

Exploring Women's Experiences Regarding Postpartum Physical Activity: A Qualitative
Research Study

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Abstract

Although recovery after birth can be promoted through body movement, many women do not engage in regular postpartum physical activity. While many past research studies have identified some of the reasons behind women's decisions, including lack of time or access to public transportation; only a limited number of studies were carried out to explore how postpartum physical activity was socially and institutionally constructed. Therefore, this research study explored women's experiences regarding postpartum physical activity in Nova Scotia. Data were collected through semi-structured in-depth interviews with six postpartum mothers. Feminist poststructuralism and discourse analysis were used to explore how postpartum women's experiences were socially and institutionally constructed. Three themes were identified regarding postpartum physical activity: (a) Boost our body, lift our mind; (b) Being a role model; and (c) Socialization, social support. Results showed that all mothers accepted postpartum physical activity as a healthy behaviour. However, some mothers did not have enough support to engage in postpartum physical activity. In addition, mothers' own needs became sidelined in the social discourses of motherhood. The findings suggest that health care professionals, mothers, researchers, and community organizations for mothers need to collaborate to find creative ways to encourage and support mothers to engage in postpartum physical activity.

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Chapter 1: Introduction

The postpartum period is an important time of transition and engaging in physical activity can be challenging for many women. During past decades, many research studies have illustrated the important advantages of physical activity during and after pregnancy for mothers and their children (Brad, 2014; Kołomańska-Bogucka and Mazur-Bialy, 2019; Saligheh, McNamara, & Rooney, 2016). Regular physical activity during this time can positively improve one's psychological state, as well as improve one's physical health such as weight management (Okyay& Ucar, 2018). According to the American College of Obstetricians and Gynecologists "women gradually return to physical activity 4–6 weeks after delivery" (Guardino et al., 2018,p.669), and following the 6-week postpartum period, recommended activity guidelines are the same as those for other individuals (Guardino et al., 2018).

Although many women believe that participating in physical activity during the postpartum period can be an appropriate decision (Evenson, Aytur, & Borodulin, 2009), most women do not practice physical activity during the postpartum period (Garshasbi, Moayed Mohseni, Rafiey, & Ghazanfari, 2015). For instance, Garshasbi et al. (2015) in their quantitative research study involving 200 participants in Iran found that only 3% of postpartum women participated in physical activity at a moderate level. In this research study she found that, lack of time and energy were the most significant limiting factors for engaging in postpartum physical activity. The same findings were also reported by other researchers in different geographic areas including Australia, the United Kingdom, and the United States. These researchers applied qualitative or quantitative research methods (Ellis, Pears & Sutton, 2019 ; Evenson, et al., 2009; Saligheh et al., 2016).

Physical issues including fatigue, or lack of time, lack of confidence and motivation were reported as the most important factors that discouraged women from engaging in postpartum physical activity (Saligheh et al., 2016). Furthermore, many investigators have attempted to identify the barriers and enablers of physical activity during the postpartum period in order to explain the reasons behind the women's decisions.

A few researchers have attempted to look at the issue of engaging in physical activity from social perspectives (Garrett, 2010; Krik, 2002), and how postpartum physical activity is socially and institutionally constructed. Krik (2002) believes that society has a crucial role in affecting how behaviour is undertaken by individuals, or explaining the reason for that behaviour. Other investigators supported this notion and discussed that the female body is socially constructed in many ways, "and it can be interpreted as a place of oppression, discursive formation and symbolization" (Zenobia, 2001, para. 2), therefore "it becomes a signifying system to control and regulate body practice" (Zenobia, 2001, para. 3). Based on this idea, women's bodies are constructed socially, and social and cultural beliefs and values are important to understanding how behaviours are taken up, or challenged, by women (Garrett, 2010). Previous literature has described women's bodies as a social construction in great detail (Krik, 2002; Zenobia, 2001), but our knowledge about the postpartum period and the social construction of women's bodies specifically is limited. More specifically, there is a lack of literature indicating how postpartum physical activity is experienced by women and influenced by dominant social and cultural practices, attitudes, and norms.

Feminist poststructuralism is a theoretical lens which is linked to a research methodology (Aston, 2016; Aston, Price, Kirk, & Penney, 2012; Weedon, 1987). It can

be applied to understand how discourses on postpartum physical activity can influence the practice of individuals. It is also a rigorous way to understand the experience and reasons why women choose to exercise, or not exercise, during the postpartum period.

Gaps in the literature

Most literature to date on postpartum physical activity is centered on exploring advantages of physical activity during pregnancy and postpartum (DiPietro et al., 2019; Huberty, Coleman, Rolfsmeyer, & Wu, 2014; Kołomańska-Bogucka & Mazur-Bialy, 2019; Mudd et al., 2109). Currently, scholarly articles involving of systematic reviews focus on presenting new evidence regarding the effect of postpartum physical activity on women's health such as decreasing the rate of postpartum depression (Dipietro et al, 2019). Moreover, other literature has described barriers such as lack of time and enablers of postpartum physical activity such as partner support (Ekelin, Langeland Iversen, Gronbaek Backhausen, & Hegaard, 2018; Evenson et al., 2009; Garshasbi et al., 2015; Groth & David, 2008; Saligheh et al., 2016; Shelton & Lee, 2018; Symons-Downs & Hausenblas, 2004). A limited number of publications have focused on the postpartum physical activity engagement from social viewpoints (Russell, 2017). After reviewing the literature, it is evident that beliefs, values, and practices of women regarding postpartum physical activity are not visible. Therefore, there is a clear gap in the literature regarding the experiences of women's postpartum physical activity, specifically from social viewpoints among women living in a province on the sea coast of Atlantic Canada with Western culture. The effectiveness of feminist poststructuralism as a lens to explore believes, values, and practices of individuals in the postpartum period was reported in previous literature (Aston, 2016; Aston et al., 2012). Thus, this

research study aims to explore women's experiences regarding postpartum physical activity, and how it is socially and institutionally constructed. Findings of this research study will provide new knowledge and subjectivities regarding personal and social experiences of new mothers in Nova Scotia.

Locating Myself in the Research

My interest in the topic and the research methodology goes back to my experiences when I was studying and working in Iran. After completing my Bachelor of Nursing (BScN) program at Shiraz University of Medical Sciences in Iran, I worked for several months in Khordad hospital as a staff nurse. From there, I was accepted to continue my education in the Master of Science in Nursing program at Tabriz University of Medical Sciences in Iran. During this time, I completed courses and clinical training related to adult health (including, but not limited to, education, leadership, counselor, research, and clinical practice), which were necessary to perform my advanced role as a nurse specialist. While writing my thesis, I had the opportunity to become familiar with concepts, models, theories, and activities related to women's health such as women's "health beliefs" and the value of "breast cancer screening".

During later years, when I began my career as a university lecturer and clinical instructor on a maternal - child unit, I tried to promote pre and postpartum health through teaching, consulting and applying direct care. This opportunity allowed me to deepen my involvement in maternal-child health issues including overweight mothers, women with gestational diabetes, and postpartum depression. These experiences inspired me to think about how we can promote postpartum health, and specifically, postpartum physical activity. During my education and career, I had learned that

exercise has several physical and psychological advantages for mothers and also babies and is recommended by health care professionals. From, my experience I believed that regular physical activity can strengthen various systems of the body, and it promotes recovery after birth. I also thought that there was a mismatch between health care professionals' recommendations regarding postpartum physical activity and women adhering to these recommendations. Based on my personal observations, many women in Iran were engaged in postpartum physical activity at a very limited level, and it was also not supported by cultural perspectives. I also learned that many of those women were afraid of harming the fetus, based on cultural beliefs. In a research study carried out by Noohi, Nazemzadeh, and Nakhei (2010) in Iran, postpartum women had minimal knowledge about physical activity and exercise during pregnancy. However, more than half of them had a positive attitude toward physical activity, and they reported that they linked participation to physical activity and exercise during pregnancy. This positive attitude may be related to positive effects of physical activity in general that have been generalized to pregnancy.

During my time in Canada, I have noticed that people's culture and life style are completely different from people's culture and life style in Iran. The Iranian government implemented actions in order to promote exercise and physical activity in people including playgrounds, sidewalks, grass fields, gyms, parks, and gardens. Men, women, and children can use them. However, in spite of the presence of these outside areas people do not engage in physical activities very much. Women in Iran have been empowered, talented, and active people working very hard in many fields to promote their country. Many of them have a high standard of education, and they have important

responsibilities to connect people within a family. As the relations of power within families have been changing during recent decades, many women are now working to help the financial status of families. The majority of people in Iran are Muslims. Islam as a religion advises all people to be healthy and choose a healthy life style. There is no rule that tells people not to engage in physical activity or exercise. Indeed, in gyms there are separate places to engage in exercise for men and women. Women in Iran have to wear the hijab, although it is not an obstacle to prevent them following their aims including physical activity or other life aims (Global Affaires Canada, 2018). According to a research study in Iran, most women gained knowledge about pregnancy and postpartum physical activity from family members and relatives who highly advised the women to avoid physical activity during pregnancy and postpartum (Noohi et al., 2010)

In Canada, and specifically in Nova Scotia, the Scottish descent constitutes the largest group of people, followed by individuals of English and French descent. More than 50% of individuals in Nova Scotia are Protestant and Catholic, a large portion of people do not discuss their religious views (Canadian Visa Org, 2020). Furthermore, the weather in Halifax is not as warm as some cities in Iran, thus doing physical activities such as walking, running outside, is more feasible than in Iran except in bad weather conditions including snowstorms.

After I started my education at Dalhousie University, my supervisor and I met with a physiotherapist whose responsibilities included providing postpartum care and exercise for women who were experiencing physical difficulties. These women had been referred by a physician to have specialized postpartum care. In this meeting we discussed current conditions, necessities, and the importance of postpartum physical

activity in Halifax. This meeting inspired me and raised many questions, such as how do Canadian women think about postpartum physical activity in general? Do they think the same way as Iranian women? What are peoples' beliefs, values and practices regarding postpartum physical activity in Canada? Which groups are supporting women to engage in postpartum physical activity in Canada? I was expecting that postpartum mothers would receive support from their immediate family members in Canada, as I had experienced in my country. Thus, it would be easier for Canadian mothers to engage in postpartum physical activity. Although, this kind of support is not possible for all mothers in my country, it is not unusual for sisters, mothers-in law, sisters in-law, grandmothers, or aunts to provide care and support for new babies. Thus, I expected that this kind of support for Canadian mothers would be the same as for Iranian mothers.

Moreover, during the COVID-19 global outbreak many gyms, parks, playgrounds, dance and fitness studios were closed. Therefore, many people could not participate in individual or group physical activities outside their homes. In these circumstances, many individuals had to adapt their level of physical activity. They might be spending more time in front of a computer or television, or changed their daily routines of activities and exercises. These conditions raised other questions about how COVID -19 affects postpartum physical activity.

In Terms of my interest in feminist poststructuralism during my time in Canada, I became familiar with it as a research methodology and found it very useful for better understanding the values, beliefs, and practices of people. Therefore, I decided to do my own research study based on feminist poststructuralism.

In conclusion, my experiences as a nurse and nursing instructor have inspired me to conduct this research study that will contribute to promoting postpartum physical activity in Nova Scotia. I believe that there is a need to provide a way to hear women's voices, and I also believe that a qualitative feminist methodology can provide a framework to explore and understand women's experiences regarding postpartum physical activity in Nova Scotia.

Research purpose and questions

Based on the evidence and gaps in the existing literature, this research aimed to explore women's views and experiences regarding physical activity during the postpartum period. The research aimed to answer the following research questions, which

were informed by the literature review and the research methodology:

- 1) What are women's experiences regarding physical activity during the postpartum period?
- 2) How do postpartum women negotiate relations of power regarding postpartum physical activity?
- 3) How is postpartum physical activity socially and institutionally constructed through different discourses?

Significance of the research

This was the most suitable time to study this topic, knowing the fact that a limited number of research studies have been carried out based on feminist poststructuralism to explore the experiences of women regarding postpartum physical activity, and its role in explaining health behaviours from a social and institutional

viewpoint. Conducting my Master of Science in Nursing thesis in this area gave me, as a maternal-child nurse and instructor, a rich insight regarding postpartum physical activity in Nova Scotia Canada. Findings can be used to compare the differences and similarities in beliefs, values, and practices, across Canada as well as between other countries.

Promoting postpartum physical activity is a worldwide challenge, and therefore, it is necessary to understand how this issue is experienced by women, their families, and health care professionals. This research study used feminist poststructuralism as it provided a lens to guide my examination of postpartum physical activity using discourse analysis. This research study helped me to understand beliefs, values, practices, and discourses that then have the potential to inform ongoing practices of postpartum exercise. This research study augmented the voice of women in the postpartum period. It gave them the opportunity to reflect on their experiences, and the challenges that they faced, as well as identified the factors affecting their engagement. This research study not only aimed to explore the experiences of women regarding postpartum physical activity, it also attempted to gain new knowledge and insight to help produce some positive changes, on the health of these women. Moreover, using appropriate dissemination approaches, the findings of this research can be delivered to health care professionals who can use them to support and educate women in the postpartum period. Other researchers may build upon research findings from this study to design their own studies to explore important factors to promote postpartum physical activity. The findings of this research provided better insights for nursing students to consider regarding women's experiences, when providing care for postpartum women in their professional lives.

Chapter 2: Literature review

To find relevant literature related to postpartum physical activity, I searched the following data bases: PubMed, Bio Med Central, CINHALL, Google Scholar. I used the key terms: postpartum, physical activity, qualitative research, pregnancy, body, social construct, and feminist poststructuralism. I included scholarly articles which had been published 2000-2020. The following literature review presents research literature focused on women's participation in postpartum physical activity. The following section will discuss the advantages of physical activity in pregnancy and the postpartum period, cultural differences in postpartum physical activity, women's bodies as a social construct, and women's bodies and medical discourses.

The advantages of physical activity in pregnancy and postpartum

The postpartum period begins straight away after childbirth, and it frequently does not have a clear end point (Evenson, Mottola, Owe, Rousham, & Brown, 2014). To obtain desired health outcomes, it is crucial that women are supported physically and psychologically. Currently, recovery after delivery can be facilitated through increased body movement (Saligheh, et al., 2016). According to physical activity guidelines for Americans "pregnant or postpartum women should do at least 150 minutes (for example, 30 minutes a day, five days a week) of moderate-intensity aerobic physical activity per week, such as brisk walking, during and after their pregnancy. It is best to spread this activity throughout the week" (Center for Disease Control, 2020, para.3).

Kołomańska-Bogucka and Mazur-Bialy (2019) found that women who did regular physical activity during pregnancy and postpartum experienced a decrease in depression during their pregnancy and after the delivery. They also found that physical

activity after childbirth can promote health-related quality of life and self-esteem in women. Several studies have shown the positive effects of physical activity on weight management during pregnancy and the postpartum period (DiPietro et al, 2019; Farpour-Lambert, Ells, Martinez de Tejada, & Scott, 2018; Keller, Records, Ainsworth, Permana, & Coonrod, 2008). DiPietro et al. (2019) carried out a research study aimed at identifying systematic reviews and meta-analyses, published between 2006 and 2018, regarding the effect of physical activity on women's health during pregnancy and postpartum. This review illustrated that physical activity at moderate-intensity can decrease large weight gain during pregnancy and postpartum. This review also revealed other positive health outcomes of physical activity, including decreasing the rate of gestational diabetes and postpartum depression. The positive effects of women's physical activity during pregnancy and postpartum on their children's health also have been investigated (Mudd et al., 2019). For instance, Mudd et al. (2019) found that any physical activity in the third trimester of pregnancy was related to a lower amount of fat in the child at 4 years. Moreover, doing physical activity regularly by mothers could lead to regular physical activity habits in their kids (Evenson et al., 2009).

Along with facilitating weight loss, exercise after childbirth has been shown to promote improvement in cardiovascular health, less bone loss related to lactation, less pelvic relaxation and less urinary stress incontinence (Evenson et al, 2009). Therefore, the positive effects of physical activity on physical and psychological health are indisputable.

Beliefs, barriers, and enablers of postpartum physical activity

Although many women believe that participating in physical activity during the postpartum period can be an appropriate decision (Evenson, et al., 2009), most women do not practice physical activity during this period (Garshasbi, et al., 2015). Evenson and Wen (2010) reported that only 14% of mothers during pregnancy engaged in physical activity at a recommended level (moderate-intensity level), and this rate decreased in the postpartum period (Pereira et al., 2007). Symons- Downs and Hausenblas (2004) believe pregnancy and postpartum are special life events that put women at greater risk for less physical activity. Physical and mental demands during pregnancy and postpartum make women choose sedentary behaviour and promoting physical activity in this group of individuals is challenging because of unique barriers, such as physical conditions, that affect their participation that non pregnant and non postpartum women do not face. To identify the reasons for lack of physical activity, some researchers focused on examining beliefs and experiences regarding postpartum physical activity. In a retrospective study, 74 women in the postpartum period (up to 1 year after childbirth) were recruited in New Britain, Connecticut (Symons- Downs & Hausenblas, 2004). This quantitative study was carried out in order to assess women's beliefs related to exercise during pregnancy and postpartum. Participants believed that exercise could improve mood, and manage weight gain, and women's partners and family members were the most influential individuals in women's participation in postpartum exercise. The authors encouraged other investigators to explore women's beliefs regarding exercise during pregnancy and the postpartum period and designed their plans to increase women's participation during their reproductive years (Symons- Downs & Hausenblas, 2004). The role of social support on engaging in postpartum

physical activity was supported by other research studies (Groth & David, 2008; Saligheh et al., 2016). A qualitative research study carried out by Groth and David (2008) in Rochester, New York, involving 49 women who gave birth within one year, all of them from different ethnicities, and new mothers reported that having a partner for walking and planning the walk were two important facilitators for physical activity.

Ellis et al. (2019) carried out a cross-sectional research study in Hertfordshire and Cambridgeshire, UK. In this study, the researchers collected information through semi-structured interviews. A quantitative questionnaire was also used. Sixteen women were recruited using convenience sampling. All of them were in the postpartum period (within 12 months of childbirth). Some barriers/enablers were the same as other studies and some of them were unique to these people. The women reported that enough time, childcare facilities, motivation, professionals' recommendations, establishing a habit, and receiving support from a group were important factors to help them engage in physical activity. They reported that their husbands were a tremendous help to them whether it was by verbally supporting them, taking care of the child for a few hours, buying them the needed equipment or engaging in the physical activity together. The participants preferred working out with either a friend or other people because it motivated them and gave them accountability. In general, the women were aware of the positive effects of physical activity on mental health, but that was as far as their knowledge went. They believed that physical activity helped augment their parenting by helping them create healthy habits and pass those on to their children. Exercise also refreshed them, preparing them for the day's obstacles, as well as keeping them healthy for future pregnancies. Enjoyment was a huge motivational factor when engaging in

physical activity, seeing their children having fun motivated the mother to exercise more. Some parents had a negative belief regarding missing family events and milestones with their babies and, they felt guilt when leaving their baby in child care. They thought that no one else could sooth the baby.

Researchers have been interested in investigating the barriers surrounding postpartum physical activity. Evenson et al. (2009) carried out a quantitative research study in the United States in order to explore the beliefs, barriers, and enablers of physical activities among 667 women at 3 and 12 months postpartum. The researchers found that more than 89% of the women believed physical activity and exercise were a proper decision at 3 months postpartum, even if they wanted to keep on breast feeding. Lack of time, child care issues, being too tired, and health issues such as depression were reported as the common barriers, whereas , eagerness to feel better and partner support (Groth & David ,2008 ;Symons-Downs & Hausenblas,2004) were the most common enablers at 3 months postpartum.

Paying attention to child health was reported as an enabler for postpartum physical activity by some women. In a research study that was carried out by Ekelin et al. (2018) in Sweden, participants explained that they believed that the postpartum period was a great opportunity for getting involved in physical activity, not only for themselves, but also, they liked to be role models for their children. Moreover, it seems that health care professionals have an important role in encouraging women in postpartum physical activity. Participants explained that it was difficult for them to join exercise classes while giving attention to their pregnancy and they did not get frequent support from the health care provider. Furthermore, they stated that they did not have

enough physical movement and they were not happy with their level of activity. They asked for information about other alternatives or home exercise.

In another study that was carried out in the United States by Shelton and Lee (2018), three categories emerged that had influence on postpartum period exercise: time, maternal responsibilities, and physical status. The women reported that there was not enough time in the day to complete their motherly tasks. According to one participant, physical activity was most certainly not a priority, while it was on her list of things to do, it took a back seat to taking care of her infant. Moreover, the effect of physical status on physical activity used to be dependant on individuals' perspectives. Some of the factors associated with negative views on physical status were fatigue and low energy. However, one participant said that physical status motivated her to exercise more. She believed that exercise enhanced efficiency and also made them overall feel better. Moreover, social support was proposed as a factor for better adherence to exercise.

