

Hesitantly Happy: The Influence of a Late Term Pregnancy Loss During the Subsequent  
Pregnancy

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## **Abstract**

This research explores the influence of pregnancy loss and coping strategies employed while connecting to the fetus in a subsequent pregnancy following a late term loss. Nine participants were interviewed using a qualitative, phenomenological methodology to determine participant's experience. Four themes emerged within the data: (1) support network – participants acknowledged who was there for them and who was not, (2) emotional ups and downs – participants reported the emotional ups and downs from loss to the subsequent pregnancy to delivery and after birth, and how they connected during this process (3) coping – participants describe coping strategies used throughout their experience, and (4) moving forward – participants reported their process of finding their new normal and how this event changed their perspective on life. Limitations, future research and clinical implications were all identified and discussed.

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## **Chapter 1: Introduction**

### **The Problem and its Setting**

Pregnancy is commonly thought of as a joyous time for many, a time when parents begin to develop hopes and dreams for their future. During this time, parents begin restructuring and defining their definitions of family, what it will mean to bring another life into this world along with the opportunities and possibilities the future may hold for them and their baby (Côté-Arsenault, & Donato, 2011). What one does not expect during this time is the possibility of losing their baby before any of those dreams can become a reality.

Due to advances in modern technology, individuals are able to see and hear the developments of their growing fetus prior to movement within the womb (Robinson, Baker, & Nackerud, 1999). These technological advances permit prospective parents to find out the sex of their baby, see their growing baby in utero, and hear the heart beat prior to birth, offering women a false assurance that the outcome of their pregnancy will be favorable (Cote-Arsenault, Donato, & Earl, 2006; Cote-Arsenault & Donato, 2011). Consequently, men and women may begin connecting to their unborn child earlier within the pregnancy (Robinson et al., 1999).

According to research, as many as 20% of pregnancies end in miscarriage and 11-18% end in late term pregnancy loss (Cote-Arsenault et al., 2006 ; DeBackere, Hill, & Kavanaugh, 2008; Robinson, et al., 1999). Miscarriage is defined as the loss of the fetus before 20 gestational weeks. Late term pregnancy loss, also known as perinatal loss, is commonly defined as the loss of the fetus from 20 weeks gestation to 28 days post birth (DeBackere, et al., 2008). Pregnancy loss can be a traumatic event for all involved and is especially significant during late term loss. Several emotions and physiological symptoms may arise following the loss including grief, sadness, anger, guilt, loss of appetite, and troubles sleeping (Gaudet, 2010; Scheidt et al.,

2012).

In spite of the grief and despair experienced by those who have had a pregnancy loss, many women decide to try to have a child again. In fact, researchers report that 80-86% of women become pregnant within 18 months of their previous loss (DeBackere et al., 2008; Gaudet, 2010). There are some women that report a sense of hope that having another child will numb the pain and sadness they are currently feeling due to the loss (Jaffe & Diamond, 2011). Although becoming pregnant again may act as a temporary fix for the grief, the long term effects of pregnancy loss can have consequences for the child and the mother-child relationship such as insecure attachment and increased levels of anxiety and depression (DeBackere et al., 2008; Gaudet, 2010).

In order for parents to securely connect to the subsequent fetus, research suggests the importance of identifying, exploring and expressing the grief one experiences from pregnancy loss during the bereavement period (Gaudet, 2010; Jaffe & Diamond, 2011). Research suggests negative consequences can occur for both the subsequent child and the mother-child relationship when the grief from pregnancy loss has not been processed. According to DeBackere et al.'s (2008) study that measured women's anxiety and depression levels prior to and during pregnancy, those who had experienced a pregnancy loss had markedly higher levels of both anxiety and depressive symptoms going into their subsequent pregnancy than women who had not experienced a loss. This increased level of anxiety and depression can impact the health of both the mother and child in addition to possibly interfering with the formation of a secure prenatal attachment (Gaudet, 2010).

Pregnancy loss can open parents to the reality that life is fragile and unpredictable; attempting to have another child can increase this vulnerability (O'Leary, 2004). O'Leary's

(2004) study regarding pregnancy loss suggests that women who become pregnant following a loss enter the subsequent pregnancy more aware and sensitive to the possible risks and concerns that pregnancy entails compared to their non-loss counterparts. The traumatic experience of pregnancy loss may set the stage for a subsequent pregnancy where doubt, insecurity, and anxieties are heightened (Cote-Arsenault et al., 2006; Gaudet, 2010; O'Leary 2004). This emotional struggle may resonate in forms of hyper vigilant behaviors, feelings, and beliefs such as increasing the number of healthcare visits, purchasing a Doppler to hear the fetal heartbeat, delaying telling friends and family about the pregnancy and postponing physical preparations for their baby's arrival (Cote-Arsenault, 2011; Cote-Arsenault et al., 2006).

Each milestone within pregnancy may bring worry, fear, and questions concerning the betterment of their growing child (Cote-Arsenault & Morrison-Beedy, 2001; Cote-Arsenault et al., 2006). These parents who have experienced loss, specifically mothers, may struggle with the social stigma of exhibiting normal behavior during a pregnancy, such as showing excitement and not worrying, enjoying the pregnancy, and joyfully preparing for the baby's arrival (Cote-Arsenault & Donato, 2011). Many women express feeling pressure due to societal expectations suggesting how to think, feel and behave during pregnancy. Women report feeling as if society wants them to dismiss their fears, not to worry about unusual feelings, cramps, or lack of movement and instead, encourage these women to relax and move on, forget about their past experiences, and become excited for this new pregnancy (O'Leary, 2004). Dismissing such feelings and experiences can impact the felt attachment women form with their subsequent children; prenatally and after birth. Much research highlights the necessity for both men and women to take the time to truly grieve their loss (Brownlee & Oikonen, 2004; Gaudet, 2010). Research suggests that not properly or fully dealing with the grief prior to the next pregnancy

may impact the attachment formed during the subsequent pregnancy and after birth (DeBackere et al., 2008; Gaudet, 2010; O'Leary 2004).

### **Significance**

Research suggests that attachment behaviors observed by mothers prenatally correlate with attachment style established post birth (Gaudet, 2010; Heller & Zeanah, 1999; Rackett & Holmes 2010; Zimmerman & Doan, 2003). The attachment behaviors observed in infancy are correlated with attachment behaviors exhibited in adulthood (Bowlby, 1988). Healthy prenatal attachment is positively correlated with secure attachment after birth (Rackett & Holmes, 2010). Research suggests that those who are securely attached during infancy are more likely to become well adjusted, contributing members of society in adulthood (Bowlby, 1988). Additional research proposes that unresolved grief from a previous loss is correlated with insecure attachment to the fetus (Dermer, 1996; Rackett & Holmes, 2010). This lack of attachment or insecure attachment in the subsequent pregnancy can have long term consequences for the child and the mother-child relationship (Bowlby, 1988; Rackett & Holmes 2010). Low prenatal attachment is indicative of a high degree of disorganized/insecure attachment during the child's first year. Insecure attachment during the child's first year is correlated with insecure attachment in adulthood (Bowlby, 1988). Therefore prenatal attachment can impact the attachment styles infants develop and maintain throughout their lives suggesting the importance of forming strong, secure attachments prenatally (Rackett & Holmes, 2010).

In spite of the fact that pregnancy loss is something many experience, it is rarely discussed, let alone fully processed among society (Uren & Wastell, 2002). Prior to 1970, the grief and sadness that accompanied pregnancy loss was not encouraged. Women and families were counseled to forget about their loss and move on (Brownlee & Oikonen, 2004). Society

continues to treat pregnancy loss as an event to be handled privately, yet researchers and doctors alike, are recognizing the significance of social support in mourning the loss (Dermer, 1996; Jaffe & Diamond, 2011; Schwerdtfeger & Shreffler, 2009). The long term effects that can surface from not dealing or processing the grief prior to a subsequent pregnancy can impact the mother and child's relationship bond and attachment style prenatally and after birth (Brownlee & Oikonen, 2004; Gaudet, 2010).

By conducting the current study, I hope to heighten helping professionals and societies understanding of the influence of pregnancy loss during the subsequent pregnancy following loss. By increasing awareness, helping professionals can become more attuned to the potential significance of the attachment developed prenatally and the level of grief that can come from losing that bond during pregnancy loss. In addition to understanding the influence of a past loss, I will also explore the coping strategies utilized by the women during the subsequent pregnancy to either increase or withhold such attachments. Through this study, I will explore the influence of pregnancy loss and coping strategies employed while connecting to the fetus in a subsequent pregnancy following a late term loss.

## **Rationale**

There have been several studies conducted to understand the experience of pregnancy loss, the bereavement period, and the experience of pregnancy after loss (Anderson et al., 2000; DeBackere et al., 2008; Jaffe & Diamond, 2011; O'Leary & Thorwick, 2012; Robinson et al., 1999; Schwerdtfeger & Shreffler, 2009; Uren & Wastell, 2002; Zimmerman & Doan, 2003).

There are also several studies exploring prenatal attachment, attachment following birth, and attachment to the fetus in a subsequent pregnancy following loss (Armstrong, 2000; Armstrong & Hutti, 1998; Cote-Arsenault, 2007; Cote-Arsenault, et al., 2006; Cote-Arsenault & Donato,

2011; Hughes, Turton, & Evans, 1999; O’Leary & Warland, 2012; Tsartsara & Johnson, 2006).

The studies focusing on pregnancy and attachment during the subsequent pregnancy following a loss are often conducted during the pregnancy. Although this gives rich data regarding their present experience, studies suggest that at times, some women may struggle truly identifying their feelings due to “emotional cushioning... a self-protective mechanism that women use to cope with anxiety, uncertainty, and vulnerability” (Cote-Arsenault & Donato, 2011, p. 81).

Emotional cushioning enables women to “compartmentalize the emotional aspects [of pregnancy] which decreases prenatal bonding” (p. 81). Along with the potential of emotional cushioning, women who are pregnant following a loss may experience the fear and expectation to fit within societal norms, appear happy and excited, and not worry about their current pregnancy. Thus, in the present study, a qualitative study will be conducted to explore and better understand the influence of a previous loss on connecting to the fetus in a subsequent pregnancy following a late term pregnancy loss from the retrospective point of view of the mothers. By exploring the experience retrospectively, I hope to gain an accurate portrayal of women’s reported level of connection by acknowledging the potential fear and concerns that may be present during a pregnancy after loss while accounting for the societal pressure western cultures hold, to appear happy, excited, and connected to the fetus in the subsequent pregnancy (Cote-Arsenault & Donato, 2011; O’Leary 2004).

A phenomenological research design was utilized as the guiding framework for this study. Due to the fact that I wanted to understand the influence a past loss had on women’s felt connection to their fetus in a subsequent pregnancy, I employed a research design that allowed me to gain an understanding from the participants lived experiences (Morse & Richards, 2002). Qualitative research designs are created from the research questions yet the design is flexible and

accounts for discrepancies in participants experiences. The data collection and analysis process consisted of an ongoing series of checks and balances to ensure the research question was being targeted and the essence of the participant's experiences were being capture. I worked inductively while analyzing the data to discover significant meaning units and themes that surfaced from the interviews.

### **Theoretical Framework**

Phenomenological inquiry was used to fully understand the phenomenon of connection to the fetus in a subsequent pregnancy following a late term pregnancy loss. Phenomenology served a dual purpose in this research; acting as a theoretical framework to guide the process of the study and to analyze the data (Creswell, 2007). Phenomenological inquiry seeks to fully understand participant's lived experience through the lens of the participant (Dahl & Boss, 2005). As discussed earlier, many women experience pregnancy loss. In spite of the frequency of this phenomenon, each person who has experienced pregnancy loss and pregnancy following a loss, has a unique experience with individualized feelings, assumptions, and overall meaning that they attribute to the event. This comprises a tenet of phenomenological inquiry stating individuals, through their lived experiences, will derive their own personalized meaning in spite of the fact that the phenomenon is universal. Therefore, this study used in depth, semi-structured interviews to capture the overall essence (Creswell, 2007) of connecting to the fetus in the subsequent pregnancy following loss from the perspective of those who have personally experienced such events.

Among the tenets that encompass phenomenology, one states that we, as researchers, are not separate from the events we study in so much that are past experiences and personal meanings derived from such experiences can influence our guiding question and the

interpretation of the data (Dahl & Boss, 2005). To account for such influences and to capture the essence of the participant's experiences, I openly expressed and continually checked in on my personal biases regarding pregnancy loss and prenatal connection with thesis advisor and through memoing and bracketing. To develop awareness of the data set as a whole, the researcher immersed self within data by reading through the transcripts several times (Dahl & Boss, 2005). Once thoroughly familiar with the data, significant statements and phrases were identified from the scripts and sorted into "meaning units" (Creswell, 2007 p. 159). The researchers worked to interconnect the meaning units to establish over-arching themes that encompassed the experience of the phenomenon as a whole. Through introspective self-reflection along with co-coding the data, credibility and trustworthiness were maintained throughout this study; along with enabling the researchers to fully grasp the overall meaning of the participants lived experiences.

### **Purpose of the Study**

The purpose of this study was to gain a detailed understanding of the influence of a previous pregnancy loss on connecting to the fetus in a pregnancy following a late term pregnancy loss. Through this study, I added to the existing research by using a retrospective design to gather insight that may not have been expressed in existing research due to emotional cushioning and societal expectations. Retrospective evaluations allowed me to identify fears and concerns that accompanied women during their subsequent pregnancy. Therefore, this study addressed the following question: What is the influence of pregnancy loss and how does one cope with such loss when connecting to the fetus in a subsequent pregnancy following a late term loss?



## **Chapter 2: Literature Review**

An overview of pertinent topics regarding attachment and pregnancy loss is necessary in order to fully understand the present study. Therefore, this chapter will review past research and studies conducted exploring attachment theory, prenatal attachment, pregnancy loss and the bereavement period, and pregnancy after loss. Gaining a thorough understanding of these topics helped frame the context for understanding the influence of pregnancy loss on connecting to the fetus prenatally in a pregnancy following loss. Attachment theory was used to inform my understanding of the bonds formed prenatally and the grief experienced after loss. Through the lens of attachment, and the additional topics explored in this chapter, I conceptualized the struggle women experience during pregnancy following a loss and the coping strategies one uses during the subsequent pregnancy in addition to grasping the importance of establishing a secure connection in lieu of the fear.

