with your partner’s desire to stop breastfeeding
36. tell your partner that you value and support her mothering decisions and intuitions around breastfeeding
37. take care of the older children (if you have older children)
Appendix F: Mothers Questionnaire

Demographic Measures

The following questions are designed to provide us with demographic information that has been found to be relevant in previous breastfeeding research. As stated earlier, be assured that this information will be kept confidential.

1. What gender is your baby?  M  F

2. a) How old is your baby? _____ months  b) How old are you? _____ years

3. a) Was your baby breastfed?  b) If yes, for how long? _____ days _____ weeks  
   c) How is/was your baby receiving breastmilk?  Breast only  Breast & Bottle  Bottle Only
   d) How much was/is your baby being fed:
      At 9months  % Breastmilk  % Formula
      At 12months  % Breastmilk  % Formula
   
   e) If you have stopped breastfeeding, what were your reasons for doing so?

4. Which of the following best describes your relationship with your child’s father?
   Girlfriend  Fiancé  Spouse  Common-law  Separated  Divorced

5. Do you currently live with the father of your child?  Yes  No
   b) If no, is there another male partner in your life?  Yes  No
      i) If yes, is this male currently living with you?  Yes  No

6. How many years of schooling have you completed?  High school? _____  College or university?

7. Employment Situation:  Full-time (35 or more hours / week)  Part-time
   (check one)  Paid work at home  Full-time Student
   Part-time Student  Not employed outside the home

8. If you are a student or working, what age was your child when you returned to school or paid work?

9. a) If you are not currently working, do you intend to return to paid work or school?  
   _____ Yes  _____ No  _____ Unsure
   
   b) If yes, approximately what age will your child be when you return to school or paid work? _____
**Relationship Confidence Scale**

The following questionnaire asks you about how you expect your partner will respond to you in the future. Based on what you know, believe and feel about your partner, please indicate your "best guess" about how you expect your partner to act in the future.

1. Although there may be times of conflict and tension, how confident are you that your partner will always value you and appreciate you as a partner?
   
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<tr>
<th>Not at all</th>
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<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Completely</th>
</tr>
</thead>
</table>

2. When you and your partner discuss sensitive issues in the future, how certain are you that your partner will honestly tell you what he is thinking and feeling?

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<thead>
<tr>
<th>Not at all</th>
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<th>3</th>
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<th>9</th>
<th>Completely</th>
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</table>

3. In the future, when your partner makes important promises to you, do you believe that your partner will do his utmost to keep them?

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<tr>
<th>Not at all</th>
<th>1</th>
<th>2</th>
<th>3</th>
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<th>Completely</th>
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</table>

4. How certain are you that your partner will care about you, come what may?

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<th>Not at all</th>
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<th>Completely</th>
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</table>

5. Do you feel certain that your partner will be willing to listen when you express your feelings or share problems that trouble you?

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<tr>
<th>Not at all</th>
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<th>6</th>
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<th>8</th>
<th>9</th>
<th>Completely</th>
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</table>

6. Do you believe that your partner will work with you so that your relationship will be able to weather any storm?

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<th>Not at all</th>
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<th>Completely</th>
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</table>

**Relationship Satisfaction**

1. All things considered, to what degree do you feel satisfied with your relationship?

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<tr>
<th>Not at all</th>
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<th>Completely</th>
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2. Talking into account all of the qualities that are most important to you, how does your relationship compare to other people's?

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<th>Not at all</th>
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<th>Completely</th>
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3. All things considered, how does your relationship compare to your ideal?

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<th>Not at all</th>
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<th>9</th>
<th>Completely</th>
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</thead>
</table>
Commitment

1. For how much longer do you want your relationship to last?
   
   not at all  1  2  3  4  5  6  7  8  9  completely

2. Do you feel committed to maintaining your relationship with your partner?
   
   not at all  1  2  3  4  5  6  7  8  9  completely

3. Do you feel attached to your relationship with your partner (like you are “linked” to your partner, whether or not you’re happy with the relationship)?
   
   not at all  1  2  3  4  5  6  7  8  9  completely

Breastfeeding Intentions

(If still breastfeeding)

For the following questions, please choose a number from 0 to 10 that best indicates how strongly you would like to breastfeed for each of the following time periods.