In another research study the role of social media in women's decision was reported. Murray-Davis et al. (2019) carried out a qualitative research study in order to explore the experience of women regarding nutrition and exercise in the early postpartum period, in Canada. In this research study some women reported that they would like to engage in physical activity in the postpartum period, but they felt that they did not give enough time for their body to recover from delivery, and, therefore, they did not feel comfortable to start exercising. Media advertisements of what bodies look like in the postpartum period was another source of pressure or judgement which had a negative influence on women's body image. Some women reported that they were disappointed because they could not attain their pre-pregnancy body weight as quickly

as they expected. Many participants believed that they had unrealistic expectations, but this did not decrease the negative effect of how they felt about themselves and their bodies.

Some researchers attempted to find the kind of physical activity which was acceptable to postpartum women. Pavlova, Teychenne, and Olander (2020) in a qualitative exploratory research study reported that enjoying a walking group was acceptable for many postpartum women. Women believed that participating in physical activity helped them to walk with other postpartum women whom they knew, and they could walk in convenient places. The mothers believed that these kinds of groups supported new mothers to engage in physical activity. They reported that joining the group, engaging in physical activity, and being familiar with other new mothers were consistent with their value system.

Postpartum physical activity among special groups of women. Engaging in physical activity during the postpartum period has been of interest to researchers not only in European and North American countries, but also all around the world. For instance, a qualitative research study carried out in Detroit by Thornton et al. (2006) with a subset of 10 Latino women participants used semi-structured in-depth interviews. These women had recently immigrated to the United States. Researchers found that physical activity habits and patterns were influenced greatly by cultural beliefs regarding safety of physical activity during pregnancy and postpartum, as well as family rituals including going to the playground together. Women reported that their husbands and some female relatives were important sources of support. Authors concluded that social support may promote healthy life styles in postpartum women.

Exploring beliefs, barriers, and enablers of physical activity is not only important for women who have given birth recently and have healthy babies. It was also important to examine experiences of women who had stillbirths or miscarriages. A qualitative research study was carried out in the United States by Huberty, Coleman, Rolfsmeyer, and Wu (2014) in order to explore how women who had a stillbirth think and engage in physical activity. Twenty-four women who experienced a stillbirth within 0-12 months prior to the interview participated. A semi-structured interview guide was used, and the following themes emerged: “barriers to physical activity”, “benefits to physical activity”, “importance of physical activity”, “motivators for physical activity”, and “health care providers and their role in physical activity participation” (p. 14). Many women reported that they experienced multiple psychological symptoms and no desire to engage in physical activity. They stated that they were depressed and not motivated to participate in any physical activity. The participants reported that the tremendous guilt they felt over the loss of their child prevented them from taking part in physical activity. A few of the participants reported that physical activity was actually helping them to focus on themselves. It helped them to feel better emotionally. Some of the women were highly motivated to participate in physical activity because they had hoped to have other children in the future and strove to be in a better state of health. They were also worried about their body shape as well as wanting to be a role model for other mothers. In contrast, others who lost their pregnancies felt sad when they saw other mothers with their babies. At the same time, findings showed physical activity was important for most participants. Moreover, women believed that they did not receive enough information regarding physical activity by health care providers.

This section highlighted some common beliefs, barriers, and enablers regarding postpartum physical activity. Many postpartum women believed that engaging in postpartum physical activity was an appropriate decision. In addition, some enablers and barriers were identified such as social support and parenting responsibilities. Exploring these beliefs/ barriers/enablers helps researchers to better understand the reasons behind women's decisions.

Cultural differences in postpartum activity

Many variations in postpartum practices can be spotted among people with different cultural backgrounds. The source of some traditional practices may stem from religions or may sometimes be called supernatural (Dennis et al, 2007). People think that they should follow special behaviours in the postpartum period to recover from delivery including considering a rest period and not engaging in physical activity (Dennis et al, 2007). For instance, in China people believe giving birth leads to an imbalance in the mother's body. Therefore, women must stay at home, take a rest in bed, and must follow special behaviours during the postpartum period. This period may last for 30 days (Holroyd, Twinn, & Yim, 2005). Holroyd et al. (2005) write that although some new mothers did not want to follow these traditional practices, pressure from relatives close to them, led them to follow. These kinds of behaviours are common among women from Southeast Asia, the Middle East, South America, and Africa (Dennis et al, 2007). For example, in Palestine, Egypt, Jordan, and Lebanon 40 days rest is recommended (Hintz-Zambrano, 2017). Due to a great number of people who immigrate to European and North American countries, we also can see these beliefs and practices in these countries (Dennis et al, 2007). Davis (2001) in a qualitative research study found that even many

new Asian mothers who lived in the United States believed that the postpartum period was a time that they needed a lot of rest. The meaning of this rest was *bed-rest* and new mothers were encouraged to avoid any activities, and just feed their newborn. This period lasted between 1-3 months.

Recommendation to return to postpartum physical activity. Alongside differences in cultural beliefs and practices, differences in postpartum physical activity recommendations are also found in different parts of the world. Ring-Dimitriou et al. (2020) state that based on international recommendations, postpartum physical activity for Australian women is the same as for all adults. In contrast, Ferrari and Graf (2017) believe that in Germany there is a lack of guidelines for physical activity in pregnancy. Evenson et al (2014) carried out a systematic review in order to find postpartum physical activity recommendations throughout the world. Six guidelines from Canada (Davies, Wolfe, Mottola, MacKinnon, & Society of Obstetricians and Gynecologists of Canada, 2003; Evenson, et al, 2014), the United States of America (Department of Health and Human Services, 2020; Evenson, et al, 2014; Guardino et al., 2018) United Kingdom (Evenson, et al, 2014; Royal College of Obstetricians and Gynecologists, 2013), Australia (Evenson et al, 2014; Sports Medicine Australia, 2009), and Norway (Evenson et al, 2014 ;The Directorate of Health and Social Affairs, 2019) were found. Some differences between them were noted. The postpartum physical activity guideline of the United Kingdom states that “women need to return to pre-pregnancy exercise levels gradually, not resuming high impact too soon” (Evenson et al, 2014, p. 410; Royal College of Obstetricians and Gynecologists, 2013). Canadian recommendations mentioned that based on the type of childbirth, “most types of exercise can be continued

or resumed in the postpartum period” (Evenson, et al, 2014, p. 410). The American College of Obstetrics and Gynecologists recommends resuming pre-pregnancy activities gradually and whenever the postpartum women felt safe (Evenson et al, 2014; Guardino et al., 2018). Based on the United Kingdom guideline, for uncomplicated pregnancy and delivery, exercise can start immediately (Evenson et al, 2014; Royal College of Obstetricians and Gynecologists, 2013). According to the Australian recommendations, non-ballistic exercise (Evenson et al, 2014; Sports Medicine Australia, 2009) such as pull ups (Guyon, 2020) could begin after vaginal delivery based on women’s comfort (Evenson et al, 2014; Sports Medicine Australia, 2009). Norway’s guideline was more conservative and stated that women can start physical activity after six weeks (Evenson et al, 2014; The Directorate of Health and Social Affairs, 2019).

This section focused on cultural similarities across Westernized developed countries regarding postpartum exercises. Different countries provide different guidelines regarding postpartum physical activity. These guidelines most likely inform postpartum practices as they are shared by health care professionals.

Women’s bodies as a social construct

Zenobia (2001) writes:“The human body is a cultural artifact and the result of social modification which not only expresses species and culture, but also presents an individual” (p.323). Other writers also argue that physical, social, and cultural worlds form socially constructed bodies. From social viewpoints, people’s bodies in different societies are socially constructed based on social and cultural norms (Lorber & Martin, 2013). Researchers have discussed that individuals’ understandings of the body is affected by the society in which they live (Krik, 2002). They explain that the body has

biological, social, and physical aspects all at the same time because biology cannot explain a social behaviour (Krik, 2002). Some researchers argue that bodies play a crucial role in explaining how and why people behave in a certain way (Krik, 2002). Thus, when explaining behaviour, it is important to consider the society and culture in which one lives. Based on this idea women's bodies are constructed socially, and social and cultural beliefs and attitudes are important to understanding how behaviours are taken up or challenged by women. Powerful cultural pressures have an impact on women's bodies and define them with regard to their physical aspects. In western cultures, women learn that thin is attractive and fat is unpleasant and weak (Garrett, 2010). From a feminist viewpoint, this long-lasting expectation of thinness makes women's secondary position in the gender order worse and limits their social, physical and self-potential. Fikkan and Rothblum (2012) write:

Fat women were also less likely than their thinner counterparts to be judged as attractive, less likely to show physical affection, and more likely to be the object of humor. In employment settings, fat women are less likely to be hired, receive worse treatment on the job and earn less than their non-fat peers (p. 587).

These cultural “technologies of control” motivate women to spend ample time monitoring their bodies to try and fit idealistic norms. These notions regarding ideal bodies have become the norm in western cultures. The strong feeling of thinness has become internalized by many women and men and is very self-supported, and does not need any external stimulation (Garrett, 2010). Garrett (2010) believes:

Such is the strength of these discourses that they compel some young women to be involved in regular physical activity. Paradoxically, while these actions can serve to break down hegemonic notions of the 'ideal' femininity, they can also be used as a mechanism to achieve the 'ideal' femininity, thus having the opposite effect. Conversely, the discourses can propel some towards more dangerous activities as in that of disordered eating or compulsive exercise (pp. 224-225).

Therefore, discourses around thinness or physical attractiveness (Galfano & Swami, 2015) have been related to physical activity (Garrett, 2010).

Cultural variations were noted in young women's perceptions regarding an ideal body. While women with ideal bodies had perceived their body as a form of empowerment, those with a less ideal body perceived their body as a form of confinement and restriction (Garrett, 2010). Garrett (2010) found in her research study that fear of public display of their body and women's beliefs regarding their body significantly influenced women's confidence in engaging in physical education or physical activities. Similarly, how women see themselves, related to beliefs and values about women's bodies, has a great influence on engaging in physical activity.

In a systematic review carried out by Hodgkinson, Smith, and Wittkowskiz (2014), some women reported that during pregnancy, social pressures encouraged them to reclaim their previous body size after they had given birth, and they considered this as a distressing and fearful expectation. The body was described like a project to be deliberately and positively worked on and managed to return to normal in the postpartum period. For some postpartum women, this goal was perceived to be more

important than before pregnancy. This was considered true for women giving birth for the first or subsequent times. Sometimes women found other individuals close to them wanting to control their bodies and pressured them, even in the postpartum period, to be slimmer than pre-pregnancy. Many women had high expectations about how their body should look and perform in the postpartum period, and they sometimes admitted that these expectations were unrealistic. Rich and her colleagues explained that discourses about thinness can give some women a feeling of low social worth, and they do not like to participate in the activities where others can see and judge their bodies. In contrast, other women clearly challenged social norms regarding their body and even the types of physical activities in which they could participate (Garrett, 2010).

Overall, decision making to engage in physical activity is a complex choice that is affected by social and cultural contexts. However, as it is evident from this section, limited research has been conducted about the postpartum period and social construction of women's bodies. Thus, there is a clear need for research to address this gap in the literature.

Women's bodies and medical discourses

The visibility of postpartum physical activity throughout the world, in real life or in social media, is a relatively new event and shows a change in attitude toward the physical capabilities of postpartum women. In some cultures, it is advised that postpartum women stay at home, especially for the first 30-40 days after giving birth, as it is considered a special time for behavioural restrictions and recovery (Liu et al., 2006). Until, as recently as 1985, there was no official advice regarding physical activity for women during the postpartum period (Evenson et al., 2014). Indeed, even in the 1980s,

many health care professionals advised pregnant women to avoid exercise except for light walking because they considered the body was fragile during pregnancy and therefore not conducive or amenable to physical activity. Feminist thinkers argue that such ideas are part of a medical discourse that originated in the 18th century. For many decades, or even centuries, the female body has been considered as “the sick or incomplete version of men” (Jette, 2006, p.332). Specific consideration was paid to the biological differences in the reproductive systems of women and men (Jette, 2006). Because the female reproductive system was constructed as “sick” during pregnancy (Jette, 2006) and in “need of repair” during the postpartum period (Neiterman, 2013), a large number of male health care professionals were able to increase their control over the female body. In the 1980s, a larger number of women engaged in physical activities in general. This interest was possibly related to the successful activity of the second wave feminist movement, which considered equal rights for men and women such as equal access to physical activity and fitness opportunities. Since this group of women, who were physically active, started to have children and liked to be active, many questions regarding the safety of physical activity, for them, were raised (Jette, 2006). The first official guidelines regarding physical activity during pregnancy and postpartum were released in 1985 (Evenson et al., 2014). This specific guideline was written in a very prescriptive manner such as “do this or do not do that”, and often women received conflicting information from health care professionals (Riczo, 1987). These recommendations were considered “too conservative” by other experts (Mining, Trimble, Sarsotti, Sebastiani, & Spong, 2009); however, while there was limited information about appropriate exercise. Guidelines released in later years encouraged

women to engage in postpartum physical activity in a “less conservative manner” (Jette, 2006), while the postpartum body was considered “in need of repair” yet (Neiterman, 2013).

According to Jette (2006) in the 1990s, there was a peak interest in the fitness business, that was then included in medical discourses. This continued into the 21st century with the notion “that women can and should exercise” (p. 333). There also were many private gyms, videos, and books related to physical activity that emerged (Jette, 2006). The development of this industry raises many questions about postpartum, physical activity, the role of medical discourses, and feminine body “norms”. For instance, it was shown that new mothers frequently suffer from social isolation after delivery. They are also expected to return to their pre-pregnancy bodies in a short period of time and discard the experiences of pregnancy and delivery (Neiterman, 2013).

Summary

It is clear that postpartum physical activity has many benefits for women and their babies as it is recommended by many health care professionals. However, in order to promote postpartum physical activity, research has demonstrated that it is important to understand how postpartum physical activity is experienced by women and influenced by dominant social and cultural practices, beliefs, and norms. Therefore, it was a suitable time to carry out this research study, as it provided a deeper understanding into how women in the postpartum period experienced physical activity. The findings of the study will be useful not only to women and their families, but also to the health centers and health care providers so they can support women as they make decisions about how to engage with postpartum physical activity.

Chapter 3: Methodology

This chapter provides a review of the underlying principles that guided this research study and why a qualitative methodology using feminist poststructuralism and discourse analysis was used to guide it. This chapter also includes a description of the study setting, participant recruitment, data collection procedures, data analysis, ethical considerations, trustworthiness, and knowledge translation.

Feminist Poststructuralism

When I was living in Iran, I had become familiar with models and theories that are used frequently in Iran to predict people's health behaviours including the Health Belief Model (Akey, Rintamaki, & Kane, 2013; Valizadeh, Akbari Nassaji, & Seyyed Rasuli, 2006). When I arrived in Canada and started to study in the Master of Science in Nursing program at Dalhousie University, I became familiar with critical social theories, and the similarities and differences between post-structuralism and post-modernism and their applications in Nursing research. I also became familiar with feminist poststructuralism as "a philosophy, theory and methodology that focuses on understanding relations of power through discourse analysis" (Aston, 2016). I believe this methodology has helped me to understand women's experiences regarding postpartum physical activity as it is influenced by dominant social and cultural practices, norms, and discourses. This research methodology can also help health care professionals to better comprehend the reasons for engaging, or not engaging, in postpartum physical activity. This can lead to finding better interventions to promote postpartum physical activity. Next, I will present a brief explanation about the concepts of post-modernism and poststructuralism and then focus on feminist poststructuralism.

Postmodernism and poststructuralism

Although postmodernism, at first, was noticed as a result of an architectural movement (Agger, 1991), it informs a variety of disciplines such as philosophy, politics, architecture, art, literature, and social sciences. A postmodernist viewpoint believes that it is unfeasible to know the world by studying it through objective ways of inquiry (Baxter, 2016). According to Baxter (2016) “knowledge is socially constructed, not discovered; contextual, not foundational; singular, localized and perspectival rather than totalizing or universal; and egalitarian rather than hierarchical” (p.35). The way that we “know the world” is connected strongly to the important topics of relations of power in institutions, communities, and societies that, sequentially, interrelate with people’s identities and actions. (Baxter, 2016). A postmodernist stance is questioning all common claims and causes and argues not to believe in the existence of absolute truth. Moreover, regarding languages and identity, people have frequently understood the conflicting “ways of knowing” and, thus competing “ways of being” that are constructed and performed through language and discourse (Baxter, 2016).

Whereas postmodernism is a wide cross-disciplinary movement encompassing many domains of intellectual life, post structuralism essentially is a linguistic movement connected with the growth of literacy, culture, and discourse theories from the 1960s (Baxter, 2016). There is no fixed definition for post structuralism, but in most cases, the term is applied to describe a range of theoretical positions taken by thinkers including Althusser (1984), Bakhtin (1981), Derrida (1987), and Foucault (1980). Each of these thinkers worked independently and thus their ideas did not produce a unified poststructuralist viewpoint. Rather, a group of competing viewpoints were created about

the relationship between languages, meaning, and identity, although they all share fundamental assumptions (Baxter, 2016). Baxter (2016) states “language is the place where our sense of self and our identity or ‘subjectivity’ is constructed and performed. Meaning is produced *within* language rather than reflected *by* language” (p.36). Language as a system consists of signs that are separated into ‘signifiers’ (e.g. words, sounds, visual images) and ‘signified’ (concepts) (Baxter, 2016). An individual sign does not have any meaning by itself, however once it is put into context along with other signs it will manifest a meaning (Baxter, 2016). Baxter (2016) explains:

Foucault’s view is that language as a system does not represent human experience in a transparent and neutral way but always exists within historically specific discourses. These are often competing, offering alternative versions of reality and serving different and conflicting power interests. Such interests usually reside within large scale institutional systems such as law, justice, government, media, education and family (p. 37).

Therefore, a group of institutional discourses constitute the network by which dominant types of social knowledge are made, become stronger, resist, or are contested. Thus, Foucault challenges notions of modernists regarding conceptualization of discourses, and offers a more dynamic and strategic interpretation (Baxter, 2016).

Poststructuralist theory proposed a new idea regarding power relations in society that is flexible and many feminist researchers became interested in poststructuralist theory as a result. Moreover, some nursing investigators have noticed that poststructuralism is beneficial for investigating the experiences of patients and health

care professionals, and for exploring the health professions in terms of historical development and knowledge (Francis, 2000).

Feminism.

There is no specific definition of feminism. Two broad issues addressed by the majority of feminist supporters historically supported the election vote (first-wave feminism) to issues of work environment equity and reproductive rights (second-wave feminism) to awareness about “cultural constructions of gender and patriarchal oppression” (Sharma, 2019, p.571). Hook writes “feminism is a movement to end sexism, sexist exploitation, and oppression” (Sharma, 2019, p.571). It is beneficial because it simply, but strongly, encompasses the beginning of feminist theory (Sharma, 2019).

Feminist theory may be regarded as a group of critical theories and approaches that help us to comprehend complexity (Sharma, 2019). Feminists have also tried to consider a paradigm of social criticism which are not based on traditional philosophical underpinnings. Fraser and Nicholson (1990) state:

They have criticized modern foundationalism epistemologies and moral and political theories, exposing the contingent, partial, and historically situated character of what has passed in the mainstream for necessary, universal, and ahistorical truths. They have called into question the dominant philosophical project of seeking objectivity in the guise of a “God’s eye view” which transcends any situation or perspective (p.26).

Jenkins, Narayanaswamy, and Sweetman (2019) believe that in order to maintain women’s rights and gender equality, it is necessary that feminist values

constitute every aspect of research. The overall aim is to provide spaces and opportunities to show power inequalities and differences based on lived realities. It can provide evidence that can be utilized in making progress, towards tending to these engrained disparities. Feminist values permit us to speak about “sexual orientation and gender identities”, and also allow us to talk about “gendered power relations between individuals and groups” (p.415). Feminist theory can also help health care professionals to progress from theory to action and make connections between the academy and the societies that they serve (Sharma, 2019).

Feminist research is based on a specific theory of knowledge, or epistemology, and the methodology and methods of the study originate from this theory. Thus, feminist research is not simply the study of women or carried out by women (Webb, 1993). Feminist research is an approach, and requires a feminist perspective, that does not only focus on gender. Feminist research, then, is not recognized by the title of research, nor by the sex, gender, or political affiliation of the investigators. Instead, feminist research is determined by how the research study is carried out and, by what is carried out with the research. What theoretical viewpoint(s) does the investigator provide in the study? How does the theoretical framework help the investigator to conduct the research in real life including developing research questions, making plans for research, interpreting results, and presenting information? (Harnois, 2013). From one viewpoint feminist research aims to explore women’s experiences along with understanding their needs and interests. MacPherson also argues that feminist theory should give attention to “women’s oppression and a concern for improving their state” (Webb, 1993).

In this research study, the methodology of feminist poststructuralism has been applied to explore women's experiences regarding postpartum physical activity in Nova Scotia. It was based on the idea that the focus of the research was on exploring women's experiences and beliefs regarding physical activity in the postpartum period. Thus, gender was an important aspect. The health of mothers has been an issue which is related to gender, social class, sexuality, race, and it is consistent with a feminist lens.