### **Attachment Theory**

Mary Ainsworth defined attachment as a loving tie that endures over time between one person and a specific other that binds them together (Ainsworth, 1967). Both Bowlby and Ainsworth conducted research suggesting the importance of mother-child, and mother-infant relationships (Bretherton, 1992). Ainsworth and Bowlby (1991) suggest that the development of a secure attachment to a primary caregiver, forming a secure base, allows the child to grow up feeling more secure with themselves and enabling these individuals to become well-adjusted adults (Bretherton, 1992). “A positive attachment between parent and child means that the child can expect the parent to correctly interpret and fulfill his/her physical, emotional, and cognitive needs...” (Zimmerman & Doan, 2003, p 132).

Inconsistent and unavailable responsiveness often results in anxious or avoidant

(insecure) attachment styles (Bowlby, 1988). Bowlby suggests that the attachment developed during infancy and childhood impacts the ‘emotional well-being’ (p.5) of children well into adulthood, along with influencing the types of relationships and bonds formed in later life. Children who form secure attachments in infancy are more likely to develop a clear sense of self, gain a sense of independence and confidence, form additional secure attachment relationships and become confident, independent adults. Children without the secure attachment struggle to both show and experience love. These children are more likely to identify and be identified as unhappy, angry, and often engage in dysfunctional relationships themselves (Bowlby, 1988).

Klaus and Kennell (1976) define attachment as a bond or relationship between two people that is specific and endures. According to Bowlby (1988), attachment bonds are formed in infancy towards their caregiver and are often maintained throughout the child’s life and into adulthood. An attachment bond is a secure emotional connection created between two individuals. As the theory has progressed, researchers suggest that mothers begin forming attachment bonds to their infants prenatally (Bouchard, 2011; Brownlee & Oikonen, 2004; Condon & Corkindale, 1997; Robinson et al., 1999). Because attachment bonds can form prenatally, the mother’s actions and behaviors towards her unborn fetus become correlated with the type of attachment behavior the child develops. “Attachment behavior is any behavior that one engages in to obtain or maintain certain proximity” (Bowlby, 1988, p. 28). Through this behavior, infants learn whether their primary care giver is available and responsive which sets the stage for a secure attachment (Bowlby, 1988).

### **Prenatal Attachment**

Although much research has developed regarding this emotional connection developed prenatally, the concept of prenatal attachment does not stem from traditional attachment theory.

There is a debate whether attachment in the traditional sense can be formed prenatally due to lack of a reciprocal relationship between the fetus and mother, which is a fundamental premise held among attachment theorists (Bowlby, 1988; Klaus and Kennell, 1976). Due to this debate, we will explore prenatal attachment and prenatal bonds as defined by Condon and Corkindale (1997), the mothers felt emotional connection towards her unborn child.

There are several factors that intensify this emotional connection or bond parents develop prenatally: verification of the pregnancy, hearing the heart beat, seeing photographs of the baby in the womb, feeling the baby move, and planning for the baby's arrival (Condon & Corkindale, 1997). Other non tangible ways of bonding include: imagining the future with this new life, wanting to protect the unborn child, and day dreaming about interactions and aspects of life with this new infant (Brownlee & Oikonen, 2004; Robinson et al., 1999). With the advancements in medical technology, women are beginning to form bonds even earlier within their pregnancy and feel more confident that the outcome of the pregnancy will be favorable (Cote-Arsenault & Donato, 2011). These bonds measured prenatally are consistently correlated with attachment bonds measured when the infants become 12 months of age (Heller & Zeanah, 1999; Zimmerman & Doan, 2003). The attachment styles employed by infants at 12 months are highly correlated with the attachment style these infants express in relationships once in adulthood (Ainsworth, 1967; Rackett & Holmes, 2010). Therefore, it is assumed that the attachment style mothers engage in with their unborn child prenatally are important and can be indicative of the bonds this child will form and employ into adulthood.

Studies suggest the type of attachment style exemplified by mothers prenatally continue after birth (Heller & Zeanah, 1999). Mothers who were insecurely attached or had a disorganized attachment to the child prenatally were more likely to have an insecure mother-

infant attachment post birth than those who had a secure attachment prenatally (Heller & Zeanah, 1999). Infants with an insecure attachment to their mothers are more likely to develop problem behaviors in adolescence and adulthood (Rackett & Holmes, 2010).

There are several assumptions regarding pregnancy and the attachment process. Among these assumptions is the belief that attachment to the fetus is measured solely by gestational age. Research evaluating prenatal maternal-fetal attachment suggests that attachment increases as the pregnancy advances (Tsartsara & Johnson, 2006). Tsartsara and Johnson's (2006) study reports a strong correlation between gestational age and increased attachment within the pregnancy. The results of the study concluded that the majority of women who had experienced a miscarriage and the majority who had not experienced pregnancy loss all maintained a strong correlation between increased attachment to the fetus as gestational age increased. Although gestational age is a factor that impacts the level of attachment, research suggests additional elements such as that the desire to have a baby, planning of the baby's future, excitement over becoming pregnant and the process of starting a family can each contribute to mother-infant attachment (Brownlee & Oikonen, 2004; Robinson et al, 1999).

Research suggests there are two main dimensions of emotional connection that is developed between the caregiver and unborn child: quality and quantity (Pollock & Percy, 1999). Quality refers to the intent of the thoughts such as, the felt closeness, day dreaming, and acknowledging the fetus as your child. Quantity refers to time spent thinking about and being interested in the unborn child. Pollock and Percy's (1999) study suggests a correlation between secure attachment after birth and scoring high in both quality and quantity of behaviors and thoughts toward their developing child in utero. Conversely, scoring low on both quality and quantity prenatally is correlated with insecure attachment post birth.

Zimmerman and Doan (2003) conducted a study with 233 expecting mothers to observe and identify level of prenatal attachment determined by specific behaviors exhibited by mothers while pregnant. Several behaviors were measured throughout the study as indicative of positive prenatal attachment, including daydreaming about the baby, reading to the baby, mothers monitoring their own diet for the baby, rubbing or feeling their belly, and talking to the fetus. The sample was divided into three groups; soon to be first time mothers, mothers of typical developing children, and mothers of atypical developing children. The Maternal Antenatal Attachment Scale (MAAS) and Interpersonal Reactivity Index (IRI) were used for this study. Of the 147 women in the soon to be first time mother's category, 24 women had previously experienced at least one pregnancy loss. The study found a strong correlation between secure prenatal attachment and secure postnatal attachment. A weak correlation was observed between women forming a secure attachment prenatally and having the attachment become insecure after birth. Additionally, a strong correlation was observed between weak prenatal attachment and insecure attachment post birth. These results suggest that the attachment style observed prenatally is positively correlated with the attachment style observed after birth between mother and infant. Although attaching to the fetus prenatally is positively correlated with secure attachments after birth, women can still form these attachments after birth with their infant regardless of attachment level observed prenatally (Zimmerman & Doan, 2003). These results may offer hope to women who struggled forming attachments prenatally, parents who adopt children, or mothers who did not want or plan the pregnancy yet chose to keep the child.

Condon and Corkindale (1997) conducted a study exploring anxiety and depression and the impacts on prenatal attachment. Within the study 236 women participated and completed the self-report questionnaires during the third trimester of pregnancy. The results suggest that

expressed prenatal attachment was higher in women who were pregnant for the first time. These results are consistent with Zimmerman and Doan's (2003) study suggesting that first time mothers exhibit more attachment related behaviors. Condon and Corkindale's study suggests that depressed mood and low spousal support were highly correlated with weak prenatal attachment concluding that additional factors can contribute to mother's prenatal attachment.

In sum, research now suggests that mothers begin attaching to their infants prenatally (Bouchard, 2011; Brownlee & Oikonen, 2004; Condon & Corkindale, 1997; Robinson et al., 1999). Many factors may contribute to the felt attachment developed prenatally such as; gestational age, mental health of mother, acknowledging and accepting maternal role, making preparations for babies arrival, talking to the fetus, and daydreaming about the future with this baby (Condon & Corkindale, 1997; Zimmerman & Doan, 2003). Although women are able to form attachments prenatally, the findings regarding the correlation between type of attachment developed prenatally and attachment style developed post birth are mixed. Some studies suggest a strong correlation between prenatal and postnatal attachments (Heller & Zeanah, 1999; Zimmerman & Doan, 2003) while at the same time reporting the ability to form a secure attachment post birth in spite of lack of attachment developed prenatally (Zimmerman & Doan; 2003).

### **Pregnancy Loss and the Bereavement Period**

**Pregnancy loss.** As reported earlier, researchers suggest that as many as 20% of pregnancies end in miscarriage and 11-18% end in late term pregnancy loss (DeBackere et al., 2008; Robinson et al., 1999). Although pregnancy loss can affect women of all ages, there are statistics that suggest the probability of fetal loss increases with maternal age (Robinson et al., 1999). According to Anderson et al., (2000); women between the ages of 15-35 had a 13.5%

chance of losing the pregnancy, this percentage rose to 20% when women were 35 years old, and for women 42 years old the chance of pregnancy loss was 54.5%. This number steadily rises for women beyond 42 years of age. These statistics highlight the fact that maternal age is one common factor that may contribute to pregnancy loss. In addition to age, overall health, diet, exercise, weight, medications, and substance use can each contribute to pregnancy loss (“Miscarriage,” 2011). While researchers and doctors provide suggestions to reduce the risk of miscarriages and stillbirths, pregnancy loss does not discriminate and can impact any woman, regardless of ethnicity, race, or age (Robinson et al., 1999).

Pregnancy loss is unique in the fact that attachment may have formed prior to the actual birth of the child, making all aspects of the relationship contingent upon the imagination and future hopes and dreams of those expecting this new life to come into the world (Uren & Wastell, 2002). Research suggests that women can maintain a relationship with their deceased baby/fetus for more than four years after the loss. For some women, pregnancy loss is considered a traumatic event. Schwartzberg, (1993) defines trauma as “a life circumstance that ruptures one’s previous ability to make sense of the world” (p. 276). Schwerdtfeger and Shreffler (2009) suggest that one month following pregnancy loss approximately 25% of women meet criteria for posttraumatic stress disorder (PTSD). According to Uren and Wastell (2002) a prominent featured expressed by many mothers who have experienced pregnancy loss is their resolve to maintain an emotional closeness to the child they have lost, attesting to the strength of prenatal attachment. Further, these authors suggest that many women and families try to keep the relationship alive by celebrating birthdays, visiting the gravesite, and talking to their deceased child.

**Grief and mourning.** Not surprisingly, pregnancy loss can arouse feelings of grief and

distress. While the duration of the pregnancy does impact said attachment, it does not detract from the grief and sorrow some women experience (Uren & Wastell, 2002). Many women meet the criteria for psychological distress following loss as measured by exemplifying symptoms of grief, anxiety, depression and guilt (Schwerdtfeger & Shreffler, 2009). Studies suggest that grief is experienced following a pregnancy loss because of the attachment bonds mothers and fathers form with their unborn child without ever having met, held, or seen their baby (Condon & Corkindale, 1997).

Uren and Wastell (2002) define grief as, “an emotion that draws us toward what is missing, arising as it does from an awareness of a discrepancy between the world that is and the world that should be” (p. 279). Any disruption in the meaning and purpose we ascribe to life constitutes grief. Grief elicits a disruption in the attachment bond which results in mourning (Uren & Wastell, 2002). Mourning is commonly defined as the actions and expressions exhibited by those who have experienced the loss of a loved one (“Mourn”, 2013). During this mourning process, many women along with partners, parents, and friends attempt to create meaning to account for their loss (Uren & Wastell, 2002).

Much of Bowlby’s (1988) research describes mourning as occurring when the infant is separated from their attachment figure or the loss of a spouse. The same principles may be maintained during loss of the fetus during pregnancy or the baby shortly after birth (Uren & Wastell, 2002). Bowlby (1988) suggests that once an attachment bond has been formed, the course of mourning occurs in four stages: numbing, yearning and searching, disorganization and despair, and reorganization. This same cycle of grief and mourning has been observed by those who have experienced pregnancy loss (Uren & Wastell, 2002).

The degree of mourning and grief experienced among those processing their loss will



vary from person to person and is dependent on several factors such as, the bond formed prenatally, the length of the pregnancy, and the desire to have a child (Schwerdtfeger & Shreffler, 2009; Uren & Wastell, 2002). With pregnancy loss, all aspects of the relationship are based on assumptions and are contingent upon time and the future (Uren & Wastell, 2002).

When these future hopes and aspirations are taken away, the mother is left to mourn the potential of a relationship that will never be realized. How one copes after a major loss is associated with the meaning prescribed to such events.

*Unresolved grief.* Studies suggest that women who become pregnant within a year of their previous loss are more likely to carry some of their grief into their next pregnancy and may struggle attaching to the fetus during the subsequent pregnancy (DeBackere et al., 2008; Gaudet, 2010). Uren and Wastell's (2002) study suggests that prior loss can influence the well-being of the subsequent pregnancy. Becoming pregnant following the loss can be an emotional and trying time for many. Jaffe and Diamond (2011) suggest the most successful way to dissipate the grief and sorrow that accompanies pregnancy loss, is through processing the experience. Unresolved grief can negatively impact the attachment to the subsequent child. Research reports attachment concerns that surface when parents try to replace what was lost with another child, 'replacement child' (Jaffe & Diamond, 2011, p. 218). Jaffe and Diamond conducted a qualitative study gathering the experience of pregnancy and parenthood after pregnancy loss. Women report societal advice stating, "you're young, you can have another, or, it was for the better" (p. 62-63) not only minimizes the grief experienced from the loss but implies the attachment felt towards the baby lost was meaningless.

*Depression, anxiety, and PTSD.* A common phenomenon that accompanies the grief experienced from pregnancy loss is increased depression and anxiety. Depression rates for

women who had experienced a loss were three to four times higher than their non-loss counterparts (Tsartsara & Johnson, 2006). Although still present, studies suggest that after three months past loss, the depressive symptoms begin to dissipate for most. According to Tsartsara and Johnson (2006) when women who suffered a pregnancy loss were one year past the date of loss, the average levels of depression and anxiety fell back in line with the national average.