0 means you definitely would not like (or would not have liked) to breastfeed
10 means you definitely do want (or did want) to breastfeed for that long

You may choose any number between 0 and 10 if you do not have definite preferences one way or the other.

How much would you like to still be breastfeeding when your baby is:

15 months old? ______
18 months old? ______
24 months old? ______
Older than 24 months? ______
The following questionnaire is about breastfeeding in general. Please indicate where on the scale most describes breastfeeding to you:

**Attitudes toward Breastfeeding**

Please choose a number that will tell us how well these words describe breastfeeding for you. For example, if you think breastfeeding is all bad, you would choose 10. If you think that breastfeeding is all good, you would choose 1. If you think that breastfeeding is more good than bad, you would choose a smaller number. If you think that breastfeeding is more bad than good, you would choose a larger number.

<table>
<thead>
<tr>
<th>Good</th>
<th>1 2 3 4 5 6 7 8 9 10</th>
<th>Bad</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foolish</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Wise</td>
</tr>
<tr>
<td>Pleasant</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Unpleasant</td>
</tr>
<tr>
<td>Negative</td>
<td>1 2 3 4 5 6 7 8 9 10</td>
<td>Positive</td>
</tr>
</tbody>
</table>

**Subjective Norms Surrounding Breastfeeding**

Use the following scale to indicate how much the people who are important to you approve of breastfeeding.

<table>
<thead>
<tr>
<th>1 Disapprove strongly</th>
<th>2 Disapprove</th>
<th>3 Neutral</th>
<th>4 Approve</th>
<th>5 Strongly approve</th>
<th>6 Does not apply</th>
</tr>
</thead>
</table>

1. Would most people who are important to you approve of you breastfeeding?
2. Would your partner approve of you breastfeeding?
3. Would your mother approve of you breastfeeding?
4. Would your friends approve of you breastfeeding?
5. How important to you are your partner's opinions about breastfeeding?
6. How important to you are your mother's opinions about breastfeeding?
7. How important to you are your friend's opinions about breastfeeding?
The following questionnaire is about fathers’ involvement in the breastfeeding process. Please indicate where on the scale most describes father involvement in the breastfeeding process to you.

**Attitudes toward Father Involvement in the Breastfeeding Process**

Please choose a number that will tell us how well these words describe fathers’ involvement in the breastfeeding process for you. For example, if you think fathers’ involvement in the breastfeeding process is all bad, you would choose 10. If you think that fathers’ involvement in the breastfeeding process is all good, you would choose 1. If you think that fathers’ involvement in the breastfeeding process is more good than bad, you would choose a smaller number. If you think that fathers’ involvement in the breastfeeding process is more bad than good, you would choose a larger number.

<table>
<thead>
<tr>
<th>Good</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<th>7</th>
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<th>9</th>
<th>10</th>
<th>Bad</th>
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<tbody>
<tr>
<td>Foolish</td>
<td>1</td>
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<td>Wise</td>
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<td>Pleasant</td>
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<td>Negative</td>
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<td>7</td>
<td>8</td>
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<td>10</td>
<td>Positive</td>
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</tbody>
</table>

**Subjective Norms surrounding Father Involvement in the Breastfeeding Process**

Use the following scale to indicate how much the people who are important to you approve of your partner being involved in the breastfeeding process.

