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The Perceived Impact of Childbirth Related PTSD and Maternal Bonding

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Walden University
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Abstract

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MPh, Walden University, 2021

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Abstract

Childbirth has been increasingly viewed as a potentially traumatic event and process impacting both mother and infant. Previous research on childbirth has concentrated on the development of postpartum depression and its impact; research on posttraumatic stress disorder (PTSD) after childbirth has been limited. However, the results of this research study suggested that the development of childbirth-related PTSD may be a far more common phenomenon than previously suggested. Bowlby's attachment theory and Ainsworth's further development and expansion of the theory served as a framework which investigated the experiences of 10 biological females, aged 21 and over previously diagnosed with PTSD after childbirth, and their perceptions of mother-child bonding. Data for this study were collected from recorded and transcribed interviews. The Colaizzi method and interpretative phenomenological analysis (IPA) were used to analyze the recorded interview transcriptions. The results provided rich, descriptive narratives from which common and unanticipated themes emerged. The themes were then grouped into a logical framework that demonstrates the transition from coded data to themes and clusters of themes and their interrelatedness. The results suggested that childbirth-related PTSD played a role in the mother-child bonding. Implications for positive social change arose from this research in the form of creating an opportunity to increase awareness of the influence of childbirth-related PTSD on maternal bonding.

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Dedication

This dissertation is dedicated to my daughters, Bella Marie Guzman and Noella Rose Guzman, those who will benefit from this research, and those who still struggle from the symptoms of childbirth-related PTSD.

Acknowledgments

Many people contributed to my pursuing this doctoral degree and completing this dissertation. First, I would like to acknowledge and thank the participants who made this study possible. Thank you for allowing me and future readers a snapshot of the associated symptoms of childbirth-related PTSD and the challenges that surface.

Thank you to my committee members, Dr. Nadine Lukes-Dyer and Dr. Matthew Hertenstein. Dr. Nadine Lukes-Dyer, you have molded me as a scholar and, writer and made the concept of “public speaking” comfortable. I will never forget the time and dedication you invested in supporting and guiding me through this journey.

I appreciate my small circle of family and friends who have stood by me throughout this process. Thank you for understanding my hectic schedule, lack of motivation, and exhaustion. I want to acknowledge my daughter, Noella, for reminding me to take ample breaks throughout the day. I would like to recognize my daughter, Bella, for understanding this process at a young age. My motivation and drive to succeed as a positive role model were solely for both of you. Finally, I would like to acknowledge my husband, Carlos Adan Guzman. The confidence you had in me was impressionable; you found ways to encourage and motivate me when quitting would have been the better option and you supported me when I simply could do it no longer.

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Chapter 1: Introduction to the Study

The importance of maternal-infant bonding is a topic that has cultivated interest for many years within the psychology community (Ainsworth, 1968; Bowlby, 1951; Bowlby, 1977; Takács et al., 2020). Over the years, researchers have questioned whether maternal bonding has a role in an infant's developmental process (Bretherton, 1997). In the 1950's, John Bowlby's interest in the infant-mother bond sparked debate and altered public conceptions about the value and importance of the infant-mother bond (Bretherton, 1997). Bowlby's lengthy research for the World Health Organization established that a nurturing and attentive nature was the key element a mother must have for children to grow and experience proper psychological development. Moreover, Bowlby established what we now know and call attachment theory. Mary Ainsworth, who worked closely with John Bowlby, highlighted the importance of a child's attachment figure, such as their mother, which underlined in her attachment theory contributions (Bretherton, 1992).

Reva Rubin also shared interests in the infant-mother bond. Rubin's theory of maternal role achievement, published in 1975, stressed the importance of mother-child attachment. Klaus & Kennell (1976) shared similar interests and their publication, *Maternal-Infant Bonding*, gained widespread interest and acceptance. Their combined work resulted in substantial improvements in postpartum care and treatment to improve maternal-infant bonding outcomes (Klaus & Kennell, 1983). One of the essential pillars of Klaus & Kennell's (1976) bonding theory was the concept of a "sensitive period," which described the attainment of optimal developmental outcomes in children, parents, particularly mothers, through close contact throughout the postpartum period.