Turton, Hughes, Evans, and Fainman (2001) conducted a study exploring PTSD symptoms during a subsequent pregnancy following a stillbirth. The results suggested that of the 82 women, 21% were diagnosed with PTSD during their subsequent pregnancy and reported the prior stillbirth as a major stressor. The study suggests strong correlations between levels of anxiety, depression, and post traumatic stress disorder and the time between loss and becoming pregnant again. Women who became pregnant within a year of experiencing pregnancy loss were at a heightened risk of experiencing increased anxiety, depression, and PTSD symptoms. In follow up samples after the birth of their subsequent pregnancy, only 4% reported having PTSD. These results suggest that after having a successful pregnancy, the levels of PTSD decreased drastically (Turton et al., 2001).

Tsartsara and Johnson (2006) conducted a study exploring the effects of a miscarriage on a subsequent pregnancy at both the first and third trimesters. At both assessment times, the researchers explored both anxiety and prenatal maternal-fetal attachment. Their study concluded that women had an increase in anxiety behaviors during the first trimester, but that their levels were consistent with their non-loss counterparts by the third trimester. According to Tsartsara and Johnson, having suffered a miscarriage may increase both anxiety and depression during the subsequent pregnancy following a loss; however, the said anxiety and depressive symptoms decreased as the pregnancy progressed and dissipated completely following birth. Research

suggests that those who had experienced stillbirths or neonatal deaths became less confident and more anxious as the time of their previous loss approached (Cote-Arsenault et al., 2006).

To recap, women who have endured a pregnancy loss report varying experiences and responses. For the majority of women, pregnancy loss invokes feelings of grief and sorrow (DeBackere et al., 2008; Schwerdtfeger & Shreffler, 2009; Uren & Wastell, 2002). Research suggests that for some women, pregnancy loss represents a loss of part of oneself due to the emotional investment and the degree of personhood that parents attribute to their unborn child (Tsartsara & Johnson, 2006). Experiencing pregnancy loss may cause women to question their value and self-worth due to their felt sense of failure to fulfill their maternal role as women (DeBackere et al., 2008; Tsartsara & Johnson, 2006). Schwerdtfeger and Shreffler (2009) suggest that in our western society, pregnancy loss is viewed as a private event, making it difficult for women to properly cope and fully mourn their loss.

### **Pregnancy After Loss**

In spite of the grief and despair experienced by many due to pregnancy loss, the majority of women express a desire to become pregnant again. Researchers report, that 80-86% of women become pregnant within 18 months of their previous loss (DeBackere et al., 2008; Gaudet, 2010). Cote- Arsenault, Donato and Earl's (2006) suggest that those who have experienced miscarriages report an increased assurance of the pregnancy maintaining once the gestational age of the fetus has progressed past the time of their previous loss. Once the gestational age surpasses previous loss, women begin exhibiting more attachment creating behaviors. Those who experienced stillbirths or neonatal deaths became less confident as the time of their previous loss approached. In spite of the type of loss experienced, the majority of women report a desire to let go of the stress and worry that accompanies them during their

subsequent pregnancy yet struggle knowing how (Cote-Arsenault et al., 2006).

Experiencing pregnancy loss and then becoming pregnant can evoke a strong emotional and physiological reaction from both mothers and fathers (Cote-Arsenault, 2007; DeBackere et al., 2008; Guadet, 2010, Tsartsara & Johnson, 2006). Some women report additional stress and worry due to past loss. Stress is released through the maternal stress hormone and carried through the placenta blood flow which can have a negative effect on both the mother and infant (Cote-Arsenault, 2007). Heightened stress is correlated with an increased risk of spontaneous abortion or preterm birth and can affect the child's physical development up to ten years of age. Coping strategies can be taught and implemented to help decrease the level of stress, while concurrently lowering the amount of the maternal stress hormone that reaches the fetus (Cote-Arsenault, 2007).

Recognizing the fact that pregnancy does not ensure a live birth may contribute to the additional worry women may experience, impacting women's ability to feel confident in their subsequent pregnancies (Cote-Arsenault & Freije, 2004; Cote-Arsenault & Donato, 2011). Research suggests women who have experienced loss have increased levels of anxiety and depression going into their subsequent pregnancy which tends to be greater in women who conceived within 12 months after their initial loss (DeBackere et al., 2008; Guadet, 2010, Tsartsara & Johnson, 2006). Some women become fearful that this pregnancy too will result in a loss, therefore they reject any favorable outcomes, struggle attaching to the fetus prenatally, and feel insecure throughout the pregnancy (Cote-Arsenault & Marshall, 2000; DeBackere et al., 2008; O'Leary, 2004).

Along with many of the negative effects that pregnancy loss can have on mothers and their subsequent fetuses, becoming pregnant following a loss can be a positive event for some.

Happiness and hope are expressed by many when finding out they are pregnant following a loss (Cote-Arsenault & Marshall, 2000). Some women report feeling as if they are able to fully accept the initial loss once becoming pregnant again. Studies suggest a decreased level of grief from past loss, a decrease in feelings of guilt, and a renewed sense of hope in being able to fulfill their maternal role upon discovering they are once again pregnant (DeBackere et al., 2008).

Researchers have studied the several contrasting behaviors exemplified by those who become pregnant following a pregnancy loss. There are some parents that try to distance themselves from reattaching to their fetus out of fear that another loss will occur (Cote-Arsenault & Donato, 2011). They will focus on the pregnancy itself but not on the growing baby. Other parents report a realization that even if they try to avoid attaching to the fetus, it will not save them from the hurt and pain of a potential loss and therefore make an intentional effort to form an attachment to their fetus (O'Leary, 2004; O'Leary & Warland, 2012). Some parents are able to feel at peace and gain a renewed sense of hope for a positive outcome this time around.

**Coping strategies.** Mothers that are pregnant following a pregnancy loss display several coping behaviors that are unique compared to their non-loss counterparts. These coping behaviors can be present while still being securely attached to the fetus. Fully dealing with the grief is correlated with increased self-worth and secure prenatal attachment (Uren & Wastell, 2002; Zimmerman & Doan, 2003). Researchers suggest that not properly or fully dealing with the grief prior to a subsequent pregnancy is correlated with insecure attachment to the fetus (Dermer, 1996). Time between loss and subsequent pregnancy along with acknowledging the parents motive and state of mind for the subsequent pregnancy can help predict prenatal attachment (Uren & Wastell, 2002; Zimmerman & Doan, 2003).

To ease women's anxiety and in hopes to increase their attachment, many women

increase the number of healthcare visits, buy a Doppler to hear the fetal heartbeat, seek out social support groups, journal their feelings, and educate themselves on pregnancy loss (Côté-Arsenault et al., 2006). Some women are observed exhibiting hyper vigilance behaviors such as constantly checking for fetal movement and/or the fetal heartbeat and making interpretations throughout the pregnancy, both positive and negative (Côté-Arsenault, & Donato, 2011). Some women who have experienced pregnancy loss delay telling others about their subsequent pregnancy. Some women feel societal pressure to appear happy and not fearful about the possibility of another loss. To appear normal and to protect others who were impacted by the previous loss, some women try to hide their feelings of anxiety and worry that accompanies them throughout the subsequent pregnancy (Cote-Arsenault et al., 2006; Côté-Arsenault, & Donato, 2011).

***Intentional parenting.*** Pregnancy loss may lead to shifts in behavior during the subsequent pregnancy that are unique when compared to women who have not experienced loss. Some parents become more vigilant and overprotective in their parenting of existing children along with caring for the next child prenatally (O’Leary & Warland, 2012). O’Leary and Warland (2012) used the term ‘intentional parenting’ (p.137) to define the behaviors observed by parents who are more alert and exhibit a heightened awareness of this pregnancy and their growing baby. These parents understand the reality that pregnancy does not equate to a live birth, therefore, they make an effort to treasure each moment they have with their growing baby. These parents seem to prefer to attach and deal with the grief rather than try to avoid the attachment in hopes to surpass the intensity of the grief experienced during the past loss (Cote-Arsenault & Donato, 2011; O’Leary & Warland, 2012).

O’Leary and Warland (2012) explored the experience of being pregnant following a late term pregnancy loss by interviewing 21 mothers and 17 fathers. A reoccurring theme in this

study was the notion of being changed by such an experience. This change impacted the way they interacted with others, the way they parented their existing children, and the way they viewed future pregnancies and life in general. Parents reported being much more intentional in their behaviors towards themselves, others, and their growing fetus (O’Leary & Warland, 2012).

This study along with other studies observing pregnancy loss describe behaviors and actions that are consistent with intentional parenting such as talking, singing, or reading to their baby, finding out the sex of the baby as a way to strengthen the connection, and increasing their awareness of how they respond to both their baby prenatally along with their existing children (O’Leary & Thorwick, 2006; O’Leary & Warland, 2012; Warland, O’Leary, McCutcheon, & Williamson, 2011). Being intentional in parenting techniques is another coping strategy some parents use to create meaning in order to make sense out of what has happened to them and their family (Uren & Wastell, 2002).

***Emotional cushioning.*** Some women report not feeling connected to their subsequent pregnancy due to the high degree of attachment and grief experienced after their loss (Cote-Arsenault & Donato, 2011). Studies suggest that some women may be focused on their feelings of distress from the unresolved mourning of their previous loss to the extent that attaching to the fetus in the subsequent pregnancy may become a struggle (Jaffe & Diamond, 2011; Reid, 2012). Women who exemplify decreased attachment when pregnant following a loss often are limiting their level of attachment as a protective factor to help cope with the uncertainty of the current pregnancy (DeBackere et al., 2008; Cote-Arsenault & Donato, 2011). Cote-Arsenault and Donato (2011) refer to this limited attachment to the fetus as ‘emotional cushioning’ (p. 81). Emotional cushioning is defined as, “allowing women to be pregnant in the moment, maintain their current roles and relationships, and not focus on the uncertain future” (p. 82). According to

Cote-Arsenault and Donato, the goal of emotional cushioning is to avoid any potential grief that may surface if this pregnancy too ended in loss. This is done by not focusing on the uncertain future and the growing fetus inside but on the pregnancy itself.

Cote-Arsenault and Donato (2011) conducted a longitudinal study with 63 women observing emotional cushioning and anxiety during a subsequent pregnancy following loss, both prenatally and postnatally. The pregnancy anxiety scale was administered three times during the pregnancy and one time after birth (between birth to six weeks) along with three additional questions that assessed for emotional cushioning. The study concluded that 58% of participants reported experiencing emotional cushioning during their subsequent pregnancy. Women who exhibit emotional cushioning during pregnancy, intend to form a secure attachment with their baby after birth. The women who continue to exhibit emotional cushioning after birth, struggle forming strong attachment bonds to their babies, resulting in attachment issues when these babies reach adulthood (Cote-Arsenault & Donato, 2011; O'Leary & Warland, 2012).

In sum, many women desire to become pregnant following a loss but are unaware of the emotional toll the previous loss may have on their subsequent pregnancy (DeBackere et al., 2008; Gaudet, 2010). Both positive and negative consequences can occur when becoming pregnant following a loss such as a renewed sense of hope, a decrease in grief, along with increased stress, anxiety and depression (Cote-Arsenault, 2007; Cote-Arsenault & Marshall, 2000; DeBackere et al., 2008; Tsartsara & Johnson, 2006). Much research has been conducted to identify ways women cope when pregnant following a loss. Once again, the results are inconsistent, some women exhibit emotional cushioning and some become more intentional in their behaviors (Cote-Arsenault & Donato, 2011; O'Leary & Warland, 2012). The majority of women, whether displaying intentionality or emotional cushioning develop hyper-vigilant



behaviors such as increased health care visits, checking for fetal movement and a heartbeat to reduce stress or worry that may accompany them during the subsequent pregnancy (Côté-Arsenault et al., 2006).

### **Attachment in the Subsequent Pregnancy**

Those who become pregnant following a loss report having a very different experience from those who are pregnant and have not experienced pregnancy loss (Armstrong & Hutti, 1998). Armstrong and Hutti (1998) found that women in a subsequent pregnancy following pregnancy loss scored significantly lower on prenatal attachment than women who were pregnant for the first time. Zimmerman and Doan (2003) conducted a study with 233 expecting mothers to observe and identify levels of prenatal attachment, determined by specific behaviors exhibited by mothers while pregnant. Of the 147 women in the soon to be first time mother's category, 24 had experienced at least one pregnancy loss previously. The results suggested that all mothers had strong attachments to their fetus, yet, first time mothers were observed doing more positive attachment behaviors, regardless of loss history. These results suggest that there is not a significant difference between attachment behaviors observed between mothers who had experienced a pregnancy loss and mothers who had not, which was contradictory to Armstrong and Hutti's findings (Armstrong & Hutti, 1998; Zimmerman & Doan, 2003).

Heller and Zeanah (1999) conducted a study to observe the attachment bonds between infants and mothers who had previously experienced a late term pregnancy loss. The women were interviewed with the perinatal loss interview 2 months after loss, and went through the strange situation when their infants were 12 months of age. Nineteen women participated in the study, 16 of the 19 women's results qualified for data analysis. Of the 16 participants who completed the study, 45% of the infants exhibited disorganized/insecure attachments to their

mothers. The control group had a rate of 15% of infants demonstrating disorganized attachment towards their mothers. The study reported a strong correlation between mothers who accepted responsibility for their own grief and infants with secure attachments (Heller & Zeanah, 1999).

Research exploring the experience of parents pregnant after a previous pregnancy loss reports an increased level of anxiety, depression, and stress among parents who were pregnant following a loss (Armstrong, 2000; Armstrong & Hutti, 1998; Cote- Arsenault et al., 2006; Cote- Arsenault, 2007; Hughes, Turton, & Evans, 1999; Tsartsara & Johnson, 2006). The results were mixed regarding how anxiety impacted prenatal attachment. Some studies suggested increased levels of anxiety, depression, or stress decreased the prenatal attachment (Armstrong & Hutti, 1998). Other studies suggested that the levels of anxiety, depression, or stress caused by previous loss did not impact said attachment in subsequent pregnancy when compared to their non-loss counterparts (Armstrong, 2000; Tsartsara & Johnson, 2006).

Ainsworth and Bowlby (1991) articulate certain aspects of attachment by reporting that the felt security provided by the relationship from birth onward is an essential feature of attachment. When mothers fear they may lose the child they are currently carrying, following a previous loss, their level of perceived security may be decreased. Once this level of security is reached, after a successful birth, women may begin to attach securely even if they were unable to form secure attachments prenatally. This research offers hope for care takers who were unable to form secure attachments to their infants prenatally, such as adoptive parents and parents who may have displayed emotional cushioning during the pregnancy (DeBackere et al., 2008; Cote- Arsenault & Donato, 2011).