Feminist poststructuralism

Feminist poststructuralist theory can be considered as a third wave feminism, from the historical viewpoint following liberal feminism and radical feminism (Gannon & Davies, 2005). From a philosophical point of view, feminist poststructuralism is guided by the concepts of both feminist and poststructuralist theories. Feminist poststructuralism was developed primarily by thoughts of philosophers and writers such as Michel Foucault, Chris Weedon, Joan Scott, Judith Butler and Julianne Cheek (Wijlen & Aston, 2019). The feminist ideas propose a lens regarding the role of gender, sexuality, class, race and ability, and the poststructural aspect proposes a viewpoint about knowledge and relations of power through the process of deconstruction.

Concepts including language, meaning, beliefs, values, practices, subjectivity, and agency are used to understand and deconstruct both social and institutional constructions, as well as relations of power. When certain tenets of feminist poststructuralism are used to deconstruct discourses, constructs, and relations of power, solutions may then be illuminated through a process of reconstruction and examination of the taken for granted (Wijlen & Aston, 2019).

Feminist poststructuralist research tries to provide deep understanding of a phenomenon (Gannon & Davies, 2005). Its responsibility is not to identify differences between those classified as male and those classified as female; rather to increase possibilities, to offer new ways of thinking regarding 'man' and 'woman', to introduce the possibility of subjectivities, and to comprehend power which is discursively constructed (Gannon & Davies, 2005).

In addition, feminist poststructuralism can be used to deconstruct, question and challenge constructs of meaning and power relations in modern societies. Moreover, many feminists accept Foucault's writings because it aligns with the way they question the idea of a fixed meaning, a consolidated subjectivity, and theories of power. These ideas provide the theoretical base for feminists to challenge, test, and deconstruct patriarchal discourse, social institutions, and power relationships that oppress women in current society (Aston et al., 2012). Underlying concepts of feminist post structuralism as described by Aston (2016) include: 1) Power as relational; 2) Binary Opposites; 3) Regulated Communications; 4) Feminist Theory; 5) Language, Discourse, and Subjectivity; 6) Beliefs, Values, and Practices; 7) Subjectivity and agency.

Power as relational. Power can be found everywhere; it is multiply positioned and sourced while also being interconnected and infinite. Power can be found universally, it is present in institutions, relationships, actions, and language. Power is also not acquired, obtained, or divided between people; rather, everything that we can consider or perceive is a result of power relations (Wooldrige, 2015). These power relations are part of all dimensions of life such as family, teaching and schooling, well-being and health, work, culture, and leisure. Power is considered relational (Weedon, 1987). It encompasses more

than the interaction(s) between two people and is related more so to the meaning of an interaction (Wijlen & Aston, 2019). That is to say that the meaning behind an interaction gives way to examining the relations of power present within the interaction (Aston, 2016).

“Power as relational” is a way to comprehend the world. It invites us to dispute the usual Western ideas regarding power that form “binary opposites” and ideas of “victimization and blame” (Aston, 2016). “Power relations” determine, how interactions between individuals are affected by social and institutional contexts. Significantly, it can illustrate how different discourses influence individuals and how individuals influence different discourses (Aston, 2016).

Understanding the social and institutional context surrounding an interaction is necessary to comprehend the meaning (Aston, 2016). The association between language, social institutions and individual consciousness can be conceptualized by knowledge and power (Arslanian-Engoren, 2002).

Moreover, poststructuralist theory rejects the idea of an absolute truth. It emphasizes subjectivity of meaning and considers knowledge as something that is socialized, not permanent, and is strongly connected to power. (Arslanian-Engoren, 2002).

Binary Opposites. After understanding the concept of relations of power, it is important to understand binary opposites (Aston, 2016). Common binary examples include man-woman, physician–nurse, and mentally-physically. In all of these examples the first word is the dominant word, and its status is held by the negation and opposition of the secondary word (Cheek, 2000). Derrida states that binary terms are not “natural”; “they are constructions which reflect embedded assumptions about value and status”

(Cheek, 2000, p.58). Feminist poststructuralism refuses binaries (Wijlen & Aston, 2019). Therefore, as a step of deconstructive process, the binary opposites and their results need to be identified (Cheek, 2000). Foucault also believes that binary opposites are the first step to recognize where power might be operating (Aston, 2016).

Regulated Communication. Understanding regulated communications can help investigators and health care professionals see power in a manner that is negotiated, relational and constructed through social and institutional discourses (Aston, 2016; Wijlen & Aston, 2019). Foucault (1982) writes:

An important phenomenon took place around the eighteenth century-it was a new distribution, a new organization of this kind of individualizing power. I don't think that we should consider the "modern state" as an entity which was developed above individuals, ignoring what they are and even their very existence, but, on the contrary, as a very sophisticated structure, in which individuals can be integrated, under one condition: that this individuality would be shaped in a new form and submitted to a set of very specific patterns (p.783).

Foucault's thoughts encourage us to challenge the idea that only institutions have direct effect on people. Therefore, there must be other ways that power is exercised between individuals (Aston, 2016). Additionally, he believed that people, or groups of people, monitored their own and practices of others in ways that were related to social norms, values, beliefs and practices (Aston, 2016; Wijlen & Aston, 2019).

Feminist Theory. Feminist theory can be viewed as a group of critical theories and methods that help us to comprehend complexity (Sharma, 2019). Harding (1986) states:

Feminisms and women's movement provide the theory and motivation for inquiry and political struggle that can transform the perspective of women into a 'stand point' morally and scientifically preferable grounding for our interpretations and explanations of nature and social life (p.26).

Moreover, a feminist analysis provides a framework to comprehend how individuals internalize or challenge social, cultural and institutional power relations (Aston, 2016). From a philosophical and theoretical view feminist concepts within feminist poststructuralism go beyond culture and race and give attention to the oppression of women (Wijlen & Aston, 2019).

Language, Discourse, and meaning. Language is not the expression of unique individuality, it is constructed through an individual's understanding in ways which are socially informed (Weedon, 1987). From an ontological view language is important. It is socially and politically a non-fixed system of signs that produce meaning through a concurrent construction of identity and difference (Wooldridge, 2015), or "the place where actual and possible forms of social organization...are defined and contested" (Weedon, 1986, p.21). Likewise, through language things are given a value and sense, along with a unique identity (Wooldridge, 2015).

Special attention to language is necessary and, it is the place where meanings evolve. Language shaped by different discourses, and therefore, meanings change depending on discursive situations (Wijlen & Aston, 2019). According to Dickson

(1990) meaning exists and is created through language, though is not necessarily guaranteed by subjects. Rather, meaning is related to discursive relations and social practices, making it the very site of political action, thoughts, and challenges. Subjects make their own meaning through the navigation of and their response to discourses- and this meaning is made tangible through language (Dickson, 1990).

Discourses are multiply positioned, always shifting, and relative, as are relations of power. Discourses and relations of power are connected through knowledge and its production. Discourses illuminate certain ways of thinking about or interpreting the world, people, and relations, though as much as discourse may allow for production of knowledge (or certain ways of knowing), it also limits it. That is, discourse can be selective and exclusionary in terms of which ideas are given space and place, and which are not. That being said, people can and will interpret certain discourses differently (Cheek, 2000). Not all discourses are created equal. In fact, due to social-historical effects, some discourses are more dominant than others (Cheek, 2000). Discourse analysis enables us to investigate the impact of power on the experiences of people and provide deep understanding (Aston, 2016; Wijlen & Aston, 2019). Language is a common factor in the analysis of social organization, meaning, and power (Weedon, 1987).

Beliefs, Values, and Practices. Other concepts that are very important are beliefs, values, and practices, which are frequently used by feminist and poststructuralist thinkers. They help to understand individuals' experiences from their perspective. If we consider these concepts in our discourse analysis, we can make sure

that our interpretations are correct, and they are based on participants' experiences (Aston, 2016; Wijlen & Aston, 2019).

Subjectivity and Agency. Weedon (1987) defined subjectivity as "conscious and unconscious thoughts and emotions of the individuals, her sense of herself, and her ways of understanding her relation to the world" (p.20). Social power shapes both how people perceive themselves and how to obtain the gendered subjectivity by maintaining the meanings and values for behaviours (Wijlen & Aston, 2019). Subjectivity is made in a total range of economic, social, and political discursive practices; the meanings are sites of struggle over power (Weedon, 1987).

How people choose to undertake an action in a specific situation, is related to their agency (Wijlen & Aston, 2019). In other words, agency refers to the idea that people have the ability to respond to, reject, challenge, adapt, or accept discourse (Cheek, 2000; Weedon, 1987).

In general, feminist poststructuralism provides a methodology to understand and explain relations of power via analysis of various kinds of discourses, based on tenets of feminism and poststructuralism (Wijlen & Aston, 2019). A Feminist poststructuralist framework could be used to understand a variety of health problems that incorporate an examination of how power relations between people are created throughout social, institutional and political constructs. Experiences, relationships, and meanings of power within relationships between people can be investigated through a feminist poststructuralist lens. It advocates the belief that individuals are related together socially. Thus, social, cultural, and institutional beliefs have an impact on forming people's experiences. (Aston et al., 2012).

In the following section, I will discuss how feminist poststructuralism can provide a lens to explore beliefs, values, and practices regarding postpartum physical activity.

Feminist poststructuralism and postpartum physical activity

The ideas of thinkers including Michel Foucault are beneficial when we want to understand “how power is exerted on female reproductive body” (Jette, 2006, p. 333) because Foucault examines the “knowledge formations and systems of power that regulate corporal practices” (Rail & Harvey cited in Jette, 2006, p. 333). Jette (2006) states “Foucault suggests that power is not something possessed by certain individuals or groups and used to oppress others, but rather is an effect of discourse, operating within the daily exchanges between people and institutions” (p.333). Therefore, power is closely connected to the making of knowledge and identifying what is accepted as truth or reality in community and society. Applying a Foucauldian lens, tells us that the body is made by, and exists through, discourse, and constitutes an important site of power relations. Foucault believed every historical period is determined by an episteme, or “set of presuppositions that organize what counts as knowledge, truth, and reality” (Jette, 2006, p.333).

The role of discourses in postpartum physical activity. Discourses help us to define “reality” and realize the social construction of specific phenomena with an emphasis on language, practices, beliefs, and values (Aston et al., 2012). Cheek (2000) defines discourse as “a set of common assumptions which, although they may be so taken for granted as to be invisible, provide the basis for conscious knowledge” (p.23). In terms of this study, there is a limited number of research studies focused directly and

exclusively on women's postpartum experiences (Neiterman, 2013). For example, Jette (2006) writes Dworkin and Wachs were authors who noticed that many papers written about physical activity during pregnancy did not focus on mother's health, rather they focused on how physical activity can help women to have an easy child birth and return to their pre-pregnancy weight and shape in postpartum period in a short period of time. These texts were telling new mothers how to lose weight after childbirth and regain their femininity. These two authors also noticed that "texts construct the postpartum body as stressful and out of control" (p. 337), and then they used feminist discourse of empowerment to recommend that new mothers can gain control over their bodies through physical activity. Other texts construct postpartum bodies as "at risk" and in need of exercise, based on medical discourses (Brad, 2014). Moreover, from motherhood perspectives there are many discourses that construct meanings of new mothers, for example, expected to be "selfless" and "confident" (Miller, 2007). There are other competitive discourses, and this study helps to understand how a group of women in the postpartum period engaged with the discourses that exist regarding physical activity experiences and expectations. In other word, this research study helps to understand experiences of postpartum women and to explore how they negotiated power in their lives.

Role of subjectivity, language, and power in postpartum physical activity.

The concept of subject encourages us to see people as non-fixed, complex individuals with many identities. For instance, an individual's subject position such as being a teacher, engineer, nurse and so on are constructed socially. Being aware of social discourses helps to recognize people's social position. To understand an individual's

social position we need to be aware of beliefs and values about their identity as well as how society may view different subject positions (Aston et al., 2012). For example, in a previously cited study carried out by Saligheh et al. (2016), women reported they do not engage in physical activity due to social pressure and expectations, demonstrating that women need social support to engage in physical activity. While physical activity is a positive activity from many women's viewpoints, this activity may be interpreted as unnecessary by their partners or other family members. When women, family members, and health care professionals consider physical activity to be helpful it may be easier to promote, but if these people have different beliefs, values, and practices and consider that physical activity is not helpful, it may become challenging. (Arslanian-Engoren, 2002).

Across various cultural groups, different beliefs and practices regarding postpartum rituals have evolved (Dennis et al., 2007). Exercise can relieve you of your stress, exercise makes you feel energetic, exercise produces positive feelings or exercise makes you feel better mentally, are some common social beliefs (Saligheh et al., 2016), and they can be seen in the media.

Overall, engaging in postpartum physical activity is complex, and it is necessary to consider this practice from different perspectives. Based on feminist poststructuralist concepts we cannot promote physical activity during the postpartum period and ignore the cultural and social beliefs of people. To promote postpartum physical activity we need to understand how it is experienced, understood and constructed socially as it is described by people and health care professionals (Aston et al., 2012).

Research design

This section includes the design and approach I used to explore women's experiences regarding postpartum physical activity. Because my aim was to understand women's experiences, a qualitative research approach (Dworkin, 2012) was applied guided by feminist poststructuralism. In order to explore women's experiences using feminist poststructuralism, interviews focused on participants' views, beliefs, feelings, and in-depth thoughts, and meanings. Analysis provided rich in-depth understanding as well as knowledge regarding women's lived experiences in order to support new mothers living in Nova Scotia.

Sampling and Recruitment. In this qualitative research, in order to answer the research question: What are women's experiences regarding physical activity during the postpartum period? A particular group of women was recruited. A purposive sampling method was used to recruit women who had firsthand experiences regarding postpartum physical activity (Etikan, Abubakar, & Alkassim 2016; O'keefe, 2017). In April 2021, I received approval for this study from the Research Ethics Boards at IWK Health and Nova Scotia Health (protocol #1026886), and I started the process of participant recruitment. To be eligible, participants must have been able to speak and understand English. Participants had to have been 19 years of age or older, and also consented to being audiotaped during the interview. They also must have been in the postpartum period (up to 12 months after delivery), must have been living in Nova Scotia, and must have had access to internet or telephone. The infant could be the first baby or subsequent baby. Electronic poster advertising was used as a recruitment strategy (Appendix A). I tried to recruit participants with different ages, number of children, place of residence, and ethnicity. The posters were

sent through email to communications coordinators at IWK Health. The recruitment poster was posted on my supervisor's website mumsns.ca and distributed by Twitter, Instagram and Facebook that were associated with the website. Social media and other kinds of mass communications are effective ways of recruitment (Morgan, Jorm, & Mackinnon, 2013). In a recent study conducted by my supervisor, 68 postpartum women were recruited over two weeks (Joy et al., 2020). Therefore, the feasibility of recruitment was very high. A phone number and an email address were provided, so women could contact the researcher easily. Fifty participants contacted me during the first three days. I could recruited the participants easily. One reason was that social media is an excellent recruitment strategy as it can access a large number of people in a short period of time (Adam, Manca, & Bell, 2016). It might also be an indication that people were interested in the topic of postpartum physical activity.

Research setting. All interviews were carried out in Nova Scotia which is a Canadian province surrounded mostly by the Atlantic Ocean. The weather conditions change during the year where the summer is short, and the winter is snowy and windy most of the time (Living in Canada, n.d.). Thus, many outdoor activities may be limited in Nova Scotia in some weather conditions. I decided to do this research study in Nova Scotia as I was living there for my Masters studies and discovered that there were a limited number of studies carried out in Nova Scotia to explore how postpartum physical activity was socially and institutionally constructed. The potential pool of women who have babies over the course of 12 months in Nova Scotia was reported to be 8472 (Duffin, 2019).

Data collection method

Semi-structured interviews. The data regarding women's views and experience about physical activity during postpartum were collected through one on one semi-

structured in-depth interviews (Appendix B). Semi-structured format is a technique of interviewing which is used in qualitative research studies and regarding health related topics (Kallio, Pietila, Johnson, & Kangasniemi, 2016). Using this type of interview enables researchers to improve their subsequent questions based on participant's answers. The questions are developed before starting the interview and prepared based on an interview guide (Kallio et al., 2016). This interview guide was developed based on the researcher's experiences and information that existed in the literature with regard to the research questions. The literature was selected based on feminist poststructuralist concepts (Aston,2016;Aston et al,2012; Wijlen & Aston, 2019), body as social construction (Krik,2002), and enablers /barriers of postpartum physical activity (Ekelin et al., 2018; Garshasbi et al., 2015 ; Groth & David ,2008; Evenson et al., 2009; Saligeh et al., 2016; Shelton & Lee , 2018; Symons- Downs & Hausenblas, 2004). Semi-structured interviews have been supported frequently by feminist researchers (DeVault & Gross, 2006), and are consistent with feminist research methodology (Brown & Strega, 2005). As a feminist researcher who uses feminist poststructuralism, I conducted semi-structured interviews because they could provide a space for participants to talk about their views and experiences (DeVault &Gross, 2006).The interview guide was designed to prompt discussion on participants' beliefs, values, practices, subjectivity, and agency (Weedon, 1987) in relation to postpartum physical activity.

Due to the COVID-19 pandemic, all interviews were carried out virtually either by telephone or a computer video platform such as Zoom. Each interview lasted for approximately 45 min. Before the interview, each participant was asked to complete a

consent form and several questions including age, ethnicity, gender, living status, place of residence, infant's age, number of other children and their ages, job, level of education, and religion. A phone number and an email address were provided to the participants, therefore, if they had any questions they could ask throughout the research process.

Non-hierarchical interviews. It is also necessary to follow a non-hierarchical interview (Roberts, 1981). Power and emotion exist everywhere in society. Society is formed by groups of individuals who are different from each other based on their race, social class, sexuality, religion, and so on. Where social position of some groups of individuals is better than others in terms of greater access to resources and power, it can create a hierarchical interview interaction (Edwards & Holland, 2013). This is not compatible with implementing feminist poststructuralism that aims to understand people's experiences in a non-hierarchical way by supporting participants to tell their stories in their own way. In this study, I introduced and positioned myself as an international graduate student and nurse who has worked as a maternal child nurse in my country, as a person who has not given birth, and who wanted to learn more about physical activity during the postpartum period. Before and during the interviews I established a relationship with participants that positioned myself as a learner, and postpartum women as people who were experts in the research topic (Hesse-Biber & Leavy, 2007). Therefore, this helped to modify the hierarchical position during interviews.

Reflexivity. Reflexivity, the "active acknowledgement by the researcher that their own actions and decisions will inevitably impact upon the meaning and context of

the experience under investigation” (Horsburgh, 2003, p. 309). Before data collection, I reflected on how my beliefs, attitudes, values, and experiences may influence the interview and research analysis. I also considered how my professional background could affect the data interpretation. It was important to position myself within the research. Throughout and even after the interview process, I gathered notes regarding my thoughts, beliefs, fears, and judgments. These notes were not aimed to decrease or control bias but rather to make it visible to the reader (Ortlipp, 2008). I also noted during the research process, that I could make decisions regarding research and justify these decisions (Ortlipp, 2008).

Before starting interviews, I explained to the participants the purpose of this study, confidentiality, risks and benefits. I also explained to them that they had the right to answer some, all or no questions, and withdraw from the study at any time (Appendix C). Moreover, my position as a Master of Science Nursing student and maternal- child nurse was explained. I also mentioned that I, as a maternal- child nurse, was very interested to learn more about the experiences of physical activity during postpartum, and to comprehend different views regarding physical activity to help me better understand how mothers decided whether to engage in physical activity or not following the birth of their babies. Moreover, the views of participants can help health care professionals and health managers to develop positive interventions to promote postpartum physical activity.

Data storage. All interviews were audio-tape recorded, online, and in a semi-structured interview format. Data included field notes, transcriptions, memos, and analyses (Lin, 2009). I changed all identifying information to ensure confidentiality. My

supervisors and research committee members could view the de-identified transcripts for analysis and reviewing purpose. All study files were electronic and stored on the secure internal Dalhousie OneDrive, and no paper files were stored outside of Dalhousie University. They were accessible only by myself as I did all the transcribing.

Data Analysis. Data analysis was carried out through a discourse analysis, which is considered a common analysis method for feminist poststructuralism (Aston, 2016). Baxter (2008) believes feminist poststructuralist discourse analysis provides a theoretical and methodological approach that can guide a gender and language study. It offers a way to examine a variety of possible meanings by challenging the idea of a single narrative. It provides a lens to identify and explore competing different experiences. Feminist poststructuralist discourse analysis explains differences that exist “within and between girls/women including their experiences of the complexities and ambiguities of power” (p.255). In other words, feminist poststructuralist discourse analysis is considered an approach that can help researchers analyze observations and verbal interactions. It also centers on understanding how individuals negotiate their subjective positions through competing discourses (Baxter, 2015).