<table>
<thead>
<tr>
<th>1</th>
<th>Disapprove strongly</th>
<th>2</th>
<th>Disapprove</th>
<th>3</th>
<th>Neutral</th>
<th>4</th>
<th>Approve</th>
<th>5</th>
<th>Strongly approve</th>
<th>6</th>
<th>Does not apply</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Would most people who are important to you approve of your partner being involved in your breastfeeding?</td>
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<td></td>
<td>2. Would your mother approve of your partner's involvement in the breastfeeding process?</td>
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<td>3. Would your friends approve of your partner’s involvement in the breastfeeding process?</td>
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<td>4. How important to you are your mother's opinions about your partner’s involvement in the breastfeeding process?</td>
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<tr>
<td>Not at all important</td>
<td>Slightly important</td>
<td>Somewhat important</td>
<td>Very important</td>
<td>Extremely important</td>
<td>Does not apply</td>
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<td></td>
<td>5. How important to you are your friend's opinions about your partner’s involvement in the breastfeeding process?</td>
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<tr>
<td>Not at all important</td>
<td>Slightly important</td>
<td>Somewhat important</td>
<td>Very important</td>
<td>Extremely important</td>
<td>Does not apply</td>
<td></td>
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</tr>
</tbody>
</table>
Breastfeeding Influence Scale

Please use the following scale to indicate how often your partner did each of the following activities by writing your answer in the space beside each activity. If you are still breastfeeding your child, please use the scale to indicate how often your partner did the activity during the past month. If you have stopped breastfeeding, please use the scale to indicate how often your partner did the activity during the time that you were breastfeeding.

1 = not at all  2 = rarely  3 = sometimes  4 = often  5 = very often

1. discuss or negotiate with you about how long to continue breastfeeding
2. make it easy for you to breastfeed while entertaining company or visiting others (for example, by entertaining company while you breastfeed or by joining you in a private place at a social event)
3. discuss with you ideas for trying to solve breastfeeding problems or make suggestions for creative or different ways to make breastfeeding work better
4. help out with or take care of other childcare tasks with the baby (for example, rocking, soothing, responding to the baby's cries, change diapers)
5. try to improve the breastfeeding experience by getting equipment or supplies ready for breastfeeding (for example, preparing a breastfeeding pump, get things such as a pillow that will make you comfortable)
6. act attentively towards you during breastfeeding (for example, bring you food or drink, a book, or massage your shoulders or back)
7. give something up in order to make breastfeeding easier (for example, be willing to set aside hobbies or preferred activities, take time off work, stop on a car trip)
8. respond sensitively and positively to sexual issues (for example, understand your feelings about not having sexual relations more than you want, understand your feelings about touching your breasts, be flexible in sleeping arrangements and allow the baby to sleep in your bed)
9. help out with other household tasks and responsibilities to free up your time and energy.
10. learn more about breastfeeding by reading books or articles on breastfeeding.
11. tell you his opinion about how long he thinks that you should breastfeed.
12. encourage you to do your best when it comes to breastfeeding and lets you know that you are not less of a mother if you feel like quitting
13. quietly share time and watch or hold you during breastfeeding
14. speak up in support of you or defend breastfeeding when someone makes a negative breastfeeding comment
15. help get assistance from others for solving breastfeeding problems or improving breastfeeding (for example, by asking others for advice, getting professional help, or going along to get help)
16. help out with breastfeeding at night (for example, bring the baby, put the baby back to bed)
17. care for your baby during and after breastfeeding is done (for example, burp the baby, change the diaper)
18. praise you for breastfeeding and lets you know that what you are doing is a beautiful, worthwhile thing
19. let you know that breastfeeding is natural and/or give her the message that you are breastfeeding because that is who you are?
20. physically help with breastfeeding related activities (for example, check the baby's latch or position, breast massage, hold a breast pump, help with breastfeeding aids)
21. help create a quiet, pleasant environment for breastfeeding
22. listen to and encourage you when you are feeling frustrated or discouraged about breastfeeding
23. remind you of the benefits that breastfeeding has for you or for your baby (for example, it saves money, it is easier than bottle feeding)
24. show pleasure and satisfaction while you are breastfeeding (for example, watch, smile)
25. be patient and understanding of the time it takes to breastfeed and don't get upset if the other housework is not done
26. show his comfort with breastfeeding in public (for example, malls, restaurants) and help you feel comfortable too
27. pay attention to how and how much you want him to participate in breastfeeding
28. try to improve your health and nutrition (for example, cook nutritious meals, help avoid foods as agreed)
29. give you a break from the baby (for example, encourage personal time away, take care of the baby so that you can have time to yourself)
30. show patience and a willingness to wait for his opportunity to feed the baby.
31. support your attendance at a breastfeeding support group
32. show appreciation that you are breastfeeding (for example, bring you flowers, take you out for dinner)
33. notice and show dislike or take offense at formula advertisements or marketing practices
34. encourage you to breastfeed as a way to calm the baby
35. discourage or disagree with you desire to stop breastfeeding
36. tell you that he values and supports your mothering decisions and intuitions around breastfeeding
37. take care of the older children (if you have older children)
Appendix G: Letter of Appreciation