## **Summary**

To summarize, much research has been conducted to explore and understand the

experience of pregnancy loss, the bereavement period, becoming pregnant following a loss and the attachment that occurs throughout (Anderson et al., 2000; Armstrong, 2000; Cote-Arsenault & Donato, 2011; DeBackere et al., 2008; Jaffe & Diamond, 2011; O’Leary & Thorwick, 2012; O’Leary & Warland, 2012; Robinson et al., 1999; Schwerdtfeger & Shreffler, 2009; Uren & Wastell, 2002; Zimmerman & Doan, 2003). The literature review identifies past studies that explore the process of attaching to the fetus in a subsequent pregnancy following pregnancy loss (Armstrong, 2000; Armstrong & Hutti, 1998; Cote-Arsenault et al., 2006; Cote-Arsenault, 2007; Hughes, Turton, & Evans, 1999; Tsartsara & Johnson, 2006). Findings exploring this phenomenon are inconsistent. Much of the research does not account for possible emotional cushioning, anxiety, depression, or PTSD that can be present during the subsequent pregnancy. The intent of the present study is to explore this phenomenon from the retrospective perspective to account for such conditions. Therefore, this study intends to bridge the gap, by exploring the influence of pregnancy loss and the coping strategies used when connecting to the fetus in a subsequent pregnancy following a late term pregnancy loss by using participant’s hindsight to attest to their experience.

## **Chapter 3: Methods**

### **Design of the Study**

A qualitative, phenomenological study was conducted to understand the influence of pregnancy loss and coping strategies employed when connecting to the fetus in a subsequent pregnancy following a late term pregnancy loss. Using a phenomenological approach provided an opportunity for women who had experienced pregnancy loss to express the influence their previous loss had on their ability to connect to the fetus along with the coping strategies used during the subsequent pregnancy (Creswell, 2007). Interviews were conducted using open ended questions to gather participants detailed accounts. This particular approach was used due to the rich, in-depth descriptions that qualitative interviews provide (Creswell, 2007).

### **Procedures and Study Participants**

Nine participants were recruited for this study using purposive and snowball sampling methods. The researcher recruited participants through flyers distributed at counseling offices, obstetrics and gynecology offices, pediatrician offices, group email lists, social media sites, online support groups, and word of mouth. The purposive, inclusion criteria to participate within this study were as follows: participants were over the age of 18, not currently pregnant, had experienced a late term pregnancy loss within the last 7 years, have had a successful pregnancy since experiencing the loss, currently parenting the subsequent child, and the child from the subsequent pregnancy is under 48 months of age. All participants within this study had experienced a pregnancy loss within the last 4 years and all subsequent children were under 24 months of age.

There are varying definitions regarding what qualifies as a late term pregnancy loss. For the purpose of this study, a late term pregnancy loss was defined as loss of the fetus from 20

weeks gestation to 28 days post birth (DeBackere et al., 2008). A successful pregnancy was defined as a pregnancy resulting in a live child to raise. Prior to participant recruitment and data collection, the study protocol was approved by the Institutional Review Board at Virginia Polytechnic Institute and State University.

All participants contacted the primary researcher via email. The primary researcher informed participants of the purpose, how confidentiality would be maintained, the risks and benefits from participating within the study in addition to reviewing the inclusion criteria. Nine participants agreed to participate after the initial telephone screening. These nine participants signed consent forms and completed a demographic questionnaire prior to beginning the interview. Individual, semi-structured interviews were conducted by Skype or in person. Additional probing questions were asked to assure completeness of thought and experience. All interviews were audio-recorded and transcribed verbatim. Following the interviews, 15 minute debriefing sessions were offered to each participant to discuss their experience. A resource sheet with relevant books, websites, and support groups were distributed after the interviews to help participants further process their experience.

All interviews were audio-taped and transcribed verbatim, with the exception of elimination of identifiable information, which was eradicated. To maintain confidentiality, an identification number was assigned to each participant and placed on transcribed interviews and demographic questionnaires. Themes, codes, and transcripts were stored on a password protected computer file on researcher's private computer. The audio files were also stored on the researcher's private computer until transcriptions were complete after which, they were destroyed.

## **Instruments**

Participants who met the inclusion criteria for the study, signed consent forms explaining their role and rights within the study. Participants filled out the demographic questionnaires in survey form prior to the interview. The interview began with an explanation of the present study following which, a series of open ended questions focusing on understanding the influence of pregnancy loss on connecting to the fetus in a subsequent pregnancy along with assessing the coping strategies used during that time were asked. The interviews were semi-structured and additional probing questions were asked to assure completeness of thought and experience. The demographic questions, introduction paragraph and interview questions are attached in the appendix. Following the interviews, I offered each participant additional time to process and debrief the experience of doing this interview. None of the participants reported a need to participate in the aforementioned debriefing session.

## **Data Analyses**

Moustakas' (1994) structured method of phenomenological analysis was used to guide the process of data analysis. A sense of curiosity regarding the participant's experiences of loss and connection during the subsequent pregnancy was maintained throughout the interview and the coding process. Each interview was conducted and audio recorded by the primary researcher. The recordings were transcribed by primary researcher and hired transcriptionists who signed a confidentiality agreement. To develop awareness of the data set as a whole, the researcher immersed self within data by reading through the transcripts several times (Dahl & Boss, 2005). Once thoroughly familiar with the data, significant statements and phrases were identified from the scripts and sorted into "meaning units" (Creswell, 2007 p. 159, Moustakas, 1994). These meaning units were interconnected to establish over arching themes that comprised

the experience of the phenomenon as a whole. Thesis advisor cross coded the data to ensure accuracy of meaning units.

As a means to interpret the data, verbatim examples were extracted, including both structural and textural descriptions, reports of ‘how’ and ‘what’ the participant experienced, to express how the themes related back to the initial research questions (Creswell, 2007). The researchers worked to interconnect the meaning units to establish over-arching themes that encompassed the experience of the phenomenon as a whole. As Dahl and Boss (2005) suggest, “the purpose of analysis in phenomenological research is not to tie all loose ends together, but rather to describe and understand the experience of the participants” (p. 74). Through these descriptions, the overall essence of the data was identified and broken into four themes: support network, emotional ups and downs, coping, and moving forward.

**Credibility and trustworthiness.** Several strategies were used to maintain credibility and trustworthiness throughout this study. I continually monitored my coding and analysis with the proposed structure for phenomenological analysis. I read through the transcripts multiple times to further immerse myself within the data in order to deepen my familiarity of the data set as a whole. Extensive bracketing and memoing occurred to account for researcher’s personal experiences and potential biases held regarding the phenomenon being studied. Prior to the interviews, during the interviews, and throughout the coding process, I kept a personal record of my thoughts, concerns, questions, and biases that arose throughout the process. Additionally, the researcher processed thoughts, feelings, and experiences with thesis advisor in addition to cross-coding to ensure accuracy of themes. I compared the findings from this study with existing literature to identify commonalities and differences among results. By completing the aforementioned checks, credibility and trustworthiness were maintained throughout the study.

## **Chapter 4: Manuscript**

### **Abstract**

This research explores the influence of pregnancy loss and coping strategies employed while connecting to the fetus in a subsequent pregnancy following a late term loss. Nine participants were interviewed using a qualitative, phenomenological methodology to determine participant's experience. Four themes emerged within the data: (1) support network – participants acknowledged who was there for them and who was not, (2) emotional ups and downs – participants reported the emotional ups and downs from loss to the subsequent pregnancy to delivery and after birth, and how they connected during this process (3) coping – participants describe coping strategies used throughout their experience, and (4) moving forward – participants reported their process of finding their new normal and how this event changed their perspective on life. Limitations, future research and clinical implications were all identified and discussed.



The Influence of a Late Term Pregnancy Loss on Coping and Developing a Connection during  
the Subsequent Pregnancy

Mandaran L. Labrum

**Introduction**

According to research, as many as 20% of pregnancies end in miscarriage and 11-18% end in late term pregnancy loss (Cote-Arsenault et al., 2006; DeBackere, Hill, & Kavanaugh, 2008; Robinson, et al., 1999). Miscarriage is generally defined as the loss of the fetus before 20 gestational weeks. Late term pregnancy loss, also known as perinatal loss, is commonly defined as the loss of the fetus from 20 weeks gestation to 28 days post birth (DeBackere, et al., 2008). Although pregnancy loss can affect women of all ages, statistics suggest the probability of fetal loss increases with maternal age (Robinson et al., 1999). In addition to age, overall health, diet, exercise, weight, medications, and substance use can each contribute to pregnancy loss (“Miscarriage,” 2011). While researchers and doctors provide suggestions to reduce the risk of miscarriages and stillbirths, pregnancy loss does not discriminate and can impact any woman, regardless of ethnicity, race, or age (Robinson et al., 1999).

Due to advances in modern technology, individuals are able to see and hear the developments of their growing fetus prior to movement within the womb (Robinson, Baker, & Nackerud, 1999). These technological advances permit prospective parents to find out the sex of their baby, see their growing baby in utero, and hear the heart beat prior to birth, offering women a false assurance that the outcome of their pregnancy will be favorable (Cote-Arsenault, Donato, & Earl, 2006; Cote-Arsenault & Donato, 2011). Consequently, men and women may begin connecting to their unborn child earlier within the pregnancy (Robinson et al., 1999).

Pregnancy loss is unique in the fact that maternal-fetal connection may have formed prior

to the actual birth of the child, linking the bond to the anticipated future (Uren & Wastell, 2002). Although loss at any gestational age can be considered a traumatic event, research evaluating prenatal maternal-fetal connection suggests a strong correlation between gestational age and increased connection (Tsartsara & Johnson, 2006). Research suggests that a woman can maintain a relationship with her deceased baby/fetus for more than four years after a loss, attesting to the strength of the felt connection while in utero (Schwerdtfeger & Shreffler, 2009).

Although much research has developed regarding this emotional connection developed prenatally, the concept of prenatal attachment does not stem from traditional attachment theory. There is a debate whether attachment in the traditional sense can be formed prenatally due to lack of a reciprocal relationship between the fetus and mother, which is a fundamental premise held among attachment theorists (Bowlby, 1988; Klaus and Kennell, 1976). Due to this debate, we will explore prenatal attachment and prenatal bonds as defined by Condon and Corkindale (1997), the mothers felt emotional connection towards her unborn child.

Several emotions and physiological symptoms may arise following a loss including grief, sadness, anger, guilt, loss of appetite, and sleeping difficulties (Gaudet, 2010; Scheidt et al., 2012). Many women meet the criteria for psychological distress following loss as evidenced by symptoms of grief, anxiety, depression and guilt (Schwerdtfeger & Shreffler, 2009). Depression rates for women who have experienced a loss are three to four times higher than their non-loss counterparts (Tsartsara & Johnson, 2006). Much research highlights the necessity for both men and women to take time to truly grieve their loss (Brownlee & Oikonen, 2004; Gaudet, 2010). Research suggests that not properly or fully dealing with grief prior to the next pregnancy may impact the connection formed during the subsequent pregnancy and after birth (DeBackere et al., 2008; Gaudet, 2010; O'Leary 2004).

In spite of the grief and despair experienced by many due to pregnancy loss, the majority of women express a desire to become pregnant again. Researchers report, that 80-86% of women become pregnant within 18 months of their previous loss (DeBackere et al., 2008; Gaudet, 2010). Experiencing pregnancy loss and becoming pregnant again can evoke a strong emotional and physiological reaction from both mothers and fathers (Cote-Arsenault, 2007; DeBackere et al., 2008; Guadet, 2010, Tsartsara & Johnson, 2006). Due to their past loss, women are now aware that pregnancy does not always ensure a live baby, impacting a woman's ability to feel confident in her subsequent pregnancy and heightening her anxiety (Cote-Arsenault & Freije, 2004; Cote-Arsenault & Donato, 2011). Research suggests women who have experienced loss have increased levels of anxiety and depression going into their subsequent pregnancy which tends to be greater in women who conceived within 12 months of their initial loss (DeBackere et al., 2008; Guadet, 2010, Tsartsara & Johnson, 2006). Some women become fearful that the current pregnancy will also result in a loss, and may reject the notion of a favorable outcome, causing them to struggle connecting to the fetus prenatally and increasing felt insecurity throughout the pregnancy (Cote-Arsenault & Marshall, 2000; DeBackere et al., 2008; O'Leary, 2004).

Although anxiety and depression are common symptoms that arise when becoming pregnant following a loss, happiness and hope are expressed by many when finding out they are again pregnant (Cote-Arsenault & Marshall, 2000). Studies suggest this instilled hope and happiness can decrease the level of grief from the past loss, decrease mother's feelings of guilt, and offer a renewed sense of hope in being able to fulfill their maternal role (DeBackere et al., 2008).

Researchers have studied several contrasting behaviors exemplified by those who become

pregnant following a pregnancy loss. Some parents try to distance themselves from connecting to their subsequent fetus out of fear that another loss will occur (Cote-Arsenault & Donato, 2011). As a protective factor, these women may focus on the pregnancy itself, rather than the developing baby. Cote-Arsenault and Donato (2011) refer to this limited connecting to the fetus as “emotional cushioning... a self-protective mechanism that women use to cope with anxiety, uncertainty, and vulnerability” ( p. 81). According to Cote-Arsenault and Donato, the goal of emotional cushioning is to avoid any potential grief that may surface if this pregnancy also ended in loss (Cote-Arsenault & Donato, 2011).

Other parents report a realization that even if they try to avoid connecting to the fetus, it will not save them from the hurt and pain of a potential loss and, therefore, make an intentional effort to form an connection to their baby while in utero (O’Leary, 2004; O’Leary & Warland, 2012). O’Leary and Warland (2012) used the term ‘intentional parenting’ (p.137) to define the behaviors observed by parents who are more alert and exhibit a heightened awareness of this pregnancy and their growing baby. These parents make an effort to treasure each moment they have with their developing baby. They choose to connect and deal with the grief rather than try to avoid connecting (Cote-Arsenault & Donato, 2011; O’Leary & Warland, 2012).