Posttraumatic stress disorder (PTSD) is a disorder that has also gained significant interest in recent decades. Generally, when one thinks of PTSD as a diagnosis, it is mainly associated with military service members or public safety service members; however, PTSD has also been prevalent among postpartum women. Several studies show that women might develop postpartum childbirth-related PTSD due to a traumatic birthing experience (Ayers et al., 2016; Dekel et al., 2019a; Dekel et al., 2017b; Yildiz et al., 2017). The combination of the studies exploring PTSD in postpartum women and those exploring infant-mother bonding have prompted my curiosity to understand the influence of childbirth-related PTSD, which could provide further insight into the perceptions of maternal bonding.

Background of the Study

Bowlby's (1982) empirical research found a link between a child's emotions, capacity to adapt, and explore, and how they respond to the care they receive during their early life. These links provided insight into how a child's attachment pattern develops. Bowlby (1982) further explained that unless a life-changing or crucial event occurs, a child's attachment style remains steady throughout their lives. An accident or persistent sickness are occurrences that restrict the stability of an established attachment pattern over time (Bowlby, 1982). These occurrences in the mother's life may influence the mother to (a) become more protective, (b) become less receptive to her child, and (c) become distracted or depressed (Bowlby, 1982). Changes in a mother's relationship and interaction with her child can cause an attachment style to become unstable (Bretherton, 2013).

Hairston et al. (2018) investigated the connection between adult attachment patterns, personality factors, and bonding concerns among postpartum women. According to Hairston et al.'s (2018) findings, a mother's attachment style substantially affects the development of bonding issues. In contrast, Kahn and Renk (2018) analyzed the role of a mother's depressive symptoms, childhood abuse, and the development of insecure attachment patterns with their children. In Kahn and Renk's (2018) study, adverse childhood experiences and maltreatment experienced by mothers were positively and substantially connected to avoidant behaviors by mother and child, anxiety experienced among both, and dysfunctional mother and child bonding.

According to academic research, attachment theory is significantly linked to PTSD in five routes (Bowlby, 1977; Bowlby, 1988; van der Kolk, 1989; Kobak & Sceery, 1988). In the first route, newborns are physiologically built to seek an attachment link with someone they consider competent to face the world (Bowlby, 1977); this will often be their parents or caregivers. As a result, the attachment system protects newborns and young children from harm. Second, inadequate care provided by a child's primary attachment figure can be traumatic and prompt distress (Bowlby, 1988). Third, when one experiences traumatic or terrifying occurrences, a person's attachment system can become triggered (Bowlby, 1977). The fourth route suggests how separation may be difficult and even painful. van der Kolk (1989) expressed the perceived threat when attachment figures are removed, arguing the similarities of PTSD symptoms and the behavior phases a newborn's experience as a result of unwarranted separation. Vulnerability and anxiety can also be experienced among mentally well individuals after

the separation of an attachment figure (Bowlby, 1977). The final route, internalized attachment schemas, aids in emotion regulation in response to stressful events (Kobak & Sceery, 1988). The difficulties in emotion regulation associated with the lack of a secure attachment schema increases vulnerability in the development of PTSD after a traumatic event (Kobak & Sceery, 1988).

PTSD may generally not be thought of when one discusses or experiences childbirth. Childbirth, however, can impact a mother's physical, social, mental, and emotional well-being (Dekel et al., 2019a). Based on their personal experiences, women will describe their childbirth differently. A woman's impression of the events occurring during their delivery and laboring phase will also differ. Anderson et al. (2012) evaluated several studies demonstrating that both complex and uncomplicated labor can result in childbirth-related PTSD. These findings align with the third route that links attachment theory and PTSD and identifies traumatic experiences as a potential trigger to a person's attachment system (Bowlby, 1977). As per van Heumen et al. (2018), women who had a life-threatening traumatic birth involving themselves or their newborn were more likely to develop childbirth-related PTSD. Additionally, women who had minimal social support or experienced threatened harm or death of their newborn were at an increased risk of developing childbirth-related PTSD (van Heumen et al., 2008). Previous research revealed that women with postpartum depression might struggle with maternal bonding (Handelzaltz et al., 2021). Still, little is known about the challenges of maternal bonding in women who have childbirth-related PTSD, which was addressed in this study (Handelzaltz et al., 2021). Overall, childbirth-related PTSD is a topic that needs further

exploration in addition to the outcomes of maternal bonding among those with childbirth-related PTSD.