Project Title: Father Involvement in the Breastfeeding Process
Principal Student Investigator: Katrina Moore, Department of Applied Health Science, Brock University, km08jt@brocku.ca
Faculty Supervisor: Dr. Lynn A. Rempel, Department of Nursing, Brock University, lrempel@brocku.ca

We appreciate that you took part in this study and helped with the research. As you read in the initial information letter you received, we were interested in learning about the aspects that get fathers to be more involved in the breastfeeding process. Finding out about these aspects will help us understand why some fathers are more involved in the breastfeeding process. This study will also help us in the eventual development of a breastfeeding promotion program specifically designed to increase fathers’ involvement in the breastfeeding process, which in turn will impact mothers’ breastfeeding decisions and behaviours.

While the literature has demonstrated that both breastfeeding and bottle-feeding are deemed adequate methods of nourishment, breastfeeding provides additional health advantages to both infants and mothers, and encourages mother-infant bonding, attesting to breastfeeding’s superiority. Despite its superiority, current breastfeeding rates within Canada fail to meet the World Health Organizations (WHO) recommendation of exclusive breastfeeding for a minimum of 6 months, and continued breastfeeding to 12 months (Millar & Maclean, 2005; World Health Organization, 1990). Efforts to increase breastfeeding rates have typically focused on involving mothers in interventions and programs within hospitals and the community. However, a growing body of literature indicates that fathers play a vital role in their partners’ breastfeeding decisions and behaviours through their involvement in the breastfeeding process.

Despite the valuable role that fathers play in breastfeeding, there are currently no studies in the literature that directly address the aspects that contribute to father involvement. This study attempted to gain a better understanding of these aspects. It is expected that fathers’ involvement will be influenced by their attitude (positive or negative evaluation of the behaviour), subjective norms (social pressure to perform the behaviour), and perceived behavioural control (ease or difficulty of performing the behaviour; Ajzen & Madden, 1986) toward breastfeeding in general, and to their involvement in the breastfeeding process.

The questions you answered asked about different aspects of your breastfeeding experience and the experience of your partner. Your responses to these questions helped us to evaluate the mechanisms by which fathers influence their partners’ breastfeeding intentions and behaviours, and ways to impact the degree to which fathers engage in these behaviours. This study found ________

It is hoped that the findings of this study will contribute to future development of breastfeeding interventions aimed at fathers.

All of the information you have provided in this study will be kept strictly confidential. This project was reviewed by, and received ethics clearance through, the Brock University Ethics board. If you have any ethical concerns about your participation in this study, please contact the Brock University Research Ethics Officer (905-688-5550 ext 3035, reb@brocku.ca). If you have any questions or comments about the study, please contact Katrina Moore at km08jt@brocku.ca or Dr. Rempel at (905) 688-5550, ext 4774, or lrempel@brocku.ca.
Appendix H: Confidentiality Agreement

Project Title: Father Involvement in the Breastfeeding Process

CONFIDENTIALITY STATEMENT

I understand that as a research assistant for a study being conducted by Katrina Moore, an Applied Health Science Masters student and Dr. Lynn A. Rempel from the Department of Nursing, Brock University, I am privy to confidential information. I agree to keep all data collected during this study confidential and will not reveal it to anyone outside the research team. All conversations related to the research, with participants and members of the research team, will be held in private locations and conducted in a manner that maintains confidentiality.

Name: ____________________ Signature: ____________________

Date: _______________ Witness Signature: ____________________