Many women desire to become pregnant following a loss but are unaware of the emotional toll the previous loss may have on their subsequent pregnancy (DeBackere et al., 2008; Gaudet, 2010). Although existing research is conflicting regarding the way in which women cope with becoming pregnant following a loss, two commonalities are noted by these women. Women gain awareness that pregnancy does not equate to a live child to raise and recognize that life is fragile and unpredictable (Cote-Arsenault & Donato, 2011; O’Leary, 2004; O’Leary & Warland, 2012). The majority of women, whether displaying intentionality or

emotional cushioning during the subsequent pregnancy, develop hyper-vigilant behaviors such as increased health care visits, checking for fetal movement and a heartbeat in an effort to reduce stress or worry that may accompany them during the subsequent pregnancy (Côté-Arsenault et al., 2006).

In sum, much of the existing research explores the impact of loss on mothers, the experience of becoming pregnant after a loss, and connecting to the fetus in a subsequent pregnancy following pregnancy loss (Armstrong, 2000; Cote- Arsenault et al., 2006; Cote-Arsenault & Donato, 2011; DeBackere et al., 2008; Jaffe & Diamond, 2011; O’Leary & Warland, 2012; Schwerdtfeger & Shreffler, 2009; Tsartsara & Johnson, 2006; Uren & Wastell, 2002; Zimmerman & Doan, 2003). These studies focusing on pregnancy and connection during the subsequent pregnancy following a loss are often conducted during the pregnancy. Although this gives rich data regarding their present experience, studies suggest that at times, some women may struggle truly identifying their feelings due to emotional cushioning (Cote-Arsenault & Donato, 2011). Along with the potential of emotional cushioning, women who become pregnant following a loss may experience fear related to an expectation to fit within societal norms. This includes the expectation to appear happy and excited, and not worry about their current pregnancy (O’Leary 2004).

In the present study, a qualitative, phenomenological study was conducted to explore and better understand, from the retrospective point of view of the mothers, the influence of a previous loss and coping strategies employed when connecting to the fetus in a subsequent pregnancy following a late term pregnancy loss. By exploring the experience retrospectively, I hope to gain an accurate portrayal of women’s reported level of connection by acknowledging the potential concerns that may be present during a pregnancy after loss while accounting for the

societal pressure western cultures hold, which are to appear happy, excited, and connected to the fetus in the subsequent pregnancy (Cote-Arsenault & Donato, 2011; O’Leary 2004). Therefore, this study intends to bridge the gap in available research by using the participant’s hindsight to attest to their experience of the impact of a late term pregnancy loss and coping strategies used when connecting to the fetus in a subsequent pregnancy.

### **Methods**

Nine participants were recruited for this study using purposive and snowball sampling methods. The researcher recruited participants through flyers distributed at counseling offices, obstetrics and gynecology offices, pediatrician offices, group email lists, social media sites, online support groups, and word of mouth. The purposive, inclusion criteria to participate within this study were as follows: participants were over the age of 18, not currently pregnant, had experienced a late term pregnancy loss within the last 7 years, have had a successful pregnancy since experiencing the loss, currently parenting the subsequent child, and the child from the subsequent pregnancy is under 48 months of age. All participants within this study had experienced a pregnancy loss within the last 4 years and all subsequent children were under 24 months of age. Prior to participant recruitment and data collection, the study protocol was approved by the Institutional Review Board at Virginia Polytechnic Institute and State University.

All participants contacted the primary researcher via email. The primary researcher informed participants of the purpose, how confidentiality would be maintained, the risks and benefits from participating within the study in addition to reviewing the inclusion criteria. Nine participants agreed to participate after the initial telephone screening. These nine participants signed consent forms and completed a demographic questionnaire prior to beginning the

interview. Individual, semi-structured interviews were conducted by Skype or in person. Additional probing questions were asked to assure completeness of thought and experience. All interviews were audio-recorded and transcribed verbatim. Following the interviews, 15 minute debriefing sessions were offered to each participant to discuss their experience. A resource sheet with relevant books, websites, and support groups were distributed after the interviews to help participants further process their experience.

Phenomenology was used both as a theoretical framework to guide the process of the study and analyze data (Creswell, 2007). Moustakas (1994) structured method of phenomenological analysis was used to guide the process of data analysis. As Dahl and Boss (2005) suggest, “the purpose of analysis in phenomenological research is not to tie all loose ends together, but rather to describe and understand the experience of the participants” (p. 74). To develop awareness of the data set as a whole, the researcher immersed self within data by reading through the transcripts several times (Dahl & Boss, 2005). Once thoroughly familiar with the data, significant statements and phrases were identified from the scripts and sorted into “meaning units” (Creswell, 2007 p. 159).

As a means to interpret the data, verbatim examples were extracted, including both structural and textural descriptions, reports of ‘how’ and ‘what’ the participant experienced, to express how the themes relate to the initial research questions (Creswell, 2007). The researchers worked to interconnect the meaning units to establish over-arching themes that encompassed the experience of the phenomenon as a whole. Through these descriptions, the overall essence of the data was identified and broken into four themes: support network, emotional ups and downs, coping, and moving forward. To ensure credibility and trustworthiness throughout the coding process, extensive bracketing and memoing occurred to account for researcher’s personal

experience and potential biases held regarding the phenomenon being studied. Additionally, the researcher processed thoughts, feelings, and experiences with thesis advisor in addition to cross-coding to ensure accuracy of themes.

## Results

### Participants

The current study aimed to gain a better understanding of the impact of pregnancy loss on the felt connection to the fetus during the subsequent pregnancy, and to examine any coping techniques used to manage the emotions that may have surfaced during the subsequent pregnancy as a result of the previous loss. The participants (n=9) were between the ages of 23 and 39. Seven reported their ethnicity as Caucasian, one as South-Asian, and one as Arab-American. Eight reported themselves as religious, whereas all participants described themselves as spiritual. All nine were married at the time of their loss and through their subsequent pregnancies. At the time of the interview, eight were still married and one was in the process of divorce. For a complete summary of the participant demographics in relation to their loss, refer to Table 1.

Table 1

#### *Participant Demographics*

Participant	Current Age	Age at time of loss	Had a successful pregnancy prior to loss	Number of losses	Gestational age of fetus at time of loss	Months between becoming pregnant again	Age of subsequent child	Gender of infant lost	Gender of subsequent child
1	34	32	No	2 losses	1 <sup>st</sup> trimester and 22 weeks	7 months	10 months	Male	Female
2	37	35	Yes	1 loss	36 weeks	15 months	16 months	Male	Male
3	23	22	No	2 losses, 3 babies	6 weeks and 21 ½ weeks	3 months	2 ½ months	Twins – male & female	Male



4	31	28	No	2 losses	29 week and 7 weeks	9 months and then 4 months	20 months	Male	Female
5	35	32	No	1 loss	38 weeks	12 months	18 months	Male	Female
6	29	28	No	1 loss, 2 babies	41 weeks 6 days	5 months	4 months	Female	Male
7	26	23	No	1 loss	26 weeks	9 months	9 months	Twins – male	Male
8	26	23	No	1 loss	31 weeks	18 months	14 months	Male	Female
9	39	38	No	1 loss	30 weeks 3 days	6 months	6 weeks 2 days	Female	Twins – female

### Theme 1: Support network

All participants reported an overwhelming outpouring of love and support from family and friends as they dealt with their late term pregnancy loss. Participants said they were touched by the selfless, empathetic expressions of kindness shown by many around them. Eight reported their relationship with their spouse strengthened during this time of loss. All women within the study discussed how unexpected friends showed support during this time. Throughout their loss, the process of becoming pregnant again, and during the subsequent pregnancy, participants seemed to gain a deeper understanding of who was truly there for them during their time of need.

P9: Your address book changes and I already knew mine had changed a month out... I was like, yeah, mine's already changed, I think. And I'm like, it's true! Your address book changes, but it doesn't mean that you lose and cut off yourself from everybody. It means you gain a whole different set of friends that get you and that are there for you.

Unfortunately, this experience also revealed who was not supportive during this critical time. Eight participants report accounts of family and friends whom they thought would have

and should have been there to offer support, but were not. This lack of support was shown by not attending the funeral, not calling or sending cards, and making non-empathic comments regarding the loss and their ability to become pregnant again. Participants describe the hurt and devastation that came about due to this lack of support. Throughout this experience, participants report making changes in their support network, deciding whom to keep close and whom to distance from. Participants report that although the lack of support was shown during the time of loss, the distance felt from the loss continued over time.

P5: It affected, it affected everything. I mean, just, I lost friends, I lost a good majority of my family. [cries] We struggle with the way my husband's family has dealt with it. The fact that they don't, they didn't recognize. For instance, my brother... he sent a sympathy card, never even acknowledged that he even existed from that point on... My two sisters, neither of them could manage to come for the funeral. My husband's family, his mom came but only because his aunt paid the plane ticket. His brother didn't come; none of his aunts, none of his brothers sent sympathy cards, nothing.

Another interesting discovery was that new friendships were gained by all participants during this difficult time. Through their pregnancy loss, participants said they connected with other individuals who had either been through a similar experience or were struggling with other pregnancy related issues; whether through pregnancy loss support groups, blogging, or friends who had experienced loss. Due to these similar experiences, participants were able to relate and connect to these friends on a different level. Some participants reported feeling these relationships were the silver lining brought about by the loss. In spite of the unfortunate circumstances that brought about these connections, these relationships contain depth and

longevity that other relationships may lack, perhaps because of the magnitude of the experiences that brought them about.

P8: Through my blog, I met this huge network of women – these angel mommies, uhm, that had gone through very similar experiences that I had, and, we actually... I, I meet with many of these women like every three or four months, the ones that are close enough, and we get together, and we go to lunch or we bring our, our rainbow babies and it's been really neat because out of this really hard tragic experience, I made these amazing friends and these relationships that are really deep.

## **Theme 2: Emotional ups and downs**

Participants report having emotional highs and lows as they continually sought to have a successful pregnancy. Participants attempted to depict this up and down of emotion upon becoming pregnant again with words like, “hesitantly happy”, “cautiously excited” and “anxiously happy”. Some participants described feeling excited about becoming pregnant again, but reluctant to fully relish in that excitement due to their fears and concerns. Other emotional descriptions include: sadness, guilt, anxiety, comfort, and excitement. Participants reported ups and downsexperiencing each of these emotions throughout the loss, the bereavement period, becoming pregnant again and as they tried to bond to their subsequent child, both in utero and after birth.

P3: I was happy, but I was nervous...I was hesitantly happy...I remember in the beginning wishing I was somebody else that could wait, that could be looking from the outside, not having to experience the hardness of it in the beginning and so I was wishing that I could be on the outside and not having to experience the

anxiety and everything that I was feeling.

**Sadness.** Sadness was experienced by all participants after their loss and during the subsequent pregnancy. Examples include, sadness regarding losing a baby, losing their perceived future, and losing their faith in life events working out in the future. As mentioned previously, sadness was also experienced as participants lost relationships due to lack of support. Five participants reported sinking into a depression after the loss. Some participants mentioned feeling pressure to appear happy during their subsequent pregnancy, yet all continued to experience sadness as they reflected on their lost baby. Some participants reported sadness over what could have been; their anticipated future. Some participants reported sadness even after they delivered their subsequent child and stated feeling as if they were always going to be sad about what happened, even though a successful pregnancy occurred.

P3: I didn't want to feel sad anymore, I just wanted it to be done. But, really, it just took time and it was hard in the beginning because I just wanted to know how long it was going to take. I just wanted to know, okay, I can get through these three, six months, a year, and then I'll be done, but it's really, I learned it was really just a process for everything. You don't know how long it's going to take, and some people it takes longer, some people it's a shorter amount of time, and still I feel sad at times, it, that never goes away, but it was constant in the beginning, I was constantly just sad, and...um... I cried a lot, and I'm not really a crier in the first place, but...um... yeah, so, so, that was hard.

**Guilt.** Guilt was a common emotion reported throughout the experience. Four participants reported not knowing the cause of death and questioning whether or not they did something to contribute to the death. One participant described feeling as if she should have

been sadder about her loss than she was, and experienced guilt over her lack of sadness. Participants described feelings of guilt throughout the connection process in utero and after birth. Some participants said they felt as if they were dishonoring the child they lost by being excited or loving the new baby.

P4: I think that nobody warned me about that guilt that was going to happen, and guilt, too, about mothering a living child and the guilt that I feel towards my son [that died], too, like this. I think that there was a little bit of part of my hard time connecting with her at the beginning was that I felt a little bit, like, that was dishonoring my son.

**Anxiety.** Several emotions were tied to this felt anxiety, including: worry, fear, and concern. Participants reported feelings of anxiety as they contemplated whether to become pregnant again. Seven participants reported struggling to connect to their baby during the subsequent pregnancy, out of fear this pregnancy would also end in loss. Four reported increased worry due to their age and their planned timeline. Because of their age, participants reported feeling they needed to become a parent sooner rather than later due to health reasons and timeline concerns.

All participants reported heightened anxiety during the subsequent pregnancy, especially as they neared the time of their previous loss. Five participants reported having panic attacks during delivery, feeling certain that this pregnancy was also going to end in loss. Participants reported heightened awareness through research and joining pregnancy loss groups, which added to their anxiety. Participants shared that becoming more aware, via support groups and doing their own personal research on loss, made them more cognizant of the many things that can go wrong during pregnancy. This allowed participants to become more familiar of potential

problems that could arise during pregnancy, amplifying participant's worries.

P7: I worried about just him dying for no reason. I worried about a cord accident, cause those can happen. I worried about going into pre-term labor. Basically, any slew of pregnancy, things that can go wrong. I've known people that they have -- because after losing the twins, you know, I joined different groups online and I read different stories, different blogs and so on, which is good 'cause it's support. But it's hard because you know everything that can happen....I honestly did not believe he was gonna make it out alive. The morning of my C-section I had a, I was having a panic attack because I just felt like it's all going to be over. I, we're going to end up burying another child... and I didn't realize until that morning, how anxious I had been the whole time.

All participants reported an increased sense of worry as they navigated through their experience. Five participants discussed how their pregnancy loss not only increased their anxiety regarding their subsequent pregnancy, but also increased their anxiety about others. Participants reported worrying that their spouse or other family members were going to die, in addition to worrying about other women who were pregnant; they worried that something would happen to their babies.