Problem Statement

Though postpartum depression is well-known, little is known about concomitant postpartum mental illnesses or disorders. Some women may develop PTSD due to their delivery experience, which may be accompanied by depressive symptoms. This prompted me to explore the literature on the increasing rates of childbirth-related PTSD that ultimately impact maternal bonding (Anderson et al., 2012). According to Soet et al.'s (2003) study, 34% of their research participants reported experiencing a traumatic birth; of those, 1.9% of their participants developed PTSD after childbirth, and 30.1% were partially symptomatic and unable to meet the full diagnostic criteria (Soet et al., 2003). Obtaining a diagnosis of childbirth-related PTSD requires alignment with the Diagnostic and Statistical Manual of Mental Disorders (DSM-5) symptom criteria for PTSD (American Psychiatric Association, 2013).

The criteria for the diagnosis of PTSD consists of one or more intrusive symptoms after a traumatic event with a duration of more than a month, which include (a) recurrent, involuntary, and intrusive distressing memories; (b) recurrent distressing dreams related to the traumatic event; (c) dissociative reactions/flashbacks; (d) intense or prolonged psychological distress; and (e) physiological reactions to internal or external cues that resemble the traumatic event. Additionally, avoidance and the inability to remember important aspects of the traumatic event are also part of the criteria. Research findings employing functional magnetic resonance imaging (fMRI) determined hyper-

responsivity to traumatic cues in the left amygdala, which can impact maternal bonding (Berman et al., 2020).

Difficulty in maternal bonding, which is a critical aspect of an infant's early development, can impact the child's development of attachment style in addition to behavioral and mental health manifestations (Dubois-Comtois et al., 2013). An infant's ability to self-regulate their behaviors, physiological, and emotional states are developed within the early life stages and are influenced by the quality of the mother and infant/child bonding (Behrendt et al., 2019). Obtaining the perceptions and descriptions of maternal bonding among women who have experienced childbirth-related PTSD can bring awareness to an under-researched area.

Purpose of the Study

The purpose of this qualitative study was to explore the shared perceptions and descriptions of women who perceived to have or developed childbirth-related PTSD and their perceptions of their maternal bonding. The research conducted by Muzik et al. (2013) established higher levels of maternal bonding disturbance among postpartum women with PTSD, but perceptions were not explored. A phenomenological study would provide further insight into these important aspects that effect a child's development (Dubois-Comtois et al., 2013). Additionally, this study seeks to increase awareness on childbirth-related PTSD and any impact it can have on maternal bonding, which can influence infant's behavior and attachment style (Behrendt et al., 2019).

Research Questions

The following research question will establish the foundation of the semi-structured interview within the study:

RQ: What are the mother-infant bonding lived experiences of women diagnosed with childbirth-related PTSD?

Theoretical Foundation

This dissertation is heavily influenced by John Bowlby's attachment theory (1969) and Mary Ainsworth's (1963; 1968) supplementary additions. John Bowlby was the first to propose attachment theory in the 1950s (Bretherton, 1997). Bowlby (1951) developed and applied concepts of attachment behavior to humans, drawing on the work of ethologists. According to Bowlby (1982), attachment behavior is any behavior that results in a person achieving or sustaining closeness to another identifiable individual who is perceived to be better suited to cope with the environment. For example, a newborn is first primarily bonded to one person; for many, this person would be their mother, and that person or mother will develop a significant attachment and affection for the newborn at the same time. Accordant with Bowlby and Ainsworth's study and findings, babies and children with secure attachments strongly link to their mother's sensitivity (Ainsworth, 1963; Bowlby, 1969; Bretherton, 1992).

Between 1954 and 1955, Ainsworth examined infant-mother interactions over nine months (Ainsworth, 1963). Ainsworth created the notion of maternal sensitivity to infant cues based on the data collected in the Ganda project, which consisted of regular bi-monthly, two-hour house visits monitoring mothers, infants, and other family members

(Ainsworth, 1963; Ainsworth, 1968). In consonance with Ainsworth's elaboration of the hypothesis, infants and children who had sensitive and attentive mothers tended to be more firmly connected than children who had inattentive and less sensitive mothers (Bretherton, 1992). Through her observations, Ainsworth identified patterns among the Gandian infants and their capacity to explore their surroundings while using their mother as a secure base (Ainsworth, 1963; Bretherton, 1992). The patterns were as follows: (a) securely attached: infant cried a little but seemed to be able to explore surroundings with mother nearby; (b) insecurely attached: infant frequently cries even when consoled by their mother and explored a little; and (c) avoidant attached infants who did not exhibit differential behavior towards their mother (Ainsworth, 1963; Bretherton, 1992).