In this research study, I applied Aston’s feminist poststructural discourse analysis (Aston, 2016) to guide the process of discourse analysis. According to this open guide, beliefs, values, and practices that exist in the data should be identified at first, and then discourses, relations of power, agency, and subjectivity should be considered. Discourses can be social, personal, or institutional and may exist in forms of dichotomizing, dominant, repressed, or invisible discourses, although this is greatly

influenced by context (Aston, 2016). This analysis was carried out by myself and my supervisors which also ensured trustworthiness of the final results of the analysis.

Data analysis is a key step in qualitative research because it shapes the research outcomes (Flick, 2013). According to Creswell and Poth (2018) data collection, data analysis, and report writing are related, and sometimes will be done at the same time. Apgar (1980) recommends that investigators “read the transcripts in their entirety several times. Immerse yourself in the details, trying to get a sense of the interview as a whole before breaking it into parts” (Apgar 1980, cite as Creswell & Poth, 2018, p.187). In this study, data collection and analysis were conducted simultaneously, and the data were analyzed using feminist poststructuralism and discourse analysis. The beliefs, values and practices then were extracted from each quotation giving close consideration to words utilized by the participants in order to preserve the meaning coming from their own experiences. Then, I wrote about the social and institutional discourses that exist in the quotation. Questions related to how discourses affect participants were analyzed as examples of “relations of power” that the women in the postpartum period experienced. I asked myself questions such as “how did participants think about the beliefs, values, and practices they talked about, or their feelings, questions, conflicts, tensions that they experienced”? I also considered the participants’ “subjectivity” (how they position themselves as a mother, partner, etc.) in addition to their “agency” (how participants decided to behave in every situation through accepting, or challenging, their experience) (Aston, 2016). I transcribed all interviews by myself. This gave me an opportunity to become familiar with the data. After completing each transcription, I read the transcribed texts from beginning to end several times. I highlighted the parts of

interviews containing important issues. I focused on parts of interviews where mothers spoke about their beliefs, values, practices regarding postpartum physical activity; and how they negotiated relations of power, what discourses appeared to be constructed, and what postpartum physical activity meant to them. I also used my notes and memos (not included as part of the data and separate from investigator field notes) to collect my initial thoughts following interviews in order to maintain details within my analysis. I used these notes to write my personal reflection, observations, my feelings about interviews, how I felt about the interviews, and quality of interviews. Following each interview, I started to transcribe, then I added the information that I gathered through field notes. My supervisors and I analyzed the interviews separately. Then, I met with my supervisors, and we discussed similarities and differences that existed between interviews, and between my supervisors' ideas and my thoughts. All of us recognized the important issues similarly. I proposed the emerging themes, and my supervisors and I discussed potential themes and feminist poststructuralist concepts that existed within each theme.

Trustworthiness

The trustworthiness, also known as rigor, of this qualitative research study was established through various methods of credibility, dependability, and transferability.

Credibility is defined as: "The confidence that can be placed in the truth of the research findings. Credibility establishes whether the research findings represent plausible information drawn from the participants' original data and is a correct interpretation of the participants' original views" (Korstjens & Moser, 2018, p.2). In this research study triangulation of data and member-checking were not used. Based on

feminist poststructuralism, statements of the participants are considered to be truthful, and it is not necessary to check by other means. The data were analyzed by myself in terms of language, discourse, and relations of power as well as through consultation with my supervisors and thesis committee. This could be considered investigator triangulation. I also used reflexive notes to record my experiences during this research study. This strategy enabled me to record all events that happened during the research process, providing more credibility to this research study. Reflexive notes also helped me to make sure my biases were declared and reflected upon.

Dependability is another important element. It ensures that the study findings are relevant and repeatable. The aim of researchers is to make sure that their findings are relevant with data which has been collected (Statistics Solution, 2019). In this study dependability was achieved by maintaining a tangible and well documented record of the reasoning for the sample, sample size, recruitment strategies, methodology, data collection strategies, analysis process, and decisions. This record allows future researchers to easily follow the same research process and shows how social positioning was attended to between researcher and participants.

Transferability means the evidence should be provided by researchers to show that findings are applicable to other contexts, situations, times, and populations (Statistics Solution, 2019). This study was carried out in Nova Scotia, but findings may be related to other contexts within Canada. Moreover, according to Bitsch (2005) “the researcher facilitates the transferability judgment by a potential user through thick description and purposeful sampling. This means that when the researcher provides a detailed description of the enquiry and participants were selected purposively, it

facilitates transferability of the inquiry” (p.85). In this research study thick description was used as a transferability method. I provided a clear explanation about research processes using detail, in-depth interviews, and quotations. Furthermore, the sample selection and the analysis techniques were described in detail. Moreover, direct quotations and detailed analysis also were included in presenting findings (Phillippi & Lauderdale, 2018) to ensure readers, researchers, health care professionals, and students can understand and critique my interpretations.

Ethical considerations

IWK Health research ethics board approval was received prior to data collection. Each participant signed an informed consent form prior to participation which included the research description. (Appendix D and E). The consent forms were sent by email. All participants were provided with a complete explanation about the study, its purpose, potential risks and benefits, acknowledgment that the participation was voluntary, methods of data collection, time involved, how confidentiality and anonymity would be maintained and how data would be stored and for how long.

The participants were informed that they had the right to withdraw from the study up to one week after the interview. It would be difficult to remove data from ongoing analysis. Therefore, one week had been chosen as the maximum amount of time for a participant to withdraw their interview from the study. Qualitative research studies gather a lot of information about participants’ conditions, lifestyle, views, and experience. If identification occurs, the possibility exists that it can lead to important harm including prejudice and reprisal to the person (Richards & Schwartz, 2002). Participants’ identifications were protected to ensure confidentiality. Names and

identifying information were removed from all transcripts. Research findings will be published without participants' identifications.

Qualitative research frequently uses in-depth interviews about participants' personal experiences; therefore, there is the possibility that sensitive topics may be addressed. These questions may lead to anxiety and distress in some participants. While participants did not express feeling anxious or distressed during the interviews, they were still encouraged to contact their health care professionals if they felt anxious or distressed due to responses to questions or discussions during the interview. A list of mental health agencies was provided if they preferred to discuss their anxiety or distress with someone else. Women who participated in the interview were given a \$25 e-gift card to a grocery store. As the thesis report and publications need to include direct quotes from participants' interviews, pseudonyms for participants were used to maintain confidentiality.

Knowledge Translation

When relevant knowledge about a specific topic is collected, evaluated, shared with others, and summarized, it is named knowledge translation. Knowledge translation is a key element in bridging the gap between research and practice, so clients, their families, and health care professionals can gain advantages in research evidence. There are several different ways, that research results can be distributed and inform service users, health care professionals, investigators, and decision makers including giving speeches in conferences, publishing scholarly papers and leaflets, and updating information on websites (Can Child, 2019).

The aim of knowledge translation in this research study was to raise awareness about postpartum physical activity and stimulate dialogue among health care professionals, families, and women about postpartum physical activity. In this study, as soon as the research is completed and findings are established, a summary of the research study will be sent to all participants. Any publications from the research study will also be sent to the participants. Moreover, a summary of the research study will be sent to IWK Health to the health care professionals and postpartum women and their families in the form of an electronic poster. This knowledge can be used by health care professionals, families, and women to find strategies to promote postpartum physical activity. A copy of the master's thesis will be given to the Dalhousie library for students and faculty members. This helps nursing students and faculty members to use the research findings when they want to provide care for postpartum mothers. I will submit the study manuscript to a peer-reviewed journal for researchers, health care professionals, and students. Moreover, the results will be presented at conferences, scholarly seminars for health care professionals, and educational workshops for postpartum women and their families for the reasons that were mentioned above.

Chapter 4: Findings

This chapter has been written regarding findings and interpretations based on interviews with six women in their postpartum period across Nova Scotia. Participants included six women of whom the youngest mother was 20 and the oldest was 41 years, with the mean age being 34 years. One mother was a single parent and all others were living with their partners. Five participants were white, and one participant was from the Middle East. In terms of place of residence, five participants lived in cities or towns, and only one participant was living in a rural area. The mean age of their infants was seven months, ranging from 4.5 to 10 months. Amongst the mothers, four participants reported that they also had between one and four other children. The age of siblings ranged from 2 to 19 years. The level of education of all participants was greater than high school and ranged from community college to Master's degree. All participants had been employed prior to giving birth. All participants' names have been changed to ensure confidentiality.

The overall question that this research study addressed was: **What are women's experiences regarding physical activity during the postpartum period?** The sub question was how are experiences constructed through social and institutional discourses? In order to answer the research questions, I conducted exploratory interviews with open-ended questions using feminist poststructuralist methodology. The purpose of each interview was to explore the experiences of women regarding postpartum physical activity. All of the participants explained what postpartum physical activity meant to them and noted that engaging in postpartum physical activity was important.

Although each participant had their own story, they all shared examples of how they negotiated similar social discourses on mothering and physical activity. Discourse analysis and feminist poststructuralism helped to understand how participants' subjective positions had been constructed through institutional and social discourses, and how they negotiated relations of power through their agency related to postpartum physical activity. The findings were interpreted into three themes and five sub-themes: 1) Boost our body, lift our mind; 2) Being a role model for their children; 3) Socialization, social support, and postpartum physical activity. Each theme has been supported by quotations from the participants' experiences, which have illustrated that theme.

Boost our body, lift our mind

For all participants in this research study, the postpartum period was a unique time with unique roles and responsibilities. Paying attention to recovery from childbirth, accompanied by the responsibilities of being new parents, led to unique experiences for mothers in every aspect of their lives, including postpartum physical activity.

This theme demonstrates why engaging in postpartum physical activity was crucial for mothers, and how they negotiated their decisions when faced with conflicting expectations. During the interviews, participants shared a variety of personal experiences about physical activity and how it also affected their own postpartum health, both mentally and physically, as well as what it meant to them. These experiences provided in-depth stories that were then analyzed using discourse analysis. Beginning with beliefs, values, and practices regarding postpartum physical activity, it was clearly

demonstrated how each participant negotiated social and institutional discourses. Experiences had both differences and similarities across participants in the study. Three subthemes emerged from the analysis of the interviews as follows: 1) Postpartum mothers valued physical health, 2) Return to pre-pregnancy weight: Now is better than later, and 3) Mental and emotional health.

Postpartum mothers valued physical health. For all participants in this research study, engaging in postpartum physical activity was a way to promote their physical health. Almost all participants spoke about the positive effects of postpartum physical activity on their health. This subtheme helps build understanding regarding why physical health was so important to mothers, and how they constructed postpartum physical health.

Although all the participants did not have the same experiences, they valued postpartum physical activity and expressed this engagement as being important to their physical health. Regaining energy, relieving pain, making it easier to get around, decreasing the possibilities of getting sick in the future, and returning to pre-pregnancy weight were some of the reasons behind women's decisions. Some participants constructed physical health as being "skinny" or not having chronic diseases such as "blood clotting" or "organ failure".

I selected parts of interviews to illustrate beliefs, values, practices, subjectivities, and common discourses around postpartum physical activity and physical health. Although all the participants believed that postpartum physical activity helped them promote, or maintain, physical health, and valued it; for a few, their practices did not

reflect their beliefs and values since they did not engage in postpartum physical activity regularly due to different reasons such as lack of social support.

The importance of postpartum physical activity stemmed from the beliefs that postpartum physical activity helped a mother become strong physically, enabling them to engage in activities that promoted health, including a healthier diet and better sleep. In addition, participants valued children's benefits from mothers' engagement in postpartum physical activity. For example, one mother said that when she was healthier, she believed her breast milk would have better quality. In the following quote, Mary explained her beliefs and values regarding physical health, and how stretching, and body strength were important to her.

I just want to exercise a little bit to stretch my body and try to strengthen my body. Try to make my body stronger. So, I guess I could say becoming strong was important.

It was evident from Mary's words that she valued stretching her body, as it helped her to become strong. Thus, she planned to engage in postpartum physical activity. For Mary, postpartum physical activity was a way that made her body stronger and healthier. Although in terms of practice, her engagement in postpartum physical activity was limited to walking around the neighborhood due to the challenges she faced during postpartum including providing care for other children, or doing house chores.

Mary's personal values regarding physical health were evident from her statement that she would like to be "strong" because she believed physical strength could help her do her daily responsibilities as a parent in interacting with her child. For example, she believed physical strength would help her carry her baby for longer periods

and would help her to go up and down the stairs. Mary used her agency as she agreed with the information and knowledge within a social health discourse. We can also see how physical activity was connected to her subjectivity as a mother. Being positioned as a mother who wanted to take care of her children in the best way possible, led her to want to practice postpartum physical activity to help her become physically stronger. She also recognized that her body strength and feelings of safety and security regarding her child were linked together because she could keep her baby close to herself. Thus, physical activity is beneficial both for her body and for her child, as she explained during the interview:

I know that the physical activity has made me be stronger, so carrying my baby around is good. Like sometimes I will carry him on me so that he is close to me, And it helps me feel stronger because I'm going up and down the stairs with him.

Mary constructed physical activity as “stretching” her body. She also noted that physical activity helped her to become strong and helped deal with the pains that began during pregnancy and childbirth and continued throughout postpartum. In the following quotes, Mary explained why postpartum physical activity was important for her:

Just like in my back, a lot of pain in my back. There was some pain in my hips, from carrying baby, from being pregnant and maybe just from labor.

Relieving postpartum pains was the first priority for Mary. Other participants reported the same beliefs and values. Ellena explained how postpartum body movement helped her overcome the pain that she experienced due to weight gain during pregnancy:

Physically I feel different than I would have pre-pregnancy, like I have extra weight, so my knee gets sore, or ankle, things like that but, overall, I feel better when I do move my body.

Other participants also shared their beliefs and values regarding postpartum physical health. For example, Sara, Ellena, and Beth believed that postpartum physical health was essential. Sara elaborated that it was important to pay attention and focus on physical health before it is too late; and the postpartum period was an appropriate time to promote physical health and prevent future illnesses. Moreover, Sara was concerned about her future physical health. This concern stemmed from the belief that she saw herself more vulnerable to diseases in the future. She also accepted that postpartum physical activity could prevent future physical health issues. Sara shared her beliefs during the interview in the following quotes:

I think every little bit counts. I try to do that a little bit. I think it's just good for myself or my body. When I get older, then I can appreciate that I did these things, and it's easier on my body..... Heavier you are when you get older, it would be harder. Many people would have knee problem or different things. If I try to keep things under control now, it's easier than later.

Sara's words highlighted her values regarding a personal agency to "control" her postpartum physical condition and find a way to manage her current and future health. For Sara "control" meant "manage". She recognized that every amount of physical activity, even a little, would contribute to promoting health, and its positive effects on her health would be recognized in the future.

The importance of physical health was also reported by other participants. Beth stated that there was a link between physical activity and preventing chronic illness in the future, and she believed it was important for every person, including pregnant and non- pregnant women. She explained during the interview:

Physical activity is important, whether you're postpartum or not for the health, to maintain good health, wellbeing and to avoid any chronic diseases. To avoid any illness in the future.

Summary. All participants in this research study believed that engaging in postpartum physical activity promoted their physical health, and some believed it was beneficial for both themselves and their children. A few mothers explained that physical activity helped them to become stronger and to interact more with their children; they did their duties as parents. For example, it has helped with carrying their babies, going up and down the stairs, and doing chores around the house. For a few mothers, engaging in postpartum physical activity helped them to overcome their pain that they experienced during postpartum; for them it was the first priority. Other mothers also spoke about preventing chronic illnesses. It was clear that medical/health discourses, that perpetuated the need to be physically active during the postpartum period, were taken up by all of the participants in the study. In addition, being subjectively positioned as mothers created different needs and practices that they chose to implement in relation to their babies and children.

Returning to pre-pregnancy weight: Now is better than later. A common idea that all participants spoke about was returning to their pre-pregnancy weight. For some participants, losing weight was important from a personal, social, or cultural point

of view, and it was the main reason for them to participate in postpartum physical activity; yet, for others it was not as important.

Participants viewed health and well-being in losing weight for a variety of reasons, for example, to prevent chronic diseases, or just losing weight in order to be in shape. Moreover, while some mothers experienced negative feelings regarding their extra weight, a few tried to overcome their negative feelings through engaging in postpartum physical activity. I have selected parts of interviews presenting how participants negotiated different beliefs and values regarding returning to pre-pregnancy weight. The quotes will illustrate *how* and *why* participants resist, or accept, the dominant health discourses about postpartum body weight.

In the following quote, Anne explained how she relied on some health discourses. Health discourses can easily be found online and in the medical literature. For example, weight retention after birth is considered to be a risk factor for metabolic and cardio-vascular diseases (Kew et al., 2014). This type of discourse is most likely being shared with mothers by health care professionals during antenatal classes and is also easily accessed on the internet; thereby demonstrating how easy it is to access health discourses. While health discourses are readily available, it is also important to examine *how* people interpret this discourse for themselves. Anne explained during the interview:

it's a lot healthier to be skinny because you're less likely to develop certain types of diseases, like some type of blood clots or artery diseases or heart problems or other organ failures.

Although, the link between postpartum weight retention and some types of chronic diseases has been recognized, for Anne being “skinny” meant being healthy. Anne positioned herself against dominant health and medical discourses that a “healthy body weight” is essential for postpartum health (Kirkegaard et al., 2021). She believed that she had extra weight in the postpartum period and that it should be decreased. In addition, losing weight was very important for her because she believed postpartum weight had negative effects and gave her a sense of being “disgusting” as she explained during the interview:

..... and after giving birth, I had a lot of extra fat. It sometimes made me feel a little bit disgusted at myself.

During the interview, it was evident for me that the postpartum weight had effects on Anne from several perspectives. First, she wanted to be skinny because she sought a “social sense in it”, as she said:

It's just the social sense in it. Not so much that I see people are prettier when they're skinny.

Even though this feeling was not considerably strong, Anne received social and cultural messages regarding being skinny and attractive when she considered her postpartum weight. In the western culture, people learn that “thin is beautiful, and fat is ugly and weak.” (Garrett, 2010.p.224). These expectations of thinness, which were stemmed from society and culture or due to a dissatisfaction of postpartum size and shape of body, can lead to psychosocial issues. (Wallis, Prichard, Hart, & Yager, 2021). Furthermore, it was evident during the interview that losing weight was important for Anne because the extra weight during postpartum changed the image that she had of her body, and she

tried to regain her previous body image through physical activity and by returning to her pre-pregnancy weight, as she said, “I didn’t feel like myself”. For Anne, these expectations of changes in body weight led to an alteration in her body image. It led to negative feelings such as ‘disgusted’ regarding her physical appearance and having low self-confidence. As she said,

..... My husband noticed this, and he really wanted me to regain the confidence.

Anne also was concerned about her postpartum weight and developing cardio-vascular or other chronic diseases in the future (as mentioned earlier). For her, expectations about weight loss continued during postpartum as she expected to return to her pre-pregnancy weight in a short period of time.

During the interview it was evident to me Beth and Sara believed that their weight was “above average” by having an extra “10 kg” of weight. It was evident that they compared themselves with social norms. Sara said:

After the birth, I lost some weight, of course, but still, I had 10 kilograms extra than what I used to have.....

Beth also noted:

Means you're above the average of what you should be; whatever you gained throughout the pregnancy and after giving birth and above your previous weight.

For two participants (Beth and Sara), being in shape was very important. For instance, Sara would like to be in shape throughout her whole life. Thus, she was trying

to always remain active. She constructed the phrase “being in shape” as not having a “big belly” or “big arms”.

I don't like to see my belly big or showing it in dresses or in clothes. I don't like it. I want that to go back to what it was.

For Sara, her body appearance in public was important because showing her big “belly or arms,” especially in summer, gave her a sense of concern and worries. Thus, the worries about public display made her “dissatisfied” or “unhappy” with herself. As she said:

Summer when I go to the beach, I don't want to worry about, "Oh, I have to, I have to be at this special", I don't know, like being true to not show my belly or arm..... When I have a big belly it's just-- I don't know, if I cannot have it, I'd prefer to not have it. I never had that, so I don't like it.

It seems that Sara, much like Anne, would like to maintain her pre-pregnancy body image. A dissimilarity between her postpartum body image and ideal body shape, which was most likely influenced by socially constructed body norms, was a source of her worry and concern. The expectation from her body shape made her do physical activity soon after birth. Sara also returned to physical activity very quickly after her first time giving birth. As she explained:

Well, that kid is my second kid, second child. With my first child, right after birth, I was active. Both of my kids were Caesarean section, so I had to be careful for two months almost. After that, with my first child, I was really active, going to the classes, baby mama yoga.

While a few participants believed skinny was beautiful, being fit was more beautiful for Beth. Beth constructed the word “fit” as “not to be overweight”. She stated during the interview:

I know, of course, it's more beautiful to be fit.

Beth believed that her extra weight during postpartum was “normal”, and that she would lose it gradually. As she explained:

What I'm thinking now is also safe, because for me, I just gave birth and I understand it is part of the body. It took time to gain, and it takes time to lose.