**Comfort.** Comfort was experienced intermittently throughout this process by several of the participants. Some described a certain point within their pregnancy where they recognized this felt sense that everything was going to be okay. Several things contributed to this felt sense of relief. For example, participants reported feeling their deceased baby was watching over them and their siblings throughout the pregnancy, delivery, and after birth. Four participants reported feeling their religious beliefs enabled them to gain a sense of peace and comfort during certain

periods throughout the process. Participants who lost their baby prior to full term reported feeling more comfortable and confident as their pregnancy progressed beyond their gestational date of loss.

P8: I did a lot of prayer and, and those kinds of things, and as I got further along, probably, I don't know, around 25 weeks or so, I kind of got a, a sense that everything was going to be okay... and I loved my baby the whole time, but that was when I really started, uhm, getting excited and started, you know, getting nursery stuff, and getting the clothes and things.

**Excitement.** All participants reported feeling joy and excitement during at least one point throughout the process. For two participants, it was not until they held their subsequent child that they were able to experience this feeling. Some participants reported having fleeting moments of excitement as they found out they were pregnant and throughout their pregnancy. Four participants reported feeling as if their excitement increased as the pregnancy progressed and as doctors reassured them that their baby was healthy.

**Forming a connection.** A large element of the participants' navigation through their emotional ups and downs was making sense of their felt connection towards their baby that died and their subsequent child in utero and after birth. Eight of the participants reported having a strong connection with their deceased baby. Some participants reported difficulty connecting with the subsequent child due to this felt connection. Some experienced guilt and felt by connecting to the subsequent child, they would be dishonoring their deceased child.

P6: I think I didn't bond. I was still so attached to the idea of my first baby, a baby girl. At the hospital they gave us pictures after she was born and I think like that I would look at those daily. So I felt a lot of attachment to the baby that I had

lost as I was growing the second baby. And I knew that I didn't wanna lose this baby, but it was more of my mind knew that because I didn't feel emotionally connected to this baby. I was still grieving too much and feeling growing attachment to the idea of my daughter, who I still feel is very real, you know?

Despite describing struggling to form connections with the subsequent child; some participants reported that their connection did begin to grow after significant milestones within the pregnancy, such as: hearing the heartbeat, the first sonogram, or finding out the sex. For most, once the acknowledgment came that this was going to be a different baby, they were able to begin the process of bonding. Seven participants reported doing things intentionally to try to increase the bond with their subsequent child while in utero. The rationale behind the intentionality for some was that if this pregnancy also ended in loss, they wanted to have memories of this baby. Four participants reported a natural feeling of connection towards their subsequent child while in utero, whether they wanted to connect or not. All participants reported feeling more connected once the child was born.

Some participants stated fear and worry impacted their ability to form an immediate connection to their subsequent child while in utero. Two of the participants reported a continual struggle to feel connected to their babies even after birth. Both of these participants reported currently having a strong connection with their babies, stating that it took some time after giving birth for the connection to form. All participants reported being connected to their baby/babies at the time of the interview.

P7: I did some things to try to connect with him more because on one hand, I was afraid to connect, but on the other I thought, well, if I only have this pregnancy with him, then I need to connect as much as possible because I won't get this time



back. So I gave him a nickname and would call him that and then seeing him on the ultrasound helped a lot. And once he started moving, I would say I bonded with him.

P9: I didn't feel that connection, like, my mom asked me afterwards, oh, did you hold them in the OR and everything? And I'm like, no, I didn't want to. I just, a part of me was like, medically, I wanted them to just be taken care of by the doctors in case there was anything wrong. I wanted to make sure that they just went straight to the doctors to get their medical care.... And I think the first 10 days or 2 weeks it's true, it took some time to bond with them. I wasn't depressed like I was taking care of them, I was getting up and going through the motions and I was finding them entertaining and, you know cute and all, but I think, I'd say, it took me the first two weeks to kind of just focus on myself and get used to the fact that my family has doubled and {baby that died}'s not here. And I was sad about {baby that died} and I was thinking about {baby that died} a lot in the first two weeks.

In sum, eight participants reported experiencing a connection to the subsequent pregnancy while in utero. The participant that did not feel connected throughout the entirety of her pregnancy was aware of this lack of connection and felt reassured that she would connect if the child lived after birth; once she gave birth, she felt an immediate connection to her baby.

### **Theme 3: Coping**

All participants reported doing certain behaviors to get through the loss and manage the spectrum of emotions experienced while becoming pregnant and during their subsequent pregnancy. A variety of coping mechanisms were reported to deal with the emotions

experienced. Some of the commonly mentioned techniques were: journaling, blogging, talking with friends and spouse, seeing a therapist, relying on religious beliefs and practices, keeping busy, meditating, exercising, doing research, drinking, sleeping, and numbing. All participants reported having frequent check-ups during their subsequent pregnancy.

P1: The journaling and that kind of individual processing...knitting and hand work helped, it really kept my hands busy and HGTV and I became really good friends... I tried to like, every time that I would feel like the fear coming up, being really conscious about breathing. I also meditate, haha, I didn't mention that before, but that helps as well, in terms of breathing exercises and that kind of thing.

P5: I couldn't leave the hospital without all these drugs that my doctor gave me, which I didn't take, but there was a point for my husband. All I wanted to do was sleep, so he would go in and even though I hadn't taken any of these medicines, he'd remove them out of the room when I was napping because he was afraid [sobs] that I was going to do something. I drank a lot of alcohol during that time.

Four participants reported not recognizing the impact the loss had on them and their subsequent pregnancy until after the baby was born. Compartmentalization and focusing on the pregnancy rather than the baby were techniques used to manage the stress and anxiety.

P2: I didn't realize how stressful it was for me I think until after...I didn't let myself, I was kind of that old version of me where everything was fine. In fact, anytime anyone asked me how I was doing, my answer was peachy. That's what I told everybody, peachy. haha, just peachy, which meant, really don't ask such silly questions... I probably compartmentalized it, put it in like a little ball and

stuck it into the back of my head and just kind of tangibly made it untouchable.

**Future preparations.** Participants reported feeling there were certain techniques that would help them deal with the loss and the emotional ups and downs. For example, some participants reported feeling that mentally preparing themselves for the possibility they could lose their subsequent baby; prepared them so they would not be as surprised if and when they lost the baby. This mental preparation, preparing for the worst, seemed to help participants find a balance between worry and hope.

All nine participants reported a desire to have another child shortly after experiencing the loss. Some participants reported hoping if they had another child it might take away or replace the hurt and sadness they were currently experiencing.

P3: I felt like if I got pregnant then that would help me with the loss as well and I guess in a way it did... I struggled with, did I want to get pregnant again because I wanted to have them, to be pregnant with them again, or did I want to be pregnant with another child?

Three participants reported a desire to have waited longer prior to becoming pregnant again in order to further process the loss and grief they experienced.

**Changes between pregnancies.** As part of dealing with the loss and the emotions experienced throughout the subsequent pregnancy and birth, participants reported doing things differently after the loss. These differences ranged from the way they celebrated holidays to the way they interacted with family and friends. Seven participants talked about changes specifically related to the pregnancy such as: not wanting a baby shower, buying things for their baby while in utero, preparing the nursery early, and announcing their pregnancy on social media sites.

P6: I didn't go shopping for little baby clothes. Umh, I didn't really pull out my baby things and get the nursery ready until the very last month. So, yeah, I didn't make the gradual preparations. I just put it off as long as possible and then when I did do it, it was more out of, okay, I know I need to do it, as opposed to, I really want to do this and I want to look at all my little baby things. I didn't have a baby shower the second time, even though people were very sweet and wanted to throw me a shower. I said no thank you. ... I didn't post anything on Facebook or send out a big announcement email like I did with my first pregnancy.

Four participants reported feeling that the loss impacted rituals around eating and exercising. Some participants reported not caring as much due to the fact they had been extra cautious and aware during the first pregnancy and it still ended in loss; others reported hyper vigilance regarding what they put into their body and the activities in which they engaged.

P4: You know before I had been, like, all organic, everything natural. This time, I was like give me preservatives. Haha, so I lived on Carnation instant breakfast and peanut butter crackers because I was so afraid of anything... So I just ate nothing but cooked and very processed foods, haha. Which, you know, is the complete opposite of how my first pregnancy was.

Another way participants dealt with their experience of loss was exemplified through the way they celebrated holidays and religious traditions. Three participants reported feeling as if the loss impacted how they now interpreted certain traditions and holidays. These participants reported feeling as if others would not understand their newly found meaning for the holiday. As a result, they chose to celebrate these occasions individually rather than in the customary group.

P1: So, [the loss] really changed that holiday's taste until even this past year, we

have her and we were getting ready to go for prayer on that day, we just like, we couldn't get in the spirit that we knew people would be in at those services ... we just decided to do our own kind of little ceremony at home.

#### **Theme 4: Moving forward**

**Finding your new normal.** As participants reported their process of moving forward after the loss, they discussed the losses impact on their behaviors and their sense of self. Several women reported feeling like a completely different person after experiencing their loss; feeling as if they will forever be changed because of the loss.

P2: You need to find the new version of yourself now is what you need to do. You need to let go of the version of yourself that was the before person and figure out who the after person is because it's not the same and that's okay. Umm, so that would be my thing, is to let yourself be as sad as you need to be, reach out to people around you, be honest about how you are feeling, but figure out who the new person is that you need to be because you can't be the same person and you kind of need to let that person go. And mourn that version of yourself because you're never going to have that person again.

P5: I think the biggest thing is that, you know, I'm a different person. Like I'm forever changed, just like anybody who, you know, becomes a mother for the first time, like, but it's changed in a different way.... I compare it to, actually my therapist told me, she's said it's like, like having a rock in your shoe and you have to learn to walk with that rock. And you can't change the shoe and the rock's never gonna get smaller, but eventually you will learn to walk with the rock in your shoe. And that's probably the biggest thing; it's like anybody who's trying to

get back to the way they were or to normal is that there's a new normal you will find... I mean, relationships that you thought were rock solid all of a sudden are not, you know, things you think will weather the storm don't. Things that you think will be killed by the storm blossom...It's more about figuring out what your new normal is.

**Advocating for self.** Six out of the nine participants reported feeling a need to advocate for themselves after the loss. The participants talked about being more assertive regarding their medical care in addition to asserting themselves around their peers, coworkers and family. Five participants changed doctors or practices after the loss due to perceived lack of compassion. The loss seemed to empower several participants to become more honest and direct regarding their needs and feelings.

P1: But in terms of the feelings about the midwife, midwifery practice, I felt really hurt, betrayed, and um, it taught me a lot about speaking up, you know, I trust people's experience and their knowledge a lot and so, um, it helped me kind of realize that I needed to speak up more... there were a few moments in which I really spoke up and I did it on purpose.

**New perspectives on life.** Seven participants reported feeling as if the loss gave them a new perspective on life. The loss gave these participants a new appreciation for life in addition to recognition of how fragile life can be. Participants reported becoming more grateful for the small things and more appreciative regarding the good things in their life. Some participants reported a desire to cherish their time and memories with their subsequent child even more because of the loss.

P3: I think because I lost the twins, I know that, and it was so sudden and without

warning, I know that life is precious... you can lose a life in a second without even knowing, and you know I had never experienced any death in my family before and so it was the first time for me and I, so I think now I realize how much more precious life is.

P7: I don't take things for granted any more, like happiness and, umh, how much I love my husband and {living son}, and I noticed that I appreciate life more and happiness more and don't -- I understand that being able to have a child is a huge blessing.

**Increased empathy.** After experiencing a pregnancy loss, a few of the participants reported feeling increased empathy towards others who were grieving, whether through pregnancy loss or other life events. Participants mentioned feeling more empathetic towards others who were struggling with life events such as breaking up with a partner, having an illness, or experiencing the death of a loved one.

**Lost blissful ignorance.** A common notion mentioned by participants was the idea that after experiencing a loss, you lose the innocence that accompanies pregnancy. Five participants discussed not feeling connected or being able to fit within the normal pregnant category of women who had not experienced loss because of their 'blissful ignorance' which was now gone for the participants.

P5: So with {baby that died} it was kind of this, you know, ignorance is bliss. Like, everything was fine, everything was wonderful, you know, it was all about the baby shower, it was all about, you know, cute maternity clothes. And with {baby that's living} it was all about appointments and tests...I sure wish [chuckles]that my ignorance would not have been shattered because, like, the way

I was with {baby that died} compared to {baby that's living}, it's just being, you know, being very, very worried. Yeah, ignorance is bliss and I wish I had it.

P7: One of the biggest things I saw is that I wasn't the giddy-pregnant person. I had that during my first pregnancy. Umh, I planned for things and I bought things for him. But I never, you know, when people are planning when they're pregnant and they have like a baby shower to look forward to, and the baby to look forward to, and they kind of take those things as given, that they are going to happen and I never really did.... so I wasn't -- I call them the "happy pregnant women". I wasn't one of those. I tried to be, but I didn't have the innocence that comes with a pregnancy.

**Acceptance.** Participants reported the need to accept that life and death is beyond their control. They also reported acknowledging that bad things happen to good people in addition to gaining acceptance towards all of the emotions and mixed feelings that come as a result of loss. Gaining this acceptance seemed to be a process rather than a one step event for the participants.

P1: I was very much at peace, I think except for like around significant milestones, but I was very, Zen about the whole experience. Um, and I think a lot of it had to do with the fact that you just have to trust. It's about just trusting and letting go of the outcome...we are praying that his baby doesn't die and it's not really in our control.

Another piece of the acceptance process for many participants was recognizing that moving forward does not mean forgetting about the loss but having the ability to move on, even though the loss occurred. This acceptance was achieved by participants in different ways, including religious and spiritual beliefs, created traditions, donations in honor of their deceased



baby, and remembering their lost child by talking about them and carrying on their memory.

Four participants shared stories about donating, adopting, or creating something permanent in memory of their lost child.

P9: I devoted my year of 2013 to {baby that died}'s memory, I got to heal myself. I got to figure out ways to develop family traditions that we can incorporate her into. I ordered stockings for her, a stocking for her with her name on it. Umh, we went to a Butterfly Release at the Compassionate Friends for her... the hospital, Virginia Hospital Center had their first ever baby loss, umh, for the, umh, month of September-October and they did their first Baby Loss ever ceremony and we planted tulips and went to the ceremony, had tulip bulbs that will be springing this spring... all those things that I got to for the healing process, umh, and to put into my scrap book for her and into her little memory chest that I created for her.

Carrying on the memory of their deceased child not only enabled acceptance, but also seemed to help parents navigate the process of bonding to the subsequent child without the guilt of dishonoring the child that had passed. Five participants reported feeling as if the baby they lost is connected to their subsequent child or a current pet.