Attachment theory relates to the purpose of this study, which was to explore the influence childbirth-related PTSD may have on maternal bonding. The research question seeks to identify perceived factors that can disrupt or cause difficulties in the mother/infant bonding experience. As established by Bowlby and Ainsworth, bonding between a mother and their infant is essential to establish secure attachments (Ainsworth, 1963; Bretherton, 1992).

Conceptual Framework

Attachment theory served as the theoretical foundation for this study's conceptual framework. Many factors play an influencing role in the establishing relationship between a mother and an infant; for example, women who experienced childbirth-related PTSD displayed lower maternal attachment to their newborns (Dekel et al., 2018). According to Bowlby's (1969) attachment theory, the interactions a mother has with her

child can prompt the formation of an insecure attachment. The characteristics might prompt distrust, fear of rejection, negative self-talk, poor self-image, and questioning others (Bowlby, 1969).

Bowlby's (1982) empirical research established a relationship between a child's emotions, ability to adapt and explore, and response to care received during childhood. Within the attachment theory paradigm, inquiry into the maternal bonding experience provides a framework for categorizing the many levels of maternal bonding experienced by study participants. Attachment theory assisted me in identifying the themes that emerged from participant discourse, but it also contributed to identifying elements that led to challenges in maternal bonding. These connections will also shed light on how a child's attachment pattern evolves and develops.

Nature of the Study

This study used an interpretive phenomenological exploration of common perspectives and descriptions of women who have childbirth-related PTSD and the impact on their maternal attachment. Muzik et al. (2013) reported that postpartum women with PTSD have higher levels of maternal bonding disruption, although the researchers did not explore perceptions among the participants. A phenomenological study would offer light on these critical aspects that influence a child's development (Dubois-Comtois et al., 2013). For purposes of this study, 10 adult women aged 21 years old and older were recruited to participate. The recruitment strategies included criterion, purposeful, and snowball sampling strategies. Although members of this population may be

concealed, purposeful sampling is achievable since there are various social media groups catering to this population.

The semi-structured interviews provided an understanding of the experiences and perspectives of women with childbirth-related PTSD, as well as servings as a source of reflection for the participants. The semi-structured interviews were simultaneously transcribed and analyzed utilizing the Colaizzi method (Shosha, 2010) and interpretative phenomenological analysis (IPA), as established by Larkin and Thompson (2012). The precision and veracity with which qualitative research findings are reported are indicators of research credibility. Member checking, referential correctness, and triangulation are all methods for establishing credibility. According to Lincoln & Guba (1985), member checking is crucial for assuring the research's credibility.

Definitions

Attachment style: Per Bowlby and Ainsworth's empirical study, the formation of an attachment style develops during infancy and early childhood (Bowlby, 1951; Ainsworth, 1968). Four attachment styles have been identified, which include: secure (positive view of self and others, low anxiety, and low avoidance), preoccupied (negative view of self with a positive view of others, and high anxiety with low avoidance), disorganized (negative view of self, negative view of others with high avoidance, anxiety, and fear), and ambivalent (negative view of self, positive view of others, with high anxiety and high avoidance).

Posttraumatic stress disorder (PTSD): PTSD can occur following a traumatic event such as (a) a life-threatening event, (b) sexual violence, (c) serious injury, (d)

witnessing a serious injury or death, (e) natural or human-made disasters, and (f) repeated exposure to uncomfortable or unliked events and/or details as experienced among emergency medical personnel, law enforcement officers, medical professionals, and victims of child abuse (American Psychological Association, 2013). According to the DSM-5, to meet the diagnostic criteria for PTSD, the presence of one or more intrusive symptoms related to an individual's trauma or traumatic event is experienced for a month or more following the incident (American Psychological Association, 2013). The DSM-5 (American Psychological Association, 2013) defines intrusive symptoms as (a) involuntary, reoccurring, and distressing memories of the event; (b) recurrent distressing dreams; (c) flashbacks of the event or feeling like the event is reoccurring; (d) intense psychological distress; (e) noticeable reactions and behaviors towards internal or external cues that resembles similarities of the traumatic event; (f) avoidance of memories, thoughts, feelings, people, places, and things associated with the event; (g) irritability and behavioral disturbances; (h) inability to recall details that occurred during the traumatic event; (i) persistent negative emotional state; and (j) sleep disturbances.