Although Beth referred to medical information that we can see was perpetuated through medical discourses that a weight gain is necessary for the fetus’ growth and development during pregnancy and that some extra weight might be gained during postpartum; she resisted the medical discourse mentioning that it takes up to one year to return to the pre-pregnancy weight. She mentioned that her postpartum weight should be decreased soon because losing that weight was crucial for her health. She also explained that her extra weight should be immediately decreased, possibly under a year and that if her extra weight was not lost very quickly, she would likely consider it as a permanent part of her body.

I think it's important because it is easier to lose it now than just wait for a year and try to lose the weight, because then I will be used to it. Then I will see as part of my body and maybe I will not be that motivated to lose it.

Summary. Almost all participants referred to information that was socially and institutionally perpetuated through medical discourses that linked the postpartum weight retention to health deteriorations. All participants mentioned that they had gained extra weight, and that they would like to return to their pre-pregnancy weight in order to stay healthy. The majority mentioned that they wanted to meet the cultural and social messages regarding being “skinny” and being attractive. While few participants said that the extra weight gave them a negative sense of themselves, one person articulated that she felt “disgusted” by herself and had “low self-confidence”. Others were worried about public display or had concerns about their inability to get back to their previous weight. Some participants also resisted professional advice that it takes up to one year to return to their pre-pregnancy weight. Indeed, many mothers ignored this fact, as many would like to return to pre-pregnancy weight very quickly. Participants’ subject positions as women and mothers around their postpartum weight - including, being “above average” (socially and medically constructed) or having “10 Kg” of extra weight- played an important role in their desire to lose weight.

Mental and emotional health. A common subject that almost all participants spoke about was the mental and emotional aspects of engaging in postpartum physical activity. While participant experiences varied in terms of actual physical activities, all of the participants spoke about how they sought out “happy” and “fun” postpartum physical activities in which to engage. For all participants, “happy” and “fun” were positive emotions that could promote mental health. A few also expressed that physical activity helped them to get rid of their worries and concerns that they experienced as parents during the postpartum period, and they also believed that postpartum physical

activity was an opportunity for relaxation and enjoyment. In the following paragraphs, I selected parts of interviews illustrating how participants in this research study experienced postpartum physical activity with respect to mental health.

For Caroline, her mental status was very important. She was a postpartum mother who had a chronic anxiety disorder, and she was concerned because she could not carry out her responsibilities as a mother during the exacerbation of her illness. Caroline experienced postpartum depressive symptoms after childbirth. She believed that the anxiety disorder prevented her from providing enough physical, or emotional, support for her children. She recognized that postpartum physical activity helped to improve her mental health. She valued mental health and postpartum physical activity since they made her feel ready and provided enough energy in order to play her role as a mother. These beliefs most likely stemmed from some institutional discourses that postpartum physical activity can reduce the symptoms of depression after childbirth (Kołomańska-Bogucka & Mazur-Bialy, 2019). This belief has been constructed through decades of scientific evidence and discussions amongst health care professionals and possibly shared with clients, and through health messages and books. Caroline's concerns about her parenting role stemmed from her mental condition, as well as her subject position of being a "better mom" which could have stemmed from cultural and social expectations regarding parents' roles and responsibilities. Caroline believed that she would be a "better mom" if she could support and guide her children better.

To me, being a better mom is just being able to keep up with all my chores because there's times with depression that you can't always keep up with

everything and instead of having one load of baby clothes, you have three loads of baby clothes. Like just not being behind on things and staying up, keeping up with things. I have more time to spend with my children, just catching up on household chores. If I stay into a routine, it makes me a better mom to keep up with my things and stay in a routine because I can do more with my children.

Moreover, Caroline's ability to support her children or do chores gave her a positive feeling about her capability. According to her, both physical and mental health were important, although mental health was crucial due to the exacerbations of the illness that affected her. With respect to her explanations, Caroline's practice was to participate in postpartum physical activity. However, Caroline could not follow her decision due to her mental status, lack of social support, and the COVID-19 outbreak. Caroline explained the following during the interview:

I tried to do the best I can. The more I accomplish and do, with walking, it mentally helps me..... physical still helps my mental but my mental wellbeing is more important than my physical because mentally I need to be there for my children, so I need to put aside what I feel about my body physicallyI have sometimes breakdowns, so I mentally have to make sure that I'm always there for my children, mentally know that I'm doing everything that I should be doing, and staying on track and providing and giving them direction. Mentally, I have to be well...My challenge is getting back past my mental state, and feeling that I'm worth it, and that I can do this for my children, and that it's good for me, and that

it's wanting to move will make me better, not make me worse, like getting past myself.

Overall, it seems that Caroline dichotomized mental and physical health into two separated things. She prioritized mental health over physical health. It also seems she challenged that physical and mental health are related together.

Some differences existed in the way that mothers experienced postpartum physical activity with respect to mental health. While some mothers thought physical activity affected their overall mental health, others noted that it affected one particular area of mental health - positive emotions. Ellena, a participant who was living in a small town, expressed that the purpose of engagement in physical activity was to “enjoy” it, because enjoyment can decrease stress, and a low level of stress could increase positive emotions, leading to better mental health. She recognized that enjoyment helped her to decrease her distress that was created by interaction with her child, or the current COVID-19 situation.

I think mentally it lifts my spirit. If I am in a wretch or feeling, I don't know, frustrated with the baby or with the situation, mentally I always feel better after I go for a walk..... it feels physically good to move my body and feel like I'm doing something good for myself.

Ellena accepted health advice advocating that physical activity could promote mental health. She also believed that doing physical activity was enjoyable because it was something she could do just for herself. I interpreted that this positive feeling maybe stemmed from the fact that she saw herself as being worthy and as a valued person; hence, doing something just for herself meant that she valued her body and mind. She

positioned herself subjectively against the dominant and normative social construction of mothers who are often expected to be all for their children (Horwitz, 2003). Thus, Ellena's agency was to participate in postpartum physical activity in spite of many challenges that she faced. Although, she had a sense of social isolation and did not receive much support from her family members or friends, she decided to engage in the postpartum physical activity. This feeling also was reported by other participants, as Sara explained:

There are things that we do for everybody in the family, making the food. Things that it's good for the family, but there are things that it's just I'm doing it for myself just to make myself to be happier.

In this research study, it was evident that both Ellena and Sara resisted the common responsibilities that are often socially constructed for mothers, such as they should be "all for their children" (Horwitz, 2003). Therefore, doing something just for themselves made them "happy".

Like Ellena and Sara, Anne also resisted the mothering discourse that perpetuates the belief that "mothers should be all for their children", as she considered time for herself to be important as it was enjoyable and doing something only for herself such as getting some fresh air, and not with the baby around. She would like taking some times for herself to engage in physical activity in spite of social common idea that consider all mothers' time for their family. Anne said:

The physical activities that I like just because it's something that's me. It's my time.

Two participants, Mary and Anne, believed that engaging in postpartum physical activity helped them to get rid of everyday tensions that they experienced. Mary explained during the interview:

So my experiences during this postpartum, I find that I'm a lot happier when I go out and walk with my baby. Sometimes I'm very stressed out and try to get my other children ready for school. And then I go out for a walk with my baby, I just feel like my mind clears up and I'm happier. I think my brain is healthier. Not after the activity, but during the activity I feel good.

Mary's quotes illustrated her personal belief regarding many responsibilities that she should carry as a mother, and trying to meet them caused her pressure and stress. Mary found that engaging in postpartum physical activity helped her to decrease the stress created by these extra demands. Mary also relied on some health discourses and believed that postpartum physical activity can help people to have positive emotions (Hutt, Moore, Mammen, & Symons- Downs, 2017).

According to Anne, intentionally engaging in postpartum physical activity could reduce her daily stress, end her worries about things, and make her happy. The stress stemmed either from her day-to-day events or her education. Her agency was to accept some institutional discourses that perpetuated the belief that physical activity is related to emotional health (Hutt et al., 2017). Anne also used postpartum physical activity as an opportunity that enabled her to think about the activities that she managed during the day including better management of her studies and daily routine. She also relied on the health discourses that physical activity can boost the memory and thinking skills (Harvard Health Publishing, 2021), and this information has been shared by mothers through scientific

books or websites. In the following quotes, Anne explained how she felt when she engaged in postpartum physical activity.

While I'm doing it, I feel very relaxed, I feel very happy. It's a good time to think about things. I think about what I want to cook for lunch or what I'm going to do. Sometimes it helps me think about my studies and clear my mind and everything.

Summary. Most participants in this research study used their agency and challenged the dominant discourse that the mothers should be all for their children. They explained that mothers should consider engaging in postpartum physical activity just for themselves at times. It would make them happy because they would possibly see themselves as valued and worthy. This affected their decisions to engage in postpartum physical activity. One participant engaging in postpartum physical activity thought it could promote her ability in being ready enough mentally to carry out her responsibilities as a parent. More specifically, mothers recognized that doing physical activity not only relieved stress and made them happier, but in turn enabled them to do their mothering chores. For one participant, subjectivity around “better mom” took place when a mother was strong enough mentally to carry out her responsibilities as a parent. For a few participants, engaging in postpartum physical activity could help to overcome their worries and concerns stemming from interacting with their children or daily activities. Postpartum physical activity made them happy because they recognized a link between the mother’s happiness and being a good mother.

Being a role model for their children

Almost all mothers wanted to encourage their children to get involved with physical activities. This was an important value to them. Some participants believed that as a parent their own behaviours could influence their children's beliefs, values, and practices in the future beginning as early as the first 3-12 months after birth. They mentioned that they would like to teach healthy lifestyles to their children by being role models and engaging in postpartum physical activity. They believed that this habit could be established from birth. All participants wanted to provide a positive message for their children regarding physical activity and this meant actually doing physical activity and being a good role model for their children. They stated that their children watched them and internalized their behaviours, which they would then carry with them into the future.

Some participants started to think about their babies' physical activity from the postpartum period. In the following quotes, Mary explained how she could create positive behaviour in her child through her own engagement in postpartum physical activity. Mary stated that her child would be affected by her practice. She explained that "see" and "copy" mother's behaviour was a powerful way of learning for her child during childhood, and then her child would grow up with the "same idea". Thus, with this approach, she could engage her children in physical activity.

I think that when kids see us, that babies take on our habits. They see what we do, and they want to be just like us. You know, I see them, if I am holding cell phone; my baby tries to take my cell phone and touch it, or TV remote. I know that's just an object in my hand, if my baby sees me doing physical activity, he's more likely to copy that when he's older, and want to do the same thing as me. So, I create good habits.

A relation of power existed between postpartum mothers and their babies. The mothers recognized their power and control to create a non-hierarchical way, through role modeling, to teach their children their own values and beliefs regarding postpartum physical activity. For example, Anne recognized her power to teach the advantages of physical activity to her child in a non-hierarchical way, instead of telling him what to do directly. It appeared from her statement “ I hope he can understand that it's a very important part of life”, that she expected her child to recognize the benefits of doing physical activity and then engage in it on his own while using her as his role model. Anne believed her role modeling would help the child choose physical activity in the future. She explained during the interview:

I'm hoping that when he's a little bit older and he understands being active and exercising, That is something that everyone should do because it keeps him healthy. It'll keep him healthy. It'll make his life a little bit easier because he's less likely to get certain diseases and stuff. It's just better for him. It makes him healthy. I want to convey the message that exercising is important because it makes you healthier, not just physically, but if you participate in sports, any sport, really, it's a team sport.

Anne also mentioned that the ability of mothers to connect with other people would be learned and followed by her own children, therefore, the socialization of baby could be learned through mother's role modeling. Consequently, Anne used postpartum physical activity to teach her child how to communicate, or build relationships, with other people as a value. She also referred to a part of a health discourse that perpetuates a societal belief that physical activity is important for health (Gao, Chen, Sun, Wen, & Xiang,

2018). She tried to teach her beliefs regarding physical activity to her child. The importance of being a role model, from her perspective, was that it would make life easier for her child. Anne viewed herself as a mother whose responsibility was to teach her child the appropriate health behaviour by her own engagement, through which she could make life easier for her child. This was her personal belief. Anne relied on some medical discourses that join physical activities to prevent chronic illness in the future (Booth, Roberts, & Laye, 2012). She also mentioned that the absence of diseases led to a better life, again her personal belief.

I would say yes. Yes, it does. There's a small correlation there that being active is just mostly a lesson to teach my child. It's something to basically teach my child. I guess just the relation between physical activity and being a mother is just teaching your child to also be active.

Anne's subjectivity as a mother can be seen in her statement "...the relation between physical activity and *being a mother* is just teaching...". This indicates her belief that there are certain social norms to being a mother. More specifically, she is referring to being part of a mothering discourse that perpetuates the belief that mothers are meant to teach their children. In this instance, she believed that she had a responsibility to teach her baby the importance of being active.

The willingness of being a role model for their children was reported by others as well. During the interview, Sara expressed the importance of the family's role in establishing physical activity in children. She explained that children could learn "many stuff" through interacting with adults within the family. Sara's beliefs stemmed from her previous experiences since she remembered how she had been affected by her mother's

practices when she was a child, and how she had learned to engage in physical activity based on her families' beliefs and values. It shows the effects of multigenerational lessons on engaging in postpartum physical activity. Sara mentioned that children could learn to engage in physical activity by *observing* their mothers' practices and being affected by their opinions, which would make the decision making process, regarding physical activity, easier for them.

Sara was concerned that her child was affected by traditional, or digital, social media as she explained that sitting in front of the television and eating junk food was a stream that was inevitable for her children, but she tried to prevent it. Thus, Sara viewed herself as a mother who had power and control over what she wanted her child to learn. Sara explained during the interview:

My mom was doing a lot of things, go for a walk and take us for a walk, and we had a weekend family walk with our extended family too. We went for a walk and that was fun things to do. At the same time, I learned to do it, so you learn some stuff from your family.... of being active is good, instead of.... Especially these days with all these video games. If my kids can see me being active, so maybe they get this message that it's better to be outside when you can and that is good. Do something or bike or do something rather than sitting right in front of the TV and eat. Basically, eat junk in front of the TV and just playing video games. I'm sure that one day it'd happen to my kids, but if I can push that further and further to not happen anytime soon, I will do.

It is evident that Sara and her husband looked at themselves as teachers; that their responsibilities were not only to teach their children to be active, but also to turn the physical activity into a practice that created a time full of fun for them. Activities that are integrated with fun and joy are learned better by children because fun and joy can provide the necessary motivation for children to engage in physical activity (Henderson, Glancy, & Little, 1999), and they also encourage them to participate in more rigorous physical activity as children. Sara sought out well-being when she engaged her children in physical activity, as well. She believed that integrating physical activity and fun helped the individuals to promote their physical and mental well-being. Sara explained during the interview:

I think maybe hopefully my kids would learn that from me and my husband, and we can keep it as like being active, but having fun with it too, and it's better for their mental health and better for their wellbeing.

The benefit of parents' role modeling, including mothers, is that the role modeling can reinforce target behaviours in parents. If parents would like their children to learn a behaviour, they have to practice it themselves. More specifically, if mothers want to promote physical activity in their children, they have to practice it themselves first. Thus, the willingness of mothers to be a role model can promote postpartum physical activity. In the following quotes, Beth explained how her engagement in postpartum physical activity could, in turn, become a part of her baby's lifestyle. Beth stated that her child would be an active person based on what she/he "sees" and "remembers" so, role modeling was a way in which she could teach her baby to choose physical activity. She explained during the interview:

The baby will look at the parent as a role model. As they see the mother doing an activity, they will always remember that... and then when the time comes, they will always be active because they will remember seeing it....

When they see the mom, you grow up [with activity] as a future lifestyle and as part of their lives and that they should do it. I think that's the message the baby will get.

While a few mothers started to think about encouraging their children to engage in physical activity through their role modeling from their babies' early stages of life, others who were in the postpartum period who had older children were thinking about their role modeling of all children. Caroline, like Anne, Beth and Sara would like to be a role model for her children, and show them how not to “give up” during their life in the future. Caroline who had personal experience with chronic anxiety disorder and postpartum depression, believed that by staying active in the postpartum period she could address her mental health issues. This was a kind of role modeling for her children that would teach them not to stop their efforts in the future.

I keep going, and that I get the help that I need. My children are very aware, and I find that it's helpful to them. I think it's being a role model to them not to give up.

This is an example of how dominant health discourses can influence the beliefs and practices of people. In particular, Caroline was aware that postpartum physical activity could decrease her depression. This information is part of mental health discourses (Kołomańska-Bogucka, & Mazur-Bialy, 2019), and is most likely available through literature, social media or talking with family or friends. She also believed that her

engagement in physical activity would influence her children and lead to positive mental health for them. Caroline recognized the need to care for self as well as care for others. She explained that her own benefits, and her children's benefits, were related. It was a personal belief. She was concerned that when she could not engage in postpartum physical activity her children also lost this opportunity to benefit from engaging in physical activity.

Summary. For most participants, their subjectivities as mothers positioned them to be role models for their children. They saw themselves as persons who were responsible to teach healthy behaviours to their children. For these participants, role modeling was a type of teaching as it helped them to teach the positive benefits of physical activity to their children including physical and mental health. Thus, their own engagement in postpartum physical activity was important to them. It was also evident that postpartum mothers were concerned about their children who would be affected by other activities, such as social media or time spent in front of a screen, rather than engaging in physical activity. Postpartum mothers felt that they had the power to encourage their children to engage in physical activity through role modeling. Thus, some mothers started to think about their role as early as in the postpartum period, and others who had several children considered themselves as role models for all children. One mother shared examples of how she learned to engage in physical activity from her parents' role modeling when her parents taught her to engage in physical activity through weekend family walking or extended family walking.

Socialization, social support, and postpartum physical activity

Socialization and postpartum mothers' sense of isolation. For some participants, socialization, or interacting with another person or group of people, was important to help them participate in postpartum physical activity. I present parts of interviews to show how participants in this research constructed the concept of “socialization” and why it was important to them to participate in postpartum physical activity. For instance, according to Ellena socialization meant connecting with another person, with her preference being engaging in group physical activity. She also believed that a high level of “endorphins,” which is associated with good feelings, could be obtained by connecting with other people.

I do almost always walk with someone else which is a big part of the feeling good. Endorphins in having- through socialization with the activity.

While endorphins are often associated with physical activity, Ellena also believed that endorphins were released by socializing with others, helping her to “feel good”. Health and biomedical discourses may have influenced Ellena’s knowledge, that during physical activity special hormones are released in the body which are called endorphin hormones, and the secretion of endorphin hormones cause positive feelings in people. What is interesting to note here, is that Ellena also included a belief that being with another person can also increase endorphins. She valued and sought out opportunities to feel good, especially during the postpartum period during which she was feeling isolated. She also valued socialization as a form of motivation that made it easier for her to reach the physical activity goals.

I like seeing someone else, having them ask me to go is motivating, like an accountability partner.

For Ellena, socializing with another person during postpartum physical activity helped her to be accountable to herself. However, while she said that she preferred to participate in group fitness classes, unfortunately, she could not due to the Covid-19 outbreak. Even when gyms re-opened, she chose to follow the public health measures that suggest people stay at home and not gather in crowded places because she did not want to take a chance that she and her baby might contract COVID-19.

I think I would be more interested in getting back into group fitness classes if it wasn't for COVID-19. I really enjoy going to group classes, but even though studios were open for a lot of this past year, I didn't feel comfortable going especially having a baby at home.

Socialization was important to other participants as well when they wanted to engage in postpartum physical activity. Anne valued doing physical activity with another person so that she could stop feeling isolated and could engage in physical activity.

When you have someone else, even if you're not talking, they're just jogging behind you or practicing beside you, it just feels like you don't feel isolated, you feel like you're part of a bigger group, and it feels nicer because you know there's someone there for you. At any given moment, you could start a conversation. It's also very important. When you start talking to them while you're exercising, it becomes a lot more interesting because you're not just exercising, you're socializing at the same time.

Anne clearly was experiencing isolation based on her description of how she felt about being with other people. She describes the importance of simply being with another

person and not even needing to talk. Being with another person made her 'feel' 'nice'. Her focus on feelings and emotions was important to Anne. Creating an opportunity to have a conversation if you wanted was necessary. It took effort on Anne's part, but she was able to create a space for socializing through exercise. Not only did this make her feel good, which was something she valued, she also found being with others, to be interesting. So, for Anne, socialization meant being with others during exercise; it enabled her to feel less isolation, deal with her emotional health, and create an interesting situation. Socialization for Anne was complex. She would like to stay with her child all the time. Being away from her baby bothered her maybe because she liked to bond with him. Bonding with baby was important for her. Thus, she used her agency to shift her postpartum situation of isolation to be with others outside of her immediate family when she could. In addition, physical activity was a way through which she could take a break from academics, as she was a student, and could meet, or make new, friends.