P1: I mean we talk to her about her brother but we also believe like, that when, especially young kids, there are really connected to the unseen. So sometimes when she is laughing in her sleep or whatever you know, we'll whisper in her ear, you know, say hi to your brother for us.

## **CHAPTER 5: DISCUSSION**

As reported in existing research and the current study, experiencing a pregnancy loss can be considered a very traumatic experience for those involved ((DeBackere et al., 2008). All

participants within this study reported experiencing sadness and grief due to the loss, in addition to anxiety and trepidation during the subsequent pregnancy. In spite of the grief, guilt, and heartache experienced, all participants within this study went on to have subsequent children within 18 months of their loss; with the mean length of time between loss and subsequent pregnancy being 9.3 months. This is consistent with the existing research which reports that the majority of women, 80-86% who experience a loss become pregnant again within 18 months of their loss (DeBackere et al., 2008; Gaudet, 2010).

Some participants within this current study reported a desire to have waited longer before becoming pregnant again. Existing research suggests that not properly or fully dealing with the grief prior to the subsequent pregnancy may impact the connection formed during the subsequent pregnancy and after birth (DeBackere et al., 2008; Gaudet, 2010; O'Leary 2004). Contrasting this finding, some participants reported feeling that becoming pregnant again actually helped them process the loss and begin their journey of moving forward, enabling them to bond with the subsequent child.

The results from this study suggest that several emotions are present due to the loss, impacting the connection formed to the subsequent child in utero and after birth. Eight participants reported having a strong connection to their baby that died and reported difficulty navigating the connection process with the subsequent child as a result of their felt connection to their lost baby. This is consistent with Uren and Wastell's (2002) study suggesting that a woman's grief and resolve to maintain an emotional closeness to their deceased child attests to the strength of their formed prenatal connection.

Existing research suggests that women are able to form connections prenatally and propose that specific behaviors observed prenatally are correlated with attachment style

established post birth (Gaudet, 2010; Heller & Zeanah, 1999; Rackett & Holmes 2010; Zimmerman & Doan, 2003). Five participants fell within this category. Four participants had differing connections while in utero to immediately after birth. Seven participants within this study reported forming a bond with their subsequent child while in utero. Of these seven, five felt a strong connection immediately following birth. The two that struggled connecting in utero also expressed a strong connection towards their subsequent child immediately following birth. Two of the seven that reported feeling a strong bond towards their subsequent child while in utero, stated they lacked connection immediately following birth. One mother reported it took two weeks for the connection to fully form, Another mother reported it took her three months before she was able to connect, attributing the time to her untreated post-partum obsessive compulsive disorder (OCD). All participants reported having a strong bond to their subsequent child at the time of the interview, being consistent with Zimmerman and Doan's (2003) study that suggested that although connecting to the fetus prenatally is positively correlated with secure attachments after birth, women can still form these attachments after birth with their infant regardless of connection level observed prenatally.

Five participants within this study employed what existing research calls 'emotional cushioning'. Cote-Arsenault and Donato (2011) define emotional cushioning as, "a self-protective mechanism that women use to cope with anxiety, uncertainty, and vulnerability" (p. 81). Emotional cushioning enables women to "be pregnant in the moment, maintain their current roles and relationships, and not focus on the uncertain future" (p. 82). According to Cote-Arsenault and Donato, the goal of emotional cushioning is to avoid any potential grief that may surface if this pregnancy too ended in loss. This is done by not focusing on the uncertain future and the developing fetus, but rather on the pregnancy itself. Four of the five participants

that exhibited emotional cushioning, reported not recognizing the level of anxiety and the impact it had on them and their subsequent pregnancy until after the baby was born. The other participant within this group that exhibited emotional cushioning reported being fully aware that she was using this technique and reported being okay with it, knowing she would connect once she delivered a live baby.

Seven participants reported recognizing their degree of connection may have been different between pregnancies and report doing things intentionally during the subsequent pregnancy to try to increase their bond to their baby in utero. These participants reported a desire to connect in spite of the fact that they may lose their baby. These participants reported recognizing that if this pregnancy also ended in loss, they wanted to have these memories of the baby while in utero in case that is all the memories they would have with this child. This concept was consistent with much of the existing research regarding intentionality (Cote-Arsenault & Donato, 2011; O'Leary & Warland, 2012). This intentionality expanded beyond the pregnancy and the growing fetus. It encompassed how participants interacted with others, how they now perceived life, and how they advocated for themselves.

In line with the existing research were the coping behaviors exhibited by the participants within this study. Increased doctor visits, journaling, conducting research on pregnancy loss, and seeking out support groups were among the coping strategies identified both by participants and within the research (Côté-Arsenault et al., 2006). The delay in preparations, in addition to the aforementioned changed behaviors is also in line with the existing research. Unique to this study were the expressive descriptions of unhealthy coping strategies utilized by participants such as, alcohol consumption, OCD behaviors, excessive shopping and eating, in addition to depressive symptoms. In existing research depressive symptoms such as: sleeping, eating, lack of desire,

sadness, and anxiety were discussed but lacked the rich descriptions provided by the participants within this study.

Consistent with the research was the concept that all participants reported experiencing anxiety during their subsequent pregnancy which added to their struggle in forming a connection. Participants, who did not go full term, did report feeling that their anxiety lessened once they passed their gestational age of loss with their previous pregnancy, therefore increasing their hope. They attributed hope to forming the connection and anxiety to their lack of connection. The idea that anxiety lessens after surpassing the gestational age of previous loss is consistent with Tsartsara and Johnson's (2006) findings. The two participants who were full term as well as three others whose babies died during delivery, reported their anxiety heightening as they approached their due date and during delivery. This is also consistent with the existing research (Cote-Arsenault et al, 2006).

It is important to note that four participants reported seeking medical interventions to help them conceive. Three of the participants used these medical interventions for both the pregnancy that ended in loss and for the subsequent pregnancy. One participant relied on in vitro fertilization (IVF), one participant utilized intrauterine insemination (IUI), and one participant used ovulation drugs. Another participant reported going in for fertility testing which resulted on her husband being put on medication to increase his testosterone which dropped due to the trauma of the loss. Although these four participants' experiences were consistent with the five participants who did not experience medical interventions to conceive, utilizing medical interventions could increase the anxiety experienced by these participants. Having a pregnancy end in late term loss after going through medical interventions, could also add to the sadness and grief experienced from the loss. The two participants who used IVF and IUI also reported

concern over their age as a factor that may have contributed to their experience.

One notion mentioned, yet not included within the results, was the societal expectations experienced by the participants within the study. This was a common concept brought up in much of the existing research; therefore, the primary researcher assumed it would be prevalent in many of the interviews. In spite of the frequency of this concept within the existing research, only two participants brought up societal expectations without being probed by the interviewer. Of the remaining seven, five reported not experiencing pressure from society to act in certain ways. Much of the existing research mentioned western culture and the societal pressure women felt to appear happy, excited, and connected to the fetus in the subsequent pregnancy in spite of the loss (Cote-Arsenault & Donato, 2011; O’Leary, 2004). Of the four who reported societal influence, the participants attributed this experience to non-empathic comments from others that implied how these participants should think, feel and behave after the loss and during the subsequent pregnancy. Participants were told “everything’s going to be fine” during the subsequent pregnancy and reported that these types of comments reinforced their feeling of being misunderstood and contributed to their feelings of lack of support from family and friends. This is consistent with Jaffe and Diamond’s (2011) qualitative study exploring the experience of pregnancy and parenthood after a loss. Jaffe and Diamond’s results reported women felt that such societal advice not only minimizes the grief experienced from the loss, but implies the connection felt towards the baby lost was meaningless (Jaffe & Diamond, 2011).

### **Limitations**

Several limitations to this current study must be noted. The sample for this study was modest in size and lacked diversity. All participants were in a committed, heterosexual relationship, were married at the time of conception, and had planned to become pregnant. All

participants within this study identified as spiritual, eight reported being religious. Seven participants were Caucasian. All participants had only one subsequent child following the loss. Only one participant had experienced a live birth prior to the loss, although the losses impact on her individually, within her relationships and her subsequent pregnancy were in line with the other participants. Further research examining experiences of having a child prior to a loss would be of value to gain a more in depth understanding of connecting to a subsequent child following loss.

**Participant's openness.** Another potential limitation within this study was the methodology used to attain participants. The primary researcher used a convenience sample and relied on word of mouth to gather participants for the study. Five of the nine participants reported they considered themselves to be open individuals. They reported feeling this openness was an asset in processing their grief and becoming an advocate for their own needs after the loss and during the subsequent pregnancy. Three other participants also alluded to the fact that they felt comfortable talking about the loss and how it impacted them, which could be a reason for their participation within the study. This felt openness in talking about the loss, as reported by eight of the nine participants, correlated with how they processed the loss and how it impacted them personally and interpersonally. It also correlated with how they coped with their emotions that arose during the subsequent pregnancy and their felt connection to the subsequent baby. Further research looking at others with different personality traits would help researchers gain a deeper understanding of the impact of pregnancy loss on connecting to the fetus during a subsequent pregnancy.

### **Future Research**

This qualitative study provides an extensive understanding of the influence of pregnancy

loss during the subsequent pregnancy and beyond. This study aimed to identify the impact of the loss on the felt connection to the fetus during the subsequent pregnancy in addition to coping strategies used to manage the fears and concerns that arose due to the loss. Continued research is warranted to further understand the overall impact on, not only the woman herself, but her partner, her family members, and her subsequent children. Future research should expand to account for the impact of the loss on the marriage and throughout all future stages of life. Future research assessing what participants would do differently could enable researchers and clinicians to educate others going through such an experience.

Future research should expand the sample population to include unmarried participants as well as participants who were not planning on becoming pregnant and then experiencing a loss. All participants within my study were in committed relationships and discussed their intentionality to get pregnant. Without the perspective of different contexts within relationship status and desire to have a baby, researches can only speculate regarding the overall essence of pregnancy loss and its impact on the individual, their relationships, and the connection to the fetus during the subsequent pregnancy.

It would be beneficial to conduct a study gaining the perspective of the impact of a pregnancy loss on parenting styles throughout childhood and into adolescence. It would also be beneficial to gain the perspective of the subsequent children following a loss and how they feel their life has been impacted because of their mother experiencing a loss prior to their existence. Results from these studies would provide clinicians with insight into the overall experience of a late term pregnancy loss and identify possible risks or setbacks regarding coping and parenting styles adapted after a loss. Clinicians could use this data to design interventions to help women grieve during a loss. They could also use it to develop positive coping strategies when in a



relationship after a loss and while parenting their subsequent child/children.

### **Clinical Indications**

This study identified therapists as an integral part of participants grieving, gaining acceptance, and processing their loss. Six participants reported seeing a therapist after experiencing their loss. Five of the six participants reported it being beneficial. Participants reported the benefit of therapy in processing their loss, finding meaning from the loss, and developing coping mechanisms to manage the anxiety that surfaced during the subsequent pregnancy. Two participants reported that therapy was crucial in maintaining a healthy marital relationship while navigating through a loss and becoming pregnant again.

The themes identified within this study have important clinical implications for therapists. This study illustrates the impact of a loss on participant's relationships. Not only is it something that the participant personally needs to process, it also impacts relationships within the family system, with their partner, other children, their extended family, and their friends. Therefore, clinicians should proactively explore how the loss is impacting these relationships, potentially bringing in different combinations of the family system to gain a complete understanding of the impact on the system as a whole.

Coping strategies were utilized by participants to deal with the loss and was one of the four themes identified within this study. All participants reported utilizing specific coping strategies to help manage their anxiety throughout the loss and the subsequent pregnancy. Some participants reported using coping strategies they felt were not healthy to manage the hurt and fear that surfaced because of the loss. Clinicians alike would be remiss to not properly assess for some of these potential risky coping strategies being used such as, drinking, excessive shopping, bingeing, and excessive exercise, all of which were mentioned within this study. Clinicians

should also be aware of the potential for depression, whether situational or chronic, following a loss. . Clinicians should educate their clients on risk factors that are possible following a loss in addition to potential relationship difficulties they may experience.

Several participants reported feeling their grief should be handled and processed over a certain period of time. It would be beneficial for clinicians to help educate participants regarding loss and the grieving process. Clinicians should help participants gain awareness that experiencing a loss is something they will never forget, but they can learn to manage over time with adaptive coping techniques.

All participants reported feeling the loss changed them personally and their views on life. Several participants recounted their own discovery of finding their new post-loss self. Therefore clinicians should be aware of this new normal clients will be navigating. Clinicians would be well advised to help clients who have experienced a loss understand that changes are common after such an experience. Feeling that you can go back to who you were prior to the loss is a fallacy. This process of acceptance requires time and self-awareness as they move forward towards their next phase of life.

Finally, this study provides clinicians unfamiliar with pregnancy loss a brief look into the overall impact that a loss has on the individual, the family system, and their social connections. This study illustrates the level of anxiety present when pregnant with the subsequent child and how the experience can bring to light many of the hurts and fears experienced during the loss. Clinicians should be encouraged to recognize that each participant's experience is unique. To fully understand the phenomenon at hand, clinicians need to go back and understand the details surrounding the loss, how the loss impacted the client initially, during the process of becoming pregnant again, and throughout the subsequent pregnancy. Normalizing the client's feelings

along with some psycho-education and assessment, may be an integral part of the therapeutic process. When possible, clinicians should involve family members in the therapeutic process that played a significant role in supporting the individual as well as those who were impacted by the loss.

### **Conclusion**

In conclusion, anyone, regardless of ethnicity, age, or health is susceptible to experiencing a pregnancy loss (Robinson et al., 1999). As time progresses, society is beginning to recognize pregnancy loss as an impactful phenomenon that needs to be acknowledged and addressed in order for healthy grieving to occur (Gaudet, 2010). In this study, nine participants reflected on their experience of pregnancy loss and the impact it has had on their ability to connect to their subsequent child in utero and after birth. The results of this study attest to the impact that loss has on participant's relationships, their perspectives on life, and their felt connection to the fetus during the subsequent pregnancy. The results of this study also indicate the importance of family, friends, doctors and clinicians in recognizing the impact of such a loss, and the necessity to show support and love to those impacted by the loss during the grieving process and throughout subsequent pregnancies.