Childbirth-related PTSD: Childbirth-related PTSD can develop during both complicated and uncomplicated childbirths (Anderson et al., 2012). Van Heumen et al. (2018) suggested that expectant mothers were at a higher risk for developing childbirth-related PTSD if they had a low social support system, their life or their newborn's life were threatened in the laboring process, and they had poor coping techniques. Anderson et al. (2012) described influential factors of the development of childbirth-related PTSD as (a) pregnancy complications, (b) emergency cesarean sections, (c) requiring

instrumental delivery such as forceps or vacuum, (d) inadequate care or support during labor, (e) episiotomies, (f) severe labor pain, (g) postpartum complications, (h) preterm labor, (i) first time mothers, (j) history of mental health conditions, (k) life stressors, and (l) early or young maternal age.

Postpartum: Postpartum describes the period after childbirth that can last up to 6 months (Handelzaltz et al., 2021).

Maternal bonding: Maternal bonding is described as "an emotional state of the mother" and refers to emotions and cognitions a woman feels towards her newborn and herself as a parent (Bicking et al., 2013). The bond between a mother and infant (maternal bonding) is believed to evolve over time (Muzik et al., 2013). Depression, stress, anxiety, and PTSD are contributing factors to disturbances in maternal bonding (Muzik et al., 2013; Mayopoulous et al., 2021).

Assumptions

It was assumed that participants in this study would not be comfortable sharing their experiences, perceptions, and thoughts. It was also assumed that participants would comprehend the questions within the semi-structured interviews. If they did not, they were to ask for clarification. In addition, it was assumed that the experiences and perspectives shared by the participants would be bountiful and exemplary to each participant. Lastly, variations in participant perspectives were assumed, which would magnify the depth of understanding while illuminating common themes.

Scope and Delimitations

The scope of this study was limited to English speaking women at least 21 years old who self-identify as experiencing or having childbirth-related PTSD, and who had access to a phone, internet, and a web camera for virtual interviews. The research participants also reported having a normal, low-risk, uncomplicated, or high-risk pregnancy. Emergent themes did not displayed transferability among different cultural settings and socioeconomic statuses. The anticipated transferability was due to the perceived differences, expectations, and child-birth related experiences birthing women.

Delimitations of the study correspond to the goal of the study's purpose to increase an understanding of the phenomenon. The aim of the study was not to establish statistically significant findings. Data gathered as an outcome of the participant's completion of self-report assessments were intended to assist in establishing rich descriptions of the participant's perceptions and experiences. I was aware of the participants' perceptions and routes of PTSD after childbirth, as provided through the semi-structured interviews. As a result, no statistical analysis was performed on the data acquired in this study.

Limitations

There are certain limitations to the study that may prevent the conclusions from establishing generalizability. The sample does not include females younger than 20 years old. Additionally, it is conceivable for women to have developed PTSD prior to their birthing experience. As defined in the DSM-5, PTSD can develop due to an earlier trauma, including physical abuse, sexual abuse, assault, injury, witnessing a traumatic

death, or experiencing a natural disaster (APA, 2013). Preexisting or undetected conditions were not accessed in this study.

The purpose of this phenomenological study was to investigate the childbirth experience, identify symptoms of childbirth-related PTSD, and obtain perceptions of maternal bonding. Establishing a diagnosis of PTSD was not an intended goal for this study. Instead, the study sought to understand the participant's birthing experience and maternal bonding. As a result of the small number of participants and their distinctive circumstances, the conclusions of this study's findings are restricted. This study's research instruments were confined to semi-structured video or voice call interviews and self-reporting; this mode of data collection has the potential to influence the study's outcomes. It should be noted that because the participants will be asked to identify their birthing experience, various factors may alter their ability to recall and describe their experience. As a result, I had no significant influence over the amount of information the research participants wanted to disclose, their willingness to verbalize their experience, and their knowledge and levels of awareness.

Significance of the Study

This study could contribute to existing academic literature and provide significant insight into maternal bonding perceptions among women with childbirth-related PTSD. Within the research community, childbirth-related PTSD is an evolving, novel concept and diagnosis that, to date, has already prompted a substantial amount of research (Horesh et al., 2021). A few studies in academic literature and academic journals