It was evident that Anne created a certain type of meaning around postpartum physical activity. It appears that she enjoyed being with another person and it was fun since they could talk, laugh, and share different ideas together. Encouragement and motivation also seemed to be part of how Anne constructed her experience with other people. This may have been influenced from previous experiences as a young child. Anne remembered that when she was a young girl, her parents encouraged her to take team sports. She really enjoyed team sports as it became social and fun for her. She carried this into her adulthood and because she valued social connections through sport, she wanted to do this again. For Anne, the culture of team sports had been informed by a

particular social discourse that fostered social connections and fun times. However, she also experienced stress when she left her baby, that complicated her decisions to do physical activity. The discourse of team sports included socialization for Anne. She valued team sports and socialization that created a personal meaning regarding socialization, team sports and physical activity that was important to her.

It also had to do a lot with social connections, because the school I went to was very small, so you could never really meet new people because we never had any new students. Doing physical activities outside of school was a nice way to meet new people and make new friends.

In the next few quotations, we can see how Anne's beliefs regarding a discourse of socialization and physical activity, were helpful as she used her agency to challenge beliefs perpetuated through some social mothering discourses.

I was still very much trying to take care of my baby and figure out what's the best way to take care of him, what are the best things to do... It's just very stressful because you have this other person that you need to take care of, and if you don't take care of them, you feel like they can't do anything for themselves, so you continuously have to be beside them, you have to be watching them, you have to make sure you know everything what they're doing at every given second. It's stressful.

Anne described her postpartum situation as stressful because it was a new experience with her baby to try to figure out how best to care for him. She felt that she had to 'be

beside' him and 'watch' him 'every single second'. This made it difficult for her to leave her baby and exercise. However, she did. Anne explained during the interview:

At the same time, my son and my husband are also a very huge prevention. My husband is at work most of the day, so he can't really help me with the child, so I have to take any opportunity I get. That's like waking up very early while he's still in the house. That's the opportunity I have to take.... On the other hand, my son, I don't like being away from him. It bothers me when I'm away from him. That prevents me from being excited or motivated to exercise because it's, again, for me now, it's just time away from my child.

Understandably, Anne was unable to go out and exercise when her husband was at work; however, when her husband was at home she still found it difficult to leave her baby. Emotionally, she feels responsible for her baby in the postpartum period and this limits her "motivation" to exercise. Her values and beliefs about caring for her baby had a significant impact on her choice to exercise. The meaning of being a mother, for Anne, means that she needed to be with her baby constantly. Anne believed that her subject position as a mother needs to include constant care. This might be influenced by a mothering discourse that perpetuates the idea that mothers need to be with their babies all the time in the early stages of postpartum. Anne certainly ascribed to this belief. It is this belief that is making her decision to exercise on her own away from her baby difficult. Actually, Anne feels a sense of responsibility towards her baby; therefore, limiting her motivation to exercise.

Other participants also valued socialization. For Caroline, connecting with other people was important and one way to do this was through physical activity. She believed

that interacting with other people made her feel healthy and “normal” because she could talk, interact, and watch other mothers and babies during times when they were together. She stated that performing postpartum physical activity with other people enabled her child to interact with other children. Moreover, they could support each other in terms of taking care of babies, talking about positive subjects, and getting rid of negative thoughts. Participating in postpartum physical activity, especially with another person, helped Caroline in many ways including avoiding being isolated. She could relax more and had a positive experience.

It keeps me grounded, and it keeps me being able to talk with other people, and be able to socialize, and make me feel better to be able to socialize and be normal.

and she mentioned:

It makes things go easier, it keeps me distracted from other things and we talk about more positive things that have me dwelling on how slow I am or how long it takes me and the babies to get right here.

Caroline’s subjectivity as a mother was evident from her opinion that she, as a mother, had the responsibility to make sure that the growth and development of her baby was similar to that of other babies, and that she held her responsibilities correctly, which provided her with a sense of comfort.

..... just knowing that you're normal and feel okay, and that your children interact with other children, or you get to see your baby and other babies and realize that everything's okay and everything's normal.....Whenever you're home, you can't have access to that, or other people and other things. You just

do it yourself as a mom, because you don't really know if things are really going right. I've had five babies, but still, I'd like to see other babies and other moms and be able to talk and feel more comfortable knowing that I'm doing a good job.

Caroline was experiencing isolation and doubt. When she was by herself she wondered if she and her baby were normal and healthy. This feeling of isolation was created by her postpartum circumstances of being at home without contact with other people outside of her home. This was partly created by social discourses of postpartum, where parents are often at home by themselves with a newborn both physically and emotionally without support from family or friends. This was exacerbated by COVID-19 restrictions whereby people were asked to stay home as much as possible. Caroline decided to use her agency and chose to find other parents to spend time with through physical activity, so she could talk with them and feel normal. This was important to her for her health. She chose to not perpetuate the social discourse that expected mothers to be able to figure out how to take care of their newborn 'naturally' on their own (Dedeoglu, 2010). Caroline valued face-to-face communication because it was more effective than other forms of communication such as virtual platforms on the internet. It was a personal belief. Caroline, who experienced depression for about 15 years, believed that there was a relationship between the COVID-19 outbreak and her mental health as it exacerbated her depressive symptoms. One example she identified in the following quote was her inability to communicate with other mothers since she could not attend community places where they could talk together.

I would have more help and more resources and be able to..., just talking to other moms and keep myself grounded instead of feeling the way I feel right now.

Caroline had experienced depression for 15 years and knew what was best for herself when dealing with her depression. Being isolated did not help. Stigma towards people with mental health problems continues to be socially constructed whereby, mental health issues are uncomfortable for people to discuss and thereby are kept invisible or silenced (Corrigan, 2007; Henderson, Evans-Lacko, & Thornicroft, 2013; Wolpert, 2001).

Caroline chose to use her agency. Rather than telling people that she had mental health issues, she chose to address them by socializing with friends. She chose to participate in physical activity that improved her mental health. She knew that she needed to be with other people and chose physical activity with other parents who also had babies. This helped her to feel normal.

Some participants sought out family connections when they wanted to do postpartum physical activity, and this was gained through doing postpartum physical activity with another person. For instance, Sara believed that doing postpartum physical activity with her husband promoted family bonding. She explained that during COVID-19, her family spent a lot of time at home during the lockdown and that her husband was working from home. Participating in physical activity outside helped them to have “a mental break and feel connected” and strengthened their family relationship.

Well, my husband and I often will go for walks together, and that always makes us feel more connected, I think...and often we're going somewhere in nature, whether it's going for walks on the beach, or in the forest, we're

just feeling our spirits lifted, and when we come home, I think our time together is more enjoyable.

Similar to Caroline and other participants, Sara found that physical activity helped her with her mental health. Sara was very specific and shared that physical activity with her husband was more than just walking. It also included being with nature and having their spirits lifted. Sara also explained how physical activity connected her husband and herself. This appeared to be an important aspect of the postpartum period, when taking care of a baby could be difficult on parents if they could not find time to do things together. Sara clearly demonstrates that connecting with her husband during the postpartum period with physical activity was very important.

Summary. This subtheme explored why socialization was very important for postpartum women and what socialization meant to them. Mothers shared their stories of their personal construction regarding socialization and postpartum physical activity. The social discourse of isolation for parents during the postpartum period was prevalent for all of the mothers, and they all attempted to challenge the discourse of isolation by finding specific ways to meet other people through physical activity. COVID-19 exacerbated postpartum isolation and it was not always easy for these mothers to find ways to meet other people. Gyms were closed and the participants had to be creative in how they managed physical activity to fit with various complexities of being a new parent postpartum. The majority of participants preferred to socialize during physical activity because it helped them with their emotional and/or mental health. They used words such as ‘happy’, ‘grounded’ ‘feeling normal’, and ‘spirit’ to demonstrate how physical activity could contribute not only to physical health, but also to mental health

when combined with socialization. Being with other people also provided motivation to keep on doing postpartum physical activity that was often challenging due to increased demands of baby and family care.

Social support. This sub theme demonstrates the meaning of social support from participants' viewpoints during the postpartum period, and how it was uniquely connected to postpartum physical activity. The majority of mothers in this study needed social support to take part in physical activity. However, the meaning of social support was constructed differently for each participant, which was based on their beliefs, values, and culture as well as encouragement from partners or people close to them. For instance, family and friends verbally encouraged the mothers to join them in physical activity or they would take care of the babies so the mothers could do physical activity without their babies.

Beth mentioned that she would like to participate in postpartum physical activity but faced a lack of social support and family support. She was referring to a family member who could help with some duties around the house, such as taking care of the baby, cooking, doing laundry, or staying with her after childbirth. Not only did this include physical support, but it also included informational support such as answering her questions regarding baby care. Although she recognized that a friend or a babysitter might provide these supports, she said they would not be the same as family and was reluctant to leave her baby with a babysitter. This participant said:

First, money. You know babysitters they will not just come for an hour.....In my country if a woman wants to give birth she goes to their mother's home for 40 days. Prepare the food, she does

anything. They take care of the other babies. It is completely different when you're by yourself in another country, there is no family. Maybe people, your friends will help make meal, food, maybe help you, but it's not ever like your family. So that for me is also a big challenge. This is maybe for immigrants, but for others who are Canadian they will not face these challenges.

This participant who came from a Middle Eastern country considered herself as a person who has a life path different from Canadian women. She was living far away from her original country and her family and said that she did not receive support from her immediate family members like the women in her country usually did as her family were not in Canada. Thus, lack of family support, that she would have had in her home culture, made it difficult for her to decide to engage in postpartum physical activity. Some differences were seen between the values, beliefs, and practices of Beth, the one non-Canadian mother in the study, and the other mothers in the study. While cultural beliefs differed, there were similarities in that all participants experienced isolation and lack of social and family supports during the postpartum period which limited them from participating in physical activities. Beth believed that she needed more support from her family- that she would have had in her home country - and motivation to engage in postpartum physical activity. In Arab culture, mothers usually receive a lot of support from their families and relatives in the postpartum period. Mothers usually get assistance with daily work and cooking. This help is provided by family members and friends (Hundt, 2000). Thus, she experienced many challenges when she wanted to engage in postpartum physical activity.

The participants made it evident that they needed social support to engage in postpartum physical activity, but for each participant the source and type of support were different. Emotional, informational, and instrumental (e.g., tangible assistance) are different types of social support (Thornton et al., 2006). Participants in this research study stated that they needed either emotional or instrumental support, or both, to engage in postpartum physical activity. For Anne and Sara, social support meant a person who encouraged them to participate in postpartum physical activity and Anne and Sara both received this support from their partners. Anne's husband provided care for the baby when she was engaging in physical activity. In the following quotes, Anne explained how her husband respected her idea against social and institutional messages that "mothers should be all" for their children (Horwitz, 2003), and supported her to take time for herself. This support made it easier for Anne to decide to engage in postpartum physical activity. She explained during the interview:

It was really like my husband was also supporting me because he knew how much I loved being active. He was really just encouraging me to take some time for myself to try just a little bit to get back into some of the activities that I used to do even if it was something very small and it was just in the park.

Both Sara and her husband valued being in shape, and their desire to be in "good shape" converted physical activity into an activity that extended to the whole family. Sara received both emotional and instrumental support from her husband, where he encouraged her not only to engage in physical activity but also to invite the family to follow a "good diet". This support helped Sara to decide to engage in postpartum

physical activity. Her child also encouraged her to participate. In the following quotes, Sara explained how she received support from her husband and her son:

My husband is really supportive on that and my son, my almost four-years-old boy, he really likes us be together like he goes and brings the yoga mat down and says, "Hey mom, let's do yoga." I like to be doing that with him and it's a family thing almost.

Sara stated that her husband's beliefs, values, and commitment regarding "healthy diet" and physical activity were effective in promoting her postpartum physical activity. Sara also believed that her husband was able to encourage the whole family to eat healthy and do physical activity. Sara and her husband shared the belief that it was important for Sara to participate in postpartum physical activity and worked together to make this happen. In particular, support from Sara's husband enabled Sara to navigate their postpartum situation to include physical activity. Sara's practice was to accept his encouragement. It seems both Sara and her husband accepted health discourses that link physical activity and healthy eating to family health. Thus, Sara decided to engage in postpartum physical activity. Her husband also provided support in terms of taking care of the baby. Sara shared her story as follows:

He was always supportive.We are doing good diet and then we do that, first of all, eating healthy. I'd say I find eating a lot of vegetables and a lot of good food with green things make me have more energy. Makes us have more energy....He always makes sure that we have everything that we make smoothies and just things that make us to

have energy to be good. Sometimes he offers "Okay, let's go for a walk with the family."

Sara valued postpartum physical activity and believed that mothers should overcome challenges that prevented them from doing physical activity by getting help from their partners, friends, family members, or community. She believed that this support could be provided by different sources ranging from family members to community resources.

Sara explained during the interview:

we should try to take care of ourselves too. We should not let things to get so hard on us. If we need a support if we need a help, we should ask for it. If the partner or family or none of those are available, I'm sure there's others from the community or there's so many things that you could get help. If you need a help, you should get that help, I think.

Sara remembered that when she was giving birth for the first time, the instrumental support that she received from her mother made it easier for her to return to physical activity because her mother took care of everything for about three months, but this option was not there for her second child. This illustrates that for Sara, she needed support from others to participate in physical activity.

For Caroline, who was living in a rural area, although she valued postpartum physical activity because it helped her with her mental health, she also believed that women needed family support in order to be able to do postpartum physical activity. According to her, the support would be provided by a person who could take care of the baby and perform house chores for her. This made it easier for her to participate in postpartum physical activity. She also experienced postpartum depression and explained

how it was important for her to have support so she could engage in postpartum physical activity for her mental health.

For me, I needed someone to look after the other things in the house to know that I could go for a walk, or do something, and things can still be taken care of and I couldn't take my other children with me. I just need to get out and go for a walk.

Despite believing that postpartum physical activity is significant, Caroline had limited engagement in it due to the challenges she faced, including COVID-19 restrictions, postpartum depression, high blood pressure, a kidney stone, and limited access to support. As she explained during the interview:

I was very depressed and COVID made things really difficult.

Whereas I was 40 and had my children, I have some blood pressure issues, so I had a lot of health issues. I have other children, so it made things really difficult. I didn't really have a lot of support around for me to be able to get out and do things. I tried. I also suffer from depression and anxiety disorders.

Caroline also mentioned that due to her Caesarean section, she should not engage in the postpartum physical activity soon after birth. However, since she had no support, she had to return to physical activity a short period after birth to assist her physical and mental health. Therefore, she attempted to make a balance between her physical abilities and level of engagement in postpartum physical activity; she believed this level of practice promoted her mental health and prevented physical complications such as pain. This was a personal experience. This level of postpartum physical activity enabled her to

be happy. She also explained about the role of support in her engagement of postpartum physical activity. She explained that if she engaged in postpartum physical activity with other people, new mothers could create support for each other.

Support. I would love to participate in physical activity, but knowing that there's support and there's people there, and whatever physical activity I'm going to be involved with is welcoming children, comedy, and can help be supportive for new moms, that'd be great because a lot of physical activity, people will find if you have other like young babies and stuff like that, they're like, "Oh, you can stay home and look after your baby."

It was imperative for Caroline to find support so that she could get out and do some physical activity. Her mother and a friend, who was a Licensed Practical Nurse, provided emotional support for her by calling her and asking her how she was doing. She attempted to follow her prescriptions and health professional's recommendation, and she also used all her abilities to be as active as she could tolerate. Caroline's story illustrated again that postpartum women were in need of instrumental and emotional support to engage in physical activity. This also illustrated that women's family members and their friends have important roles in providing support for mothers to engage in the postpartum physical activity.

For Sara, observing other mothers engage successfully in physical activity helped reinforce for her that postpartum physical activity was positive and doable. Sara mentioned that she preferred to engage in postpartum physical activity with a group of mothers and considered that their ability was an encouraging factor for her to participate in physical activity. However, this opportunity was not possible due to COVID-19.

If it was not a COVID, I would've preferred to meet with other moms. If the financial situation of the family would've helped me. Right now, because of the COVID, I prefer to have it just by myself and my family...Because seeing other people having the same situation as you then obviously, being there, having life besides having this baby, they're doing it. It's like encourage that if other people can do, I can do too. It's always a little helpful.

Summary. Social support was constructed differently by different women in the postpartum period. However, all participants reported that they preferred social support to engage in physical activity including instrumental and emotional supports. Social support for a few mothers meant a person who provided care to the baby or did chores around the house. Without this support, engaging in postpartum physical activity was difficult. For most mothers their partners or family members provided this support. It also was important that partners valued physical activity as this made it easier for women to engage in postpartum physical activity. Understanding the experiences of one mother who was originally from a Middle-Eastern country, enables us to see how different cultural postpartum discourses construct family support differently. This one mother believed that her life path was different from Canadian mothers as she explained how there is more postpartum support in the country she came from when she compared it to Canada where she did not receive enough social support from her immediate family or the community. Her family members did not live in Canada. In general, Canadian social norms tend to perpetuate small family units that create postpartum experiences of isolation and lack of support. For parents to engage in postpartum physical activity, a

shift is needed to challenge social norms. The participants in this study had to negotiate their subject positions as mothers of newborns in the postpartum period as they struggled to find a way to do physical activities that they believed were important for their individual physical and mental health as well as relationships within the family.

Chapter 5: Discussion

This thesis is an examination of how postpartum physical activity was experienced by six mothers who were living across Nova Scotia. This research study illustrated how women's experiences regarding postpartum physical activity had been constructed through social and institutional discourses. Interviews carried out with mothers and their analyses indicated how discourses linked, conflicted, and influenced participants' experiences. Moreover, how mothers positioned themselves related to postpartum physical activity subjectively. We have illustrated through these analyses how women accepted, resisted, or challenged beliefs and practices related to postpartum physical activity. It was evident that mothers in this research study had several beliefs, values, and practices regarding postpartum physical activity that influenced their experiences, expectations, and engagements. While some differences were demonstrated in the women's experiences regarding postpartum physical activity, similarities also existed. Moreover, postpartum women were challenged with various factors when they wished to engage in physical activity. Findings of this research study were categorized into the following three themes: 1) Boost our body, lift our mind; 2) Being a role model for their children; and 3) Socialization, social support, and postpartum physical activity. The overall purpose of the research study was to identify women's experiences regarding postpartum physical activity in Nova Scotia.

In this final chapter, I will discuss findings related to each theme and related discourses. I then will discuss implications for nursing practice, education, and research.

Boost our body, lift our mind. One finding of the research study focused on how physical activity was related to participants' subjectivities as mothers and how they

wanted to “be the better mom” for their children. This belief and value influenced their decision to engage in postpartum physical activity as it would help them become physically and mentally stronger. To better understand this relationship, it was helpful to explore how social, institutional, and bio-medical discourses related to motherhood and postpartum physical activity influenced participants’ experiences. For example, in many families, the responsibility of caring for children is divided between two parents (Chronholm, 2007); however, for many, the common discourse is that mothers are primary caregivers for their children (Bornstein & Putnick, 2019). Taking care of babies and performing household duties are examples of responsibilities that mothers are responsible for (Saligheh et al., 2016). For some families, these parental responsibilities are mentioned as barriers to engaging in physical activity (Saligheh et al., 2016).

For some mothers, engaging in postpartum physical activity can improve their mood and well-being (Center for Disease Control and Prevention, 2020; Kołomańska-Bogucka & Mazur-Bialy, 2019). Pregnancy, delivery, and the postpartum period are crucial life events, in which alterations in mental and physical health are possible. There is much evidence illustrating the positive relationship between postpartum physical activity and positive mood and well-being (Bahadoran, Tirkesh, & Oreizi, 2014; Blum, Beaudoin, & Caton-Lemos, 2004; Symons Downs & Hausenblas, 2004). For example, physical activity increases secretion of dopamine, a chemical substance, in the brain causing people to feel good (American Psychological Association, 2020). People’s ability to manage their social responsibilities and their lives is effectively influenced by health and well-being (Bahadoran et al., 2014), and while all participants in this study decided to engage in postpartum physical activity to promote their abilities, they did not

all focus on the same abilities. For example, some focused on physical health, others focused on mental health. The relationship between postpartum physical activity and physical strength has been proven in many studies (Better Health Chanel, 2020). It seems that the participants in this research study relied on a few medical discourses that promoted their engagement in postpartum physical activity. These beliefs and values should be supported by healthcare professionals and educational programs.

Being with the baby all the time was another subjectivity that was reported by mothers in this research study. One of the most important theories that has been shown to negatively impact mothers' feelings is attachment theory (Horwitz,2003). Based on this theory and health care professionals' advice, bonding between parents and their babies is crucial with more emphasis being placed on bonding by mothers. Mothers frequently receive this message from society that it is important to consistently stay with their children to form mother-child bonding. Many women strive to allocate time and energy to build this mother-child relationship, leading them to stay with their children at all times or as much as possible. Social beliefs and values are prevalent through messages and expectations of 'bonding'. Parents are made aware of potential adverse consequences of being away from their children. These messages received by mothers may give them a sense of worry and concern about their children's psychosocial health (Horwitz, 2003). Some mothers are socialized to believe that day-cares are harmful to the development of their babies. Several articles from the 2000s note the risks of childcare, asking parents to observe the growth and development of their children and implement appropriate care for them (Chappell, 2008; Wall, 2013). These articles demonstrate the concerns regarding the growth and development of children who

receive care from day-care centers (Wall, 2013). Further, the social construction of motherhood postulates that women are responsible for their children's health in every aspect, including physical, mental, and spiritual health. Moreover, mothers are also responsible for their children's psychosocial issues. The discourses on mothering foster this notion that mothers should be the first person to provide support for their children as it is assumed that they will understand the children's needs best (Horwitz, 2003). Thus, the influence of these discourses prevent some mothers from being away from their children or having a babysitter look after them. These social beliefs put pressure on women to be perfect in raising children and avoid any mistakes (Horwitz, 2003). This type of information leads to tense mothers, as they are afraid of any possible damage to the physical or psychosocial health of their children (Horwitz, 2003) when they wish to be engaged in other activities such as postpartum physical activity.