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## Appendix A Recruitment Flyer

Are you among the 20% of women who have experienced pregnancy loss? Do you want to share your experience of loss and the influence it had on your subsequent pregnancy?



### Research Topic

For my thesis, I am currently recruiting participants to explore the impact of a late term pregnancy loss on the connection developed with the fetus during the subsequent pregnancy.

### What does my involvement within the study entail?

You will be asked to complete an interview in which you reflect on your experience of loss and the influence it had on you during your subsequent pregnancy.

### Where at?

The interviews will be conducted at Virginia Tech's Northern Virginia Center (Falls Church, VA) or at a location more convenient for you.

### Who to Contact?

If you would like more information or would like to participate, please contact:

**Mandaran Labrum**  
[mandaran@vt.edu](mailto:mandaran@vt.edu)  
435-770-1821



### How do I know if I am eligible to participate?

*To participate you need to be:*

- Over the age of 18
- Currently not pregnant
- Within the last 5 years, you experienced a late term pregnancy loss
  - For the purposes of my research, a late term pregnancy loss is defined as loss of the fetus from 20 weeks gestation to 28 days post birth
- You have had a successful pregnancy since experiencing your loss
  - For the purposes of my research, a successful pregnancy is defined as a pregnancy resulting in a live child to raise
- The child from the successful pregnancy is currently under 24 months of age.

## **Appendix B**

### **Telephone Screening Script**

The following script was used when calling participants who had emailed primary researcher showing interest in the current study.

During the telephone call, each participant was provided the following information:

The purpose of this study is to gain a deeper understanding of the influence of a late term pregnancy loss and the coping strategies used when developing a connection to the fetus in a subsequent pregnancy. You would be asked to complete a brief demographic questionnaire and a 60-90 minute face-to-face interview. There are minimal risks involved in participating in this study. Potential risks include experiencing emotional distress or discomfort when answering some of the interview questions or while reflecting on your experience. The benefits of participating may include you feeling empowered through sharing your own experience and offering advice to others. You may also feel a sense of pride knowing you are contributing to research that would increase the awareness of helping professionals and the general public regarding pregnancy loss and its impact on the subsequent pregnancy. Confidentiality will be maintained throughout the study. The responses you provide regarding the research questions will not have any identifiable information linked to them. The only time I would break confidentiality is if you were threatening to harm yourself or others or if there was reason to suspect child abuse or neglect. While it is my hope that you will complete the study, you will not be penalized if you choose to stop participation at any time throughout the study. For participating at any length, you will receive a list of resources that may aid you in further processing and coping with your experience. At this time, do you have any questions about the study or the requirements of participating?

Okay, the first step of the study would be answering a few questions to determine your eligibility; would you like to participate in this first step? (If participant's answer is yes, continue with eligibility questions)

List of questions to ask that determine eligibility within the study:

1. Are you over the age of 18?
2. Are you currently pregnant?
3. For the purposes of my research, a late term pregnancy loss is defined as loss of the fetus from 20 weeks gestation to 28 days post birth. Within the last 7 years, have you experienced a late term pregnancy loss?
4. For the purposes of my research, a successful pregnancy is defined as a pregnancy resulting in a live child to raise. Have you had a successful pregnancy since experiencing your loss?
5. Is the child from the successful pregnancy under 48 months of age?
6. Are you currently parenting that child?

If participants reported that they did not want to participate or if they did not fit within the criteria for my study, they were thanked for their time and interest and were sent the list of resources.

If participants fit within the research criteria, an agreed upon appointment time and place were set to conduct the interview, either face-to-face or via Skype.

**Appendix C**  
**Informed consent**

**VIRGINIA POLYTECHNIC INSTITUTE AND STATE UNIVERSITY**  
Informed Consent for Participants  
in Research Projects Involving Human Subjects

**Title of Project:** The Influence of a Late Term Pregnancy Loss on Coping and Developing a Connection during the Subsequent Pregnancy

**Primary Investigator:** Angela J. Huebner, Ph.D.

**Co-Investigatory:** Mandaran L. Labrum, B.S.

**I. Purpose of this Research Project**

The purpose of this study is to gain a deeper understanding of the influence of a late term pregnancy loss and the coping strategies used when developing a connection to the fetus in a subsequent pregnancy. We are interested in learning about the influence of such a loss during the subsequent pregnancy in addition to ways in which it might have impacted the connection you had with your baby during the pregnancy. In addition to identifying the influence of such a loss, we also intend to explore and identify coping strategies used to either increase or withhold such connections. The results will be used for co-investigators master's thesis and potentially publication.

**II. Procedures**

You will be asked to complete a brief demographic questionnaire before beginning the interview itself. Following the questionnaire, you will be asked to participate in a face to face interview with the co-investigator. The interview will last approximately 60-90 minutes and will be audio recorded. The research questions will include information regarding your previous pregnancy loss, your subsequent pregnancy and the influence the loss had on your felt connection during the subsequent pregnancy. The interviews will take place at the Northern Virginia Center or at a location more convenient to you.

**III. Risks**

There are minimal risks associated with participating in this study. During the interview, you may experience emotional distress or discomfort when asked to discuss pertinent issues relating to your previous loss and/or your experience during the subsequent pregnancy. The co-investigator will offer a 10-15 minute debriefing session after the interview to discuss any distress that may have risen during the interview process. You will also be provided with a list of resources if you wanted further support.

#### **IV. Benefits**

By participating in this study, you may feel empowered by sharing your story and offering advice to others who may be going through similar experiences. You may feel unburdened and relieved due to processing your experience. You may also feel a sense of pride and gratification knowing you are contributing to research that will heighten social awareness and helping professional's awareness of pregnancy loss and its influence on the subsequent pregnancy. No promise or guarantee of benefits has been made to encourage you to participate.

#### **V. Extent of Anonymity and Confidentiality**

Your confidentiality will be preserved throughout this study. This means that we will not tell anyone what you say during your interview. No individuals outside of the research team will have access to your interview. The interviews will be transcribed and at that time, all identifiable information will be omitted and replaced with an identification number assigned to you by the co-investigator. The key code with your name and this informed consent form will be kept separate from your transcribed interview; both will be held in separate locked files accessible only to the research team. Once all interviews have been transcribed and checked for accuracy, the audio recording will be destroyed. Names will not be used on any results developed by the research team. At no time will the researchers release identifiable results of the study to anyone other than individuals working on the project without your written consent. The only exception to breaking confidentiality is if you reported to harm yourself or others or if there is reason to suspect child abuse or neglect. It is possible that the Virginia Tech (VT) Institutional Review Board (IRB) may view the study's data for auditing purposes. The IRB is responsible for the oversight of the protection of human subjects involved in research.

#### **VI. Compensation**

You will not be monetarily compensated for participating in this study. You will be provided with a list of resources pertinent to the research topic.

#### **VII. Freedom to Withdraw**

Your involvement in this study is completely voluntary. If at any time during the study you feel as if you would like to end involvement you may do so without penalty. You will be provided a list of resources regardless of length of involvement within study.

#### **VIII. Subject's Consent**

I have read the Consent Form and the conditions of this project. I have had all my questions answered and I hereby acknowledge the above and give my voluntary consent:

Participant's Name (please print): \_\_\_\_\_  
Participant's Signature: \_\_\_\_\_ Date \_\_\_\_\_

## **IX. Questions or Concerns**

If you have any questions about this research study, please feel free to contact:

Angela J. Huebner, Ph.D.  
Primary Investigator

703-538-8491/ahuebner@vt.edu  
Telephone/E-mail

Mandaran L. Labrum B.S.  
Co-Investigator

435-770-1821/mandaran@vt.edu  
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David M. Moore  
Chair, Virginia Tech Institutional Review  
Board for the Protection of Human Subjects

540-231-4991/moored@vt.edu  
Telephone/E-mail

**Virginia Tech Institutional Review Board: Project No. 13-1006**  
**Approved November 18, 2013 to November 17, 2014**

**Appendix D**  
**Demographic Questionnaire**

*Demographic Questions*

1. How old are you now?
2. How old were you during your most recent pregnancy loss?
3. What ethnicity do you identify yourself as?
4. Do you consider yourself a spiritual/religious person?
  - a. Do you affiliate with a particular religion?
    - i. If so, which one?
5. What is your current relationship status?
  - a. Married, Single, Divorced, In a relationship, etc.
6. What is your highest level of education?
  - a. High school or less, some college, college degree, some graduate work, graduate degree or higher
7. What is your annual household income?
  - a. Less than \$25,000, between \$25,000 and \$50,000, between \$50,000 and \$75,000, between \$75,000 and \$100,000, over \$100,000
8. How many children do you have?
9. What are the ages of children?
10. Was the pregnancy loss your first pregnancy?
11. How many past pregnancy losses have you had?
12. What was the gestational age of the fetus(es) at the time of loss?
13. How many months elapsed prior to becoming pregnant again?
14. When was your most recent pregnancy loss? (month/year)

## **Appendix E**

### **Interview Script**

Many experience pregnancy loss and it can impact any woman regardless of ethnicity, race, or age, yet pregnancy loss is rarely discussed among society (Robinson et al., 1999; Uren & Wastell, 2002). Western cultural expectations presume that women should connect to their baby and begin to prepare for their babies arrival prior to birth. It is customary to gain a felt connection, make preparations, and share the joy of pregnancy with others, yet the loss is glossed over and often times, women are encouraged to forget about the loss and move on, especially after becoming pregnant again (O’Leary, 2004). The grief experienced along with fears and concerns that may have surfaced after the loss and during the subsequent pregnancy are often minimized or discounted among society, leaving the event unprocessed for some. In spite of the commonality of pregnancy loss, every loss is different and each person deals with pregnancy loss in a different way. Researchers alike are trying to gain a better understanding of the experience of pregnancy loss, grief, attachment and the experience of being pregnant following a loss. I am trying to gain a better understanding of the influence of a late term pregnancy loss and how it impacts the felt connection to the fetus during the subsequent pregnancy. I am also curious about any coping strategies used during the subsequent pregnancy to manage any fears, concerns or societal expectations experienced. Before I ask you questions about your most recent pregnancy, I thought it may be helpful to understand your unique experience of loss. I am aware that talking about this could bring up difficult memories, so if at any time this becomes too difficult or overwhelming please let me know and we can pause or stop all together. At the end of the interview, we will have time to process anything that may have come up for you that was difficult to talk about.

1. So to start, would you be willing to tell me about your most recent pregnancy loss?



- a. (What type of loss? How far along were you? How did you find out?)
2. In what ways, if any, did this loss impact you? (emotionally, physically, socially, culturally)
3. Some women feel supported during pregnancy loss and others report a lack of support, I'm curious how you felt during this time?
4. Can you tell me about becoming pregnant again?
  - a. (Was it planned/unplanned? How long did it take for you to conceive? What was it like for you emotionally, physically, mentally?)
5. I appreciate your willingness to discuss your most recent loss, now I would like to switch gears and talk about your most recent pregnancy. In what ways, if any, did your previous loss impact your most recent pregnancy: emotionally, physically, or socially?
  - a. Do you feel the loss impacted the way you acted/felt during your subsequent pregnancy? In what ways?
  - b. Did your relationship/interaction with others change during your subsequent pregnancy ...with your partner, family, friends, coworkers? If so, in what ways?
  - c. During your subsequent pregnancy, did you feel any pressure from outside sources (society, family, doctors, culturally) to behave or act in certain ways?
    - i. Please elaborate.
6. Could you tell me about any worries or fears that may have surfaced for you during your most recent pregnancy that you attribute to your previous loss?
  - a. Where there any concerns that may have influenced the connection or lack of connection you formed with your child during the pregnancy?
    - i. If so, what were they?
7. Some women who have experienced loss, express feeling very connected to their baby during the subsequent pregnancy whereas others report lacking such a connection,

what was your experience of feeling connected to your baby during your subsequent pregnancy?

- a. Do you feel you did things intentionally to increase your connection to your baby prior to birth?
    - i. (Doppler, find out the sex, sing/talk/read to baby, prepare room)
  - b. Some women really struggled after their initial loss and reported doing things to not become as attached to their baby prior to birth out of fear that this pregnancy may also end in loss, what were some things you may have done to minimize that felt closeness to your baby during your subsequent pregnancy? (Delay in telling others, delay in baby room prep?)
    - i. Do you attribute these actions to your previous loss?
      - o If yes, in what ways?
  - c. Have your feelings of connection toward your baby changed since giving birth? (If so, in what ways?)
    - i. Are there things you have done intentionally to increase your bond or connection since giving birth?
    - ii. Could you talk about some concerns, if any, that have come up for you since giving birth?
8. During the subsequent pregnancy, what was your thought process regarding bonding to your unborn baby?
- a. In what ways, if any, did this change after giving birth?
9. Looking back today to how you felt during that pregnancy, how worried were you?
- b. Do you feel this is different from how you allowed yourself to feel during the pregnancy?

i. Why do you feel that is?

10. If you could offer any advice to others regarding this experience what would it be?

11. I know we have gone over a lot, I'm curious though, what haven't I asked that you feel would be important for me to know?

## Appendix F IRB Approval Letter



Office of Research Compliance  
Institutional Review Board  
North End Center, Suite 4120, Virginia Tech  
300 Turner Street NW  
Blacksburg, Virginia 24061  
540/231-4606 Fax 540/231-0959  
email [irb@vt.edu](mailto:irb@vt.edu)  
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### MEMORANDUM

**DATE:** February 11, 2014  
**TO:** Angela J Huebner, Mandarin Lynn Labrum  
**FROM:** Virginia Tech Institutional Review Board (FWA00000572, expires April 25, 2018)  
**PROTOCOL TITLE:** The Influence of Late Term Pregnancy Loss on Developing a Connection during the Subsequent Pregnancy  
**IRB NUMBER:** 13-1006

Effective February 11, 2014, the Virginia Tech Institutional Review Board (IRB) Chair, David M Moore, approved the Amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report within 5 business days to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at:

<http://www.irb.vt.edu/pages/responsibilities.htm>

(Please review responsibilities before the commencement of your research.)

### PROTOCOL INFORMATION:

Approved As: **Expedited, under 45 CFR 46.110 category(ies) 6,7**  
Protocol Approval Date: **November 18, 2013**  
Protocol Expiration Date: **November 17, 2014**  
Continuing Review Due Date\*: **November 3, 2014**

\*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

### FEDERALLY FUNDED RESEARCH REQUIREMENTS:

Per federal regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals/work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

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