Additionally, mothers "are expected to be fulfilled solely by their roles as mothers while ignoring other desires and needs" (Horwitz, 2003, p. 22). If mothers do not fulfil these needs, they are considered to be selfish and careless. Therefore, women's own needs are ignored in several societies and families. All women in this research study opposed the discourse of the ever-giving mother and that mothers should be everything for their children, as many of them would like to do something solely for themselves.

Although society respects children's growth and development, there is not enough funding support to assist mothers to engage in physical activities to promote their health while also raising their children (Horwitz, 2003). Mothers in my study stated that cost was a barrier when they wanted to engage in postpartum physical activity such

as having to pay for a babysitter or pay for gym memberships. It is difficult for some families to spend more money on babysitters, athletic facilities, or equipment.

Overall, these findings suggest that mothers' perceptions and experiences toward postpartum physical activity are related to both societal and institutional factors. More specifically, the understanding of mothers' health behaviours depends on the social, cultural, and historical contexts faced by the mothers.

Another finding of this research study was related to participants' desires to return to their pre-pregnancy weight. Pregnancy and postpartum are crucial times when the body undergoes several changes including changes in weight and shape of the body. While a few studies mentioned that some women had positive experiences regarding their postpartum weight and shape, others noted that dissatisfaction of shape and weight was common in the postpartum period (Clark, Skouteris, Wertheim, Paxton, & Milgrom, 2009). This finding illustrates how attempts to return to pre-pregnancy weight affects participants' experiences regarding physical activity during the postpartum period.

All participants in this research study were dissatisfied with their current, postpartum weight and expressed their interest to participate in postpartum physical activity to lose it. They challenged the health discourses that it takes 6 months to one year to return to pre-pregnancy weight (Mayo clinic, 2020; McKinley, Allen-Walker, McGirr, Rooney, & Woodside, 2018). The dissatisfaction regarding postpartum weight had internal and external origins, and it is consistent with previous literature stating that women had negative feelings regarding their bodies in postpartum (Murray-Davis et al., 2019). In that study, women felt disappointed when they did not lose their postpartum weight very quickly as this did not meet their own expectations. They explained that

they knew their expectations regarding postpartum body weight were unrealistic, but it did not change their views regarding their weight loss during the postpartum period. They also mentioned that they did not have excuses for postpartum extra body size. The dissatisfaction about postpartum weight stemmed from a mismatch between their expectations and real experiences (Murray-Davis et al., 2019).

For a few participants, social and institutional discourses around being thin were quite powerful, and thus, some extra weight gave them negative feelings regarding their appearance, which led to decreased confidence and fear of public display. Social discourses regarding women's bodies can often create pressures for women if they believe they should look a certain way. Social beliefs can be perpetuated in many different ways placing pressure on women to be thin and pay attention to their physical appearance (Hodgkinson et al., 2014). Similar findings were reported by other researchers (Garrett, 2010; Murray-Davis et al., 2019). Garrett (2010) explained that this desire to appear thin causes women to monitor their bodies continuously, and they wish to bring their body weight to a size closer to society ideals. The study recommended that social activities should form and expand to help postpartum women challenge such hurtful social discourses. Women should speak up to bring change in thinking.

Willing to accept the cultural norms to appear slim that stems from culture and society moves beyond the health consequences that are related to extra weight. About 50% of women in North America are dissatisfied with their body image, and it has been related to low self-esteem (Olmsted & McFarlane, 2004). The dissatisfaction with the body image is seen during pregnancy and following childbirth, which is in line with the results of my research study. Difficulties of motherhood, such as sleep deprivation,

hormone fluctuations, and providing care for other children are not openly discussed; instead, it encourages postpartum women to strive to meet societal expectations regarding weight. Then, they are judged according to these social expectations. Postpartum mothers may experience negative body image and even eating disorders due to these pressures (Parsons, 2018). Besides social and cultural pressures, some women internalise the willingness to be thin, and do not need any external pressure, as was reported by participants in this research study. It was found that losing weight was a personal interest which could be a result of social perspectives regarding weight.

Being a role model for their children. Another finding was that all women in my research study reported that they wanted to engage in postpartum physical activity to be role models for their children. Similar findings were reported by Ekelin et al. (2018) in their study that they carried out in Sweden. The authors explained that mothers would like to engage in physical activity not only for themselves, but also for their children's health.

According to Greenberg and Shenaar-Golan (2018) observing a behaviour, which is called modeling, leads to learning in people. Observation, attention, and imitation of others' behaviours will inform new behaviours. Parents, including mothers, are role models for their offspring because children observe and imitate their parents' behaviours. Although, the role of imitation in very young children is controversial (Jones, 2009), and more research is needed to explore the effect of postpartum mothers' role modeling on infants; some participants in this research study started to think about their role modeling from the early stages of their children's life. They saw themselves as persons who had the power and control to create healthy behaviours in their children.

The idea behind this decision was that most participants were concerned with the time that their children spent on social media, or what their babies might do in the future. Currently, it has been demonstrated that imitating behaviour plays an important role in children's learning (Wang, Williamson, & Meltzoff, 2015). In my study, it was noted by one participant who learned from her parents about physical activity.

Participants in this research study believed that their children would learn a behaviour through watching their mothers' behaviour. Observing other people's actions allows children to learn about the social and physical world. Learning in children can be supported and sped up by imitating individuals' practices. More specifically, children not only learn others' observable practices, but also they "infer and reproduce the goals others strive to achieve and cognitive rules that guide others' behaviours. For example, children imitate an adult's intended goal, causal relations, the organization guiding others' acts, and abstract rules" (Wang et al., 2015, p.562).

Parents have a vital role in supporting and promoting physical activity in their children. They can act as gatekeepers who promote physical activity in their children by their own engagement. They can support children's physical activity in different ways: role modeling for their children, playing with them, and providing necessary equipment (Solomon-Moore et al., 2018). In a research study which was carried out by Garriguet, Colley, and Bushnik (2017) results showed that there was a direct relationship between parents' physical activity and children's physical activity. Importantly, sedentary behaviour in children results in health concerns, such as obesity, in children. Watching television for a long period and frequent usage of computers are contributing factors to these health issues. Eating unhealthy food is also common while watching television

(He, Piché, Beynon, & Harris, 2010). Additionally, social media provides an environment in which different values and beliefs can be promoted and followed by children, and sometimes, parents do not have any control on this. Thus, additional risks may be present (Procentese, Gatti, & Di Napoli, 2019). These behaviours create great worries and concerns in families that were reported by participants in the current study. Fostering parental role modeling of healthy behaviour is one of the strategies recommended by experts to prevent sedentary lifestyle and promote physical activity in children (He et al., 2010).

Socialization, social support, and postpartum physical activity. Another finding of the current research study was that postpartum mothers experienced social isolation, and they tried to find a way to deal with this sense of loneliness. The mothers found that postpartum physical activity was a way to help them meet other people and decrease their sense of isolation. This finding is consistent with those of a previous research study carried out by Liva (2017). In that study, most participants were on maternity leaves, and they also reported that they experienced social isolation during the postpartum period. They wanted to participate in a group physical activity (a mom-baby yoga class) to overcome this isolation. These feelings were caused by new parenting roles and the new responsibilities put on new mothers under pressure to change their day-to-day activities to adjust to their baby's routine. They experienced isolation regardless of whether they choose to stay home, or go back to work, after childbirth. For instance, mothers who decided to return to the workplace found that, instead of chatting with their colleagues, they now had to check on, or feed, their babies. Thus, some mothers experience isolation during the postpartum period. Postpartum social isolation

is important to address because it can lead to other health issues including stress, anxiety, and depression. There are many approaches that postpartum women can use to feel less isolated (Humenick, 2003), including engaging in postpartum physical activity as participants in the current research study tried to apply. However, based on the findings of this research study, the COVID-19 outbreak complicated the situation.

The findings of this current research study illustrate that participants experienced many limitations when they wanted to engage in postpartum physical activity during the COVID-19 outbreak. “COVID-19 was classified as a global pandemic by the World Health Organization (WHO) on March 12, 2020” (Lesser & Nienhuis, 2020, para.1). All countries around the world applied several precautions to decrease the disease spread, including isolating oneself, closing parks and playgrounds, and staying at home. These limitations decreased the opportunities for exercise (Kaur, Singh, Arya, & Mittal, 2020). In Nova Scotia restrictions were implemented when COVID-19 pandemic started. People were recommended to follow social distancing guidelines. Mandatory self-isolation was highly recommended to contain the spread of COVID-19, especially for those who had travelled outside of Nova Scotia. Provincial health authority had ordered to close some businesses and others had to work from home if possible (Joy et al., 2020). Therefore, many people could not engage in individual, or group, exercises outside their homes. A sense of “worry, anxiety, loneliness, isolation, and stress” was reported by parents in previous literature (Ollivier et al., 2021).

In my research study, participants also reported feelings of fear, concern, social isolation, and lack of motivation to engage in physical activity during COVID-19 outbreak. These feelings can lead to mental health issues. Thus, this finding illustrates

the importance of paying attention to formal and informal psychological support for postpartum women during the COVID-19 outbreak. Further, COVID-19 has limited the women's engagement in postpartum physical activity. A research study involving 445 pregnant and postpartum women in England showed that 50% of women's engagement in physical activity was reduced due to lockdown compared to the time before the lockdown (Atkinson et al., 2020). This finding is consistent with the current study, that participants' engagement was limited by COVID-19.

All participants in my research study reported that they preferred social support while engaging in postpartum physical activity. Participants' construction of social support showed that many mothers felt the need for emotional or instrumental support, or both, to engage in postpartum physical activity. Most mothers constructed instrumental support as an individual who could take care of the babies or perform household chores. Most mothers believed that their partners, family members, or friends could provide this support. Social support is "classified as either perceived or received support, and has three major types, each of which may be experienced as positive or negative: 1) emotional (e.g., feeling loved, appreciated, and valued), 2) informational (e.g., advice or guidance), and 3) instrumental (e.g., tangible assistance)" (Thornton et al., 2006, p.96). The role of social support in promoting postpartum physical activity has been presented in previous literature (Faleschini et al., 2019; Saligheh et al., 2016). For instance, in a research study carried out by Evenson et al. (2009), some postpartum mothers stated that they needed instrumental support to engage in physical activity. Specifically, the mothers depended on their partners or friends to encourage them, or provide

education or communication. This opportunity was not available for one participant in my study who was an immigrant from a Middle-Eastern country. This participant believed that she did not receive instrumental support from her family members that other women in her country did because she lived far away from her family members. Thus, it was difficult for her to engage in postpartum physical activity without receiving support from her family members. There are some different traditions in different cultures for providing support for mothers to adjust to new babies and household chores. In Arab culture, the postpartum period is considered a special time that mothers need special care and support. After giving birth, mothers often stay at home for about 40 days; and their family members, relatives, and friends visit them. They provide instrumental support in terms of taking care of infants, doing household tasks, and preparing special food (Puddister, Ali-Saleh, Cohen-Dar, & Baron-Epel, 2020). Sometimes, this option is not available for mothers who migrate to other countries; thus it is difficult for them to engage in postpartum physical activity. This finding indicates that people from different cultures constructed social support and family support differently. It also shows how different cultural beliefs, values, practices, and the structure of family may affect mothers' perceived social support regarding postpartum physical activity.

Implications

This research study aimed to fill the gap in the literature about how postpartum physical activity is socially and institutionally constructed. This study illustrates that while postpartum is a crucial time in women's lives, women in Canadian society have concerns as to when and how they can engage in postpartum physical activity. These

concerns stem from their own families, as well as the society in which they live. All mothers in this study accepted postpartum physical activity as a practice that can promote their physical and mental health, and can help them to carry out their responsibilities as parents. The first theme- *boost our body, lift our mind*- indicates the importance of supporting the women's beliefs and values regarding the postpartum physical activity. Moreover, it illustrates that mothers' experiences of postpartum physical activity are connected to their subjectivities as postpartum mothers. Findings from this research study show how the way in which mothers position themselves as a mother is related to the society (culture) in which they live. Partners, family members, and health care professionals should be aware of the social discourses that inform mothers' subjectivities. These discourses have great influence on mothers' beliefs, values, practices, and the power relations between mothers and their partners, family members, and friends. Additionally, health care professionals should be aware of the many motherhood discourses such as mothers should be all for their children. This awareness, in turn, can help health professionals to work with mothers and their family members to plan effective interventions to challenge harmful social norms and expectations regarding motherhood, postpartum, and physical activity. For example, Kila (2019) in a research study in Nepal found that an educational workshop was effective in helping young mothers to resist harmful social norms. Some mothers participated in the workshop with their partners and sister-in laws, and recognized its usefulness.

Moreover, health care professionals can use different approaches to promote postpartum physical activity. For example, teaching is an effective way to promote

postpartum physical activity. A quasi-experimental research study carried out by Bashirian, Oujii, and Afshari (2019), in Iran involving 68 postpartum women found that educational interventions were effective in promoting the postpartum physical activity. In this research study, educational materials were delivered through forms of lectures, questions and answers during five sessions. Several text messages were sent to participants in order to remind them of the educational contents. Findings showed this intervention was effective in promoting postpartum physical activity. Consultation with postpartum mothers is another approach that can be applied by health care professionals to promote postpartum physical activity. In another research study carried out by Aittasalo et al. (2008) involving 132 pregnant and 92 postpartum women, nurses consulted with women regarding physical activity during routine visits. Nurses emphasized on importance of physical activity before pregnancy, importance of increasing physical activity level, barriers and enablers of physical activity, and a weekly plan for physical activity. These consultations were conducted during five sessions and included level of physical activity before pregnancy, 16–18 weeks during pregnancy, 36–37 weeks during pregnancy, and 5 and 10 months postpartum. Data were obtained by questionnaires. An option for group exercise was provided once a week. Results showed that counseling could promote physical activity in women when started before pregnancy.

The current study highlights the importance of paying attention to the needs of mothers, as they often become sidelined in the social discourses about motherhood perpetuating that mothers should be *all* for their children, or that mothers should stay with their children *all the time*. Mothers need to be supported to challenge and question

discourses. While some women may be happy to be ‘everything’ to their children, it is also important for health care professionals to acknowledge these discourses and support women to ‘pay attention to their own needs’. According to Horwitz (2003), partner support, family members support, and access to financial resources are important factors that can help women to deal with such discourses. However, these types of support are not available for some mothers (Horwitz, 2003). These types of supports and more specifically partners’ support has been mentioned as a strong predictor of physical activity in postpartum mothers. In a previous research study conducted by Thornton et al. (2006) in Latino women findings showed that women’s partners provided instrumental support in terms of childcare, but this support was limited to evenings and weekends, and it rarely happened. Women are predominantly responsible for taking care of children, and this responsibility was assigned to them mainly by the culture and society in which they live (Cerrato & Cifre, 2018). Women are responsible for raising children because women and men traditionally accept the dominant definition of their roles (Cerrato & Cifre, 2018). “The stereotypical gender roles that women face are shaped by social norms, which prescribe guidance for how one should think, act, and feel” (Forbes, Donovan, & Lamar, 2020, p. 64). By giving birth to a baby, women face many expectations such as feeding the baby or doing chores (Cowdery & Knudson-Martin, 2005). In my culture as a Middle-Eastern culture the dominant discourse is that taking care of a baby is a maternal responsibility (Fatehi, 2017). In order to promote the postpartum physical activity, the childcare responsibilities should be shared between two partners.

Partners' engagement in physical activity was another type of social support that could promote postpartum physical activity in women (Saligheh et al., 2016). Health care professionals should encourage partners and family members to provide emotional and instrumental support for postpartum women in terms of taking care of babies and engaging in physical activity with them; however, more research is needed to explore the effectiveness of these approaches. Moreover, health care professionals can help postpartum mothers to find solid ways to attend to their own needs as well as those of their children (Howitz, 2003). For example, Horwitz (2003) also encouraged health care professionals to be active in society, and advocate for resources that mothers could use. In addition, mothers, their partners, and family members should be encouraged to be active in public. Horwitz (2003) in her research study reported that some mothers engaged in activism. They tried to challenge dominant discourses about motherhood. These women considered their social action as important parts of their challenge because it helped their voices be heard. In order to help women's voices to be heard social media can be used. Social media can connect a large number of people together, and it has unpredictable and huge effects on society (Ross & Cross, 2019). In addition, social media such as television or internet can help mothers, family members, and health care professionals to start special campaigns in order to emphasize physical activity (Center for Disease Control and Prevention, 2021). However, a range of approaches are needed to support women as a singular approach may not be a good fit for all mothers (Saligheh et al., 2016). It is recommended that future studies focus on finding the best strategies to help mothers challenge such discourses.

Another finding of this research indicated that postpartum mothers experience a sense of dissatisfaction about postpartum body weight. To counter this, nurses and health care professionals should establish a relationship with mothers, be good listeners, and provide a safe space in which mothers can talk about their beliefs, values, worries, and concerns regarding postpartum body weight, without any fear of judgement or prejudice, and improve their body image. In addition, the findings of this study highlight that health care professionals need to educate or consult with mothers to set realistic goals and expectations regarding postpartum body weight, and encourage them to reach realistic goals through evidence-based approaches, including postpartum physical activity. Previous literature suggested that health care professionals consult mothers about postpartum changes and timing (Clark et al., 2009; Murry- Davis et al., 2019). In addition, nurses are responsible for giving information to postpartum mothers about the ideal ways to calculate healthy weight during postpartum. Moreover, they can clarify and respond to the doubts of the mothers regarding unreliable and old ways of measuring postpartum body weight.

The second theme of this study - *Being a role model* - illustrates that postpartum mothers would like to engage in postpartum physical activity in order to be good role models for their children. This belief might stem from a dominant health discourse. Considering the benefits of being a role model for both postpartum mothers and their children, it is important to support mothers' beliefs, values, and practices regarding their responsibilities as role models to support physical activity. It is a way that can promote physical activity in mothers and their children. Clearly, it is important for health care providers to discuss with mothers the positive effects of postpartum activity, then help

them find ways to engage in physical activity with their children, and emphasize the fact that it is important to establish physical activity in children during early stages of life. The health care professionals who provide prenatal care need to find the best positive ways for helping mothers explore the different options, that are available to them when they want to engage in physical activity. This includes participating in family-friendly physical activities and showing their children that it can be fun- not a duty. It is recommended that future research focuses on exploring the effect of postpartum mothers being role models for their young children's physical activity. Nurses also are good listeners for postpartum mothers who want to speak about their worries and concerns regarding their children's screen time.

The findings of my study illustrate that mothers who were active when they were children, or mothers who received support and encouragement from their immediate family members in childhood, are more likely to engage in postpartum physical activity. This highlights the importance of engaging children in physical activity early on. Thus, the role of school teachers is key for encouraging children to engage in physical activity. Nurses and other health care professionals have great responsibilities in making school teachers aware of the importance of engaging children in physical activity, and its effect on their engagement in the later years. Health care professionals like school nurses can work together with school teachers in order to support children to engage in physical activity in the best way possible (Ardahan, & Erkin, 2018; Clemes et al., 2018; Morgan et al., 2019). For example, the teachers can support school-based programs in schools. School-based programs contain daily races, expanding physical education for children, and integrating physical education. These programs help students do more physical

activity (Center for Disease Control and Prevention, 2018; Faber, Kulinna, & Darst, 2007). When nurses are available to work closely with teachers in schools, they can achieve children's health goals easier (Ardahan & Erkin, 2018). Moreover, local government can have a role in supporting physical activity in children. The government can provide physical environments for exercise for adults and children such as good sidewalks and greenspaces (Ponce-Koch, 2013).

The findings from the final theme -*Socialization, social support, and postpartum physical activity*- highlight the importance of intervening to decrease a sense of isolation. Some mothers reported that they preferred to engage in postpartum physical activity with another person, or group of people, to deal with isolation. This is an important finding as health care professionals need to engage in related discussions with mothers and their families, and if needed, help them find ways to connect with, or establish, social networks. Clearly, the findings of the present study illustrate the importance of social support for postpartum mothers to engage in physical activity. The participants also identified the cost of day-care centers and gyms as barriers to engaging in postpartum physical activity.

Although, the health of children is very important, there is not much support in the society for parents who have children (Horwitz, 2003). Childcare can be so costly in Canada. More specifically, the type of the care that is provided for infants is more expensive than those that are offered to older children. Currently, there are some subsidies for families paid by government. These subsidies do not cover all families. Low-income families can apply for this financial support (Department of Education and Early Childhood Education, n.d.). It is recommended that more subsidies are needed to

be offered by the Canadian government for childcare, and to cover middle and low-income families.

More attentions should be paid to physical and social resources that can support postpartum physical activity such as Non-Governmental Organizations. These organizations are hidden resources and can help government in promoting health behaviours including physical activity. “Provision of services includes medical, social and psychological services as well as, integration activities, care and nursing, material and financial support, educational and information services and training” (Piotrowicz & Cianciara, 2013,p. 69). These organizations can provide instructors, managers, gyms, and other facilities for low price (Farahani, Ghasemi, &Hassani, 2018). It is recommended that Non-Governmental Organizations collaborate with government, families, and experts to support postpartum mothers such as providing clean gyms, or gyms in which mothers can participate with their babies.

In the present research study mothers reported a sense of social isolation. Saligheh et al. (2016) found that for postpartum mothers it was difficult for them to engage in postpartum physical activity as a result of being socially isolated and not having another person to take care of their children. Mothers reported that their partners were “the most reliable source of support” that enabled them to engage in postpartum physical activity (Saligheh et al., 2016, p.4). Government officials, health promotion clinics, health care professionals, Non-Governmental Organizations, and women and their families need to work together to explore the best ways to support postpartum women to engage in healthy behaviour including postpartum physical activity, and identify existing resources to support postpartum mothers to engage in postpartum

physical activity. For some mothers being a member of social networking sites can help them to be in touch with other people. The findings also illustrated that one non-Canadian mother did not receive enough support from immediate family members because she did not live in her original country. It has implications for nurses and nursing students to consider cultural differences and availability of resources when they want to provide care, support, or consultation with this group of postpartum women.

The findings of the present research study also highlight the need for paying more attention to the status of physical activity of postpartum women during the COVID-19 outbreak. All participants' physical activity was influenced by restrictions due to COVID-19. Online support groups or physical activity apps maybe effective. These applications may provide the necessary encouragement for mothers to engage in physical activity. The usefulness of these apps in promoting physical activity during COVID-19 were reported (Srivastav, Khadayat, & Samuel, 2021). However, more research is needed to explore the effect of these new technologies specifically in promoting postpartum physical activity. Health care professionals and researchers should collaborate to find the best approaches to promote physical activity in postpartum women.

Implications for future research. In this study, participants spoke about their experiences regarding postpartum physical activity. This study aimed to understand how postpartum mothers think about engaging in physical activity. I was eager to know how mothers' subjective positions as well as different beliefs, values, and practices affect their engagement in postpartum physical activity. During the interview, I noted that all participants would like to be good role models for their children, and they even started to

think about it during the postpartum period. Some participants spoke about the role of multigenerational learning in physical activity. Some research questions that arose from these findings include the following:

1. How do postpartum mothers think they can support their children to engage in physical activity in the best way possible?
2. How do they think the role of multigenerational learning promotes physical activity in themselves and their children?
3. How has role modelling from others encouraged their own engagement in physical activity?
4. What do they think about their skills for being a role model for their children?
What experiences do they have?
5. What barriers are there to being a role model for their children's physical activity?

In addition, the findings of this study noted that postpartum women experienced a sense of isolation and would need social support to engage in postpartum physical activity that promoted socialization. This gives a rise to other potential research questions:

1. What roles do new technologies (e.g., websites, apps and social media) play to overcome social isolation in the postpartum period?
2. How do immigrant and refugee women with different ethnicity backgrounds gain social support in a new country?

3. What similarities or differences are there between immigrant and non-immigrant postpartum women in terms of their experiences of access to resources and societal support?

Further, the findings also noted that other studies are needed to understand the best strategies to reduce the effect of harmful social norms in postpartum mothers.

Strengths and Limitations

A strength of the study was to apply feminist poststructuralism as a methodology and discourse analysis. This methodology provided the deep understanding of mothers' experiences regarding postpartum physical activity. Using feminist poststructuralist and discourse analysis enabled me to identify different discourses and give new insight about women's experiences regarding postpartum physical activity in Nova Scotia.

The sample size of six and using the one-on-one interview method provided important and first voice data for analysis in this qualitative research study. The main themes that were obtained through the use of feminist poststructuralism and discourse analysis can be used to enhance understanding regarding postpartum physical activity in Nova Scotia. Another strength of this study was the inclusion of some diversity in the sample that involved five Canadian and one non-Canadian woman, which enabled me to become familiar with experiences of different people from different cultures. In addition, participants came from diverse sized communities - some women living in cities while others lived in sub-urban or rural communities - which helped me learn how each size affected participant physical activity.

One limitation was that the study involved participants who were able to speak English, and all of them were well-educated; thus, experiences of people who spoke

other languages and from other societies or culture, or with different levels of education were not addressed. I recommend that future studies include different groups of people in terms of race, culture, and level of education.

Another limitation was the format of interviews. Due to the COVID-19 outbreak, all interviews were carried out virtually by phone. Thus, even though firsthand data was obtained, an understanding of all the participants' body language was not possible. Some previous literature recommended the use of telephone for collecting data in qualitative research study (Cachia & Millward, 2011; Drabble, Trocki, Salcedo, Walker, & Korcha, 2016), and emphasized its benefits including low cost and access to broad geographical areas. However, some barriers have been reported for telephone interviewing in qualitative research. For example, telephone interviews may rely less on non-verbal cues, so interviewers need to ask more questions (Cachia & Millward, 2011). It is recommended that for future studies, various formats of interviews, including face-to-face, video call and phone are applied.

Conclusion

In this research study, I explored women's experiences regarding postpartum physical activity. I used feminist poststructuralism and discourse analysis to understand the women's experiences. In my attempt to explore the women's experiences regarding postpartum physical activity, I discovered that postpartum mothers had many beliefs, values, and practices regarding physical activity. As each participant spoke about her experience, it was evident that the postpartum period is a challenging time and making decisions regarding physical activity is complex. This study drew attention to the many

personal, institutional, and social discourses that constructed mothers' subjectivities and practices regarding motherhood and postpartum physical activity.

The findings of this research also illustrated that all participants in the present study would like to engage in postpartum physical activity, both for themselves and for their children. They valued the role of themselves as modeling for their children, as they believed that their children would learn to engage in physical activity when demonstrated by their parents. They believed that their children see and copy their behaviours. Each participants' subject position was constructed through the discourse of mothering as a role model. In particular, this began in the postpartum period. Participants wanted to be mothers in a certain way. They struggled and challenged the obstacles that prevented them from doing physical activity in the postpartum period because they valued their position as mother and role model so much.

Role modeling is crucial in promoting health behaviours in children. The physical activity patterns are influenced by their parents and the family environment (Webber & Loescher, 2013). In addition, parents were concerned about the time that their children spent in front of the screen. This finding has implications for health care professionals. Webber and Loescher (2013) note that: "Nurses in hospitals and community settings are well positioned to encourage parents to be role models for their children" (p.174). Hence, nurses could find ways to engage with parents to assist them in modelling for their children to promote healthy behaviours.

This research study also drew attention to how social support plays an important role in women's decisions to engage in postpartum physical activity. For example, the findings showed that returning to postpartum physical activity was more possible for

mothers who received emotional or instrumental support from their partners or immediate family members, than for mothers who did not have such support. Findings also showed that mothers who received encouragement from their families during their childhood; made making the decision to return to postpartum physical activity easier than for persons who did not receive such family support. This illustrates the importance of multigenerational lessons in promoting postpartum physical activity. The findings of this research study also illustrated that when lacking connection with other people, postpartum mothers experienced a sense of isolation. The COVID-19 outbreak restricted mothers' access to this type of social support. It is recommended that mothers, health care professionals, community organizations, and researchers work together to find creative ways to support postpartum mothers through, for example online apps, and identify the resources that postpartum women can use to overcome barriers of physical activity across Nova Scotia. The aim of this research study was to provide a deep understanding of women's experiences regarding postpartum physical activity. My ultimate goal was to build awareness regarding the physical and mental health needs of postpartum mothers, and possibly create a change in postpartum care.

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Appendix A

Recruitment Poster

RESEARCH OPPORTUNITY PHYSICAL ACTIVITY AFTER CHILDBIRTH



Study Details: The purpose of this study is to explore how individuals who have recently given birth, experience the physical activity through interview. The interview lasts 45-60 minutes. All ideas and thoughts are welcoming! Participants will receive a 25\$ gift card as a “Thank You” for their time.

Eligibility:

- ✓ Be over 18 years of age
- ✓ Be able to speak English
- ✓ Be in post-partum period (0-12 months after child birth)
- ✓ Live in Nova Scotia
- ✓ Have access to internet or telephone

Contact: If you are interested to be interviewed as a part of this study, please contact: Neda Akbari (Master of Science Nursing Student), Dalhousie University, School of Nursing. Email: postpartum.pa@gmail.com

Version date: February 22, 2021

Appendix B

Semi-Structured Interview Guide

Introduction:

Thank you again for your time and accepting to discuss with me about your experiences regarding physical activity after child birth. I know you have a busy schedule and really appreciate your interest in participating in this study.

As I stated earlier, I am a Master of Science in Nursing student at Dalhousie University conducting a research study titled “exploring women’s experiences regarding post-partum physical activity: a qualitative research study”. In many of following questions, I will ask you to tell about physical activity. I want to know about experiences with post-partum physical activity.

Any information you share will remain confidential. Names and any way of identifying participants will all be removed. All information presented in conferences or publications that result from this study will be anonymous. Your participation is not obligatory, and it can stop at any time based on your request. Do you have any questions before we begin?

Age: _____

Ethnicity: _____

Gender: _____

Living status: _____

Place of residence: _____

Infant’s age: _____

Job: _____

Level of Education: _____

Religion (optional): _____

Number of other children: _____

Other children’s age: _____

Questions:

1. What do you think about when you hear the term *physical activity after birth*?

2. Tell me about whether you have taken part in any physical activity since giving birth
 - a. *If yes* what kind of physical activity have you taken part in – what helped you make your decision to take part in physical activity?
 - b. How long after you gave birth did you wait to engage in the physical activity?

- c. Are you still doing any physical activity?

 - d. *If you have not* taken part in any physical activity since giving birth – help me understand how you made your decision
-
- 3. What is the most important thing ...and the least important thing ...to you about your physical activity after having a baby?

 - 4. Now in post-partum period (after giving birth), what does physical activity mean to you and how has it changed from your thoughts before giving birth?

 - 5. What has encouraged or prevented your physical activity after birth?

If engaging in physical activity:

- 6. In what ways do you think physical activity has helped you and/or your baby ...or not helped you and/or baby after birth?

- 7. When you participate in physical activity, do you do it alone ...with others ...or with baby? How does that help or not help?

- 8. What messages do you think you might be giving your baby when you engage in physical activity after birth?

- 9. Can you tell me about your experiences regarding physical activity during post-partum period.

- 10. Would you like to talk about anything else?

Thank you very much for participating the interview.

Appendix C



Consent Form: Semi structured Telephone or Video Interviews for Women after Giving Birth

Research Title

Exploring women's experiences regarding post-partum physical activity: A qualitative research study

Researcher(s)

Principal Investigator:

Neda Akbari Nassaji, BScN, Master of Science in Nursing Student, School of Nursing, Dalhousie University

Supervisors:

Dr. Megan Aston, RN, PhD, School of Nursing, Dalhousie University

Dr. Jean Hughes, RN, PhD, School of Nursing, Dalhousie University

Thesis Committee Members:

Dr. Christine Cassidy, RN, PhD, School of Nursing, Dalhousie University

Dr. Britney Benoit, RN, PhD, Rankin School of Nursing, St. Francis Xavier University

Funding -

Introduction and Purpose

Women and their children's health during pregnancy and after birth is a worldwide concern. The postpartum time after birth is an important time where women's health can be promoted through healthy behaviors including physical activity. During the past few decades many research studies illustrated the advantages of regular post-partum physical activity including weight management, physical fitness, and mental health. As a first

step, it is important to understand how new mothers think about post-partum physical activity, and how they experience it. The findings of this research study can guide healthcare professionals to design appropriate interventions to promote post-partum physical activity. We are inviting you to participate in this research study titled “Exploring women’s experience regarding post-partum physical activity: A qualitative research study”. This consent form provides information about the purpose of this study, benefits, and risks associated with participation. Participation in this research study is not obligatory. It is up to you whether you participate or not. It is my responsibility to answer all your questions, as a principal investigator. You can withdraw from the study, at any time up to one week after the interview, this will not influence the health care that you or your family members receive from health care professionals. All interviews will be recorded as it is necessary for doing this research study , so it can be transcribed and your information is accurately captured.

Why are the researchers doing the study?

The purpose of this study is to explore how people who have recently given birth experience their physical activity after birth. This study will help us to better understand how women decided to participate or not in physical activity after giving birth, and how they experienced it. Then, this information can be used by nurses to support women/their families.

How will the researchers do the study?

This research study is being carried out to involve new mothers throughout in Nova Scotia who gave birth during the last year. My aim is to understand how they experience physical activity after having a baby, through interviews. I will collect information through phone or online video interviews. I will interview with 10 new mothers.

What will I be asked to do?

You will be asked to engage in an interview which will be carried out online or by phone. The method of interview is up to you. You can choose to do the interview through Zoom or on the telephone. The interview will be audio recorded. The interview will last about

45-60 minutes. You will be asked to talk about your experiences regarding physical activity during the postpartum period. The audiotape will be transcribed word for word. All names and identifying information will be removed

What are the burdens, harms, and potential harms?

We do not anticipate that this study has any special risks or harms. However, if the interview causes you to become distressed or upset you can take a break or stop the interview and I will advise you to see a health care provider to discuss your feelings. A list of mental health agencies will be provided if you prefer to discuss your anxiety or distress with someone else.

What are the possible benefits?

There are no personal benefits in participating in this research study. The finding may help health care professional to take several appropriate interventions to promote physical activity in new mothers. Therefore, it may have benefit for other people in future.

What alternatives to participation do I have?

You do not have to participate in the study. Not participating will not affect the care you receive from any health care facility, personnel or community agency.

Can I withdraw from the study?

As it was said earlier, you can withdraw from the study, up to one week after the interview. In this case all information which had been collected during this study, including demographic information, phone numbers, email addresses, audiotaped records, and notes will be destroyed completely. Withdrawal from the study does not have any effect on you or your family's health care.

Will the study cost me anything and, if so, how will I be reimbursed?

The study will not cost you anything. However, the study is conducted on a cell phone/Zoom you may have internet or cell phone costs which will not be reimbursed.

Are there any conflicts of interest?

There are no anticipated profits or conflict of interest in doing this research study.

What about possible profit from commercialization of the study results?

The researcher and her research committee members will not profit from commercialization of the research study results.

How will I be informed of study results?

It is predicted the study will completed by summer 2021. If you would like to know about the research results, please leave an email address on the consent form, and I will email the research results to you.

Would you like to receive of the study results? Yes _____ No _____

If you indicated yes to this question, please provide your mailing address or email address:

How will my privacy be protected?

Any information which is collected about you through this research study will be confidential. All recordings will be de-identified by the principal investigators, and put into transcripts that they will be able to read for better understanding. The supervisors and the research committee members will be able to read the transcripts without identifiable information. Your consent form, demographic information, and written transcripts will be kept in a locked cabinet and drawers, and they will be destroyed 5 years after the completion of the study. Only the researcher, her supervisors Dr. Megan Aston and Dr. Jean Hughes, and research committee members will have access to the transcripts with all identifying information removed. Your name will not be used in the study or in reports or presentations. The IWK research ethics board audit committee has the right to access study documents for audit purposes.

What if I have study questions or problems?

If you have any questions or concerns about the study please contact me at any time:
Neda Akbari Nassaji (Mobile: 902-412-2631, Email: postpartum.pa@gmail.com).

What are my Research Rights?

After signing the form, you will be provided with a copy of the Information and Consent Form for future reference. As stated earlier, you can withdraw from the study at any time (up to one week after the interview) without impacting the care you or your family receive at the IWK Health Centre or other health care centers. Your signature on the form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the investigator(s), sponsors, or involved institution(s) from their legal and professional responsibilities. “If you become ill or injured as a direct result of participating in this study, necessary medical treatment will be available at no additional cost to you. You are free to withdraw from the study at any time without jeopardizing the health care you are entitled to receive.” “If you have any questions at any time during or after the study about research in general you may contact the Research Office of the IWK Health Centre at (902) 470- 8520, Monday to Friday between 8:00a.m. and 4:00p.m.”

What will I be offered if I participate in this study?

You will be offered a \$25 e-gift card to a grocery store prior to the interview to thank you for your participation in this research study.

How will I be informed of study results?

Would you like to receive of the study results? Yes _____ No _____

If you indicated yes to this question, please provide your mailing address or email address:

Appendix D
Participant Consent Signature Form

Study Title. Exploring women’s experiences regarding post-partum physical activity: A qualitative research study

Participant ID #: _____

Participant INITIALS: _____

I have read or had read to me this information and consent form and have had the chance to ask questions which have been answered to my satisfaction before signing my name. I understand the nature of the study and I understand the potential risks. I understand that I have the right to withdraw from the study during the interview at any time. I agree to have my words from the interview used in reports, publications, and conferences. I have received a copy of the information and Consent Form for future reference. I freely agree to participate in this research study.

Name of Participant: (Print) _____

Participant Signature: _____

Date: _____ Time: _____

STATEMENT BY PERSON PROVIDING INFORMATION ON STUDY

I have explained the nature and demands of the research study and judge that the participant named above understands the nature and demands of the study. I have explained the nature of the consent process to the participants and judge that they understand that participation is voluntary and that they may withdraw during the interview at any time.

Name: (Print)

Signature: _____

Position:

Date: _____

Time: _____

Appendix E

Telephone/Virtual Verbal Script & Consent

Verbal Script:

My name is Neda Akbari Nassaji and I am a Master of Sciences Student in the School of Nursing at Dalhousie University. I am calling to ask you for your verbal consent to participate in my master research study, which is called “Exploring women’s experiences regarding post-partum physical activity: A qualitative research study”. Given that you have expressed an interest in participating in this study, it is important that I review information about the study with you to ensure you understand the purpose, benefits, and risks. Is this an okay time to speak with you? If not, we can reschedule the call.

Signature: _____

Position:

Date: _____

Time: _____

My co-supervisors are Dr. Megan Aston and Dr. Jean Hughes, both professors at the Dalhousie University School of Nursing. They will be guiding me as I complete and analyze this research, which includes reading the transcripts from the interview. My thesis committee members include Dr. Britney Benoit and Dr. Christine Cassidy. They will read my Master thesis and provide critical feedback on the work, though they do not read the interview. The purpose of this research is to explore how postpartum individuals experience their physical activity after birth. Do you have any questions so far? Please do not hesitate to ask questions at any time during this call and I would be more than happy to answer them. It’s important that you understand and feel comfortable with all of the information that I provide to you today.

This research will involve one telephone or video chat call lasting approximately 45 minutes to answer some questions about how you have experienced your physical activity since giving birth. You do not have to answer a question if you do not know the

answer or choose not to answer. In fact, you do not have to participate at all, and this decision will not affect the care received by you or your family at the IWK.

The interview will take about 45 minutes of your time. Some people find it difficult discussing their experiences. If you ever feel uncomfortable answering a question, you do not have to answer it or you can answer only to the extent that you're comfortable and that is completely your decision to make. Benefits to participating include receiving a summary report of the research results and contributing to research knowledge about physical activity after birth. There is no guarantee that you will benefit personally by taking part in this study. However, the information you provide may help improve health care practices and policies related to post-natal care. This information can be shared with other health care professionals and researchers through workshops, conference presentations, and scholarly publications. You will also be given an e-gift card for the amount of \$25 as a thank you for your time.

All attempts to maintain confidentiality will be taken. I will not be collecting any data from any health care records. I will have access to your name in the initial consent forms and interview files. Confidentiality will be further maintained by replacing your name with an identification number and a 'made up' name that you may choose, as well as by removing the names of people, organizations, and agencies referred to in our conversation. You will not be identified by name in any reports or publications of this research. Data stored digitally will be password protected. Hard copy data will be kept in a locked drawer and a locked cabinet at my house. Only I will have access to them. The only individuals who will read or hear the interviews are myself, Dr. Megan Aston (supervisor), Dr. Jean Hughes (co-supervisor), and my research committee members. Five years after this research has been published, this data will be destroyed. All studies conducted at the IWK Health Care Center are subject to a potential audit by the IWK Health Centre's Research Ethics Audit committee. Should an audit be conducted, your privacy will continue to be protected to the maximum extent allowable by the law.

Do you have any more questions for me?

Do you understand what I have outlined?

Do you agree to participate in this study?

Would you like to receive the study results?

If so, please provide your mailing address or email address:

Participant email or phone number: _____

➤ **Consent**

Participant:

Name

Date

Time

Investigator or Study Personnel:

_____ Neda Akbari Nassaji _____

Name

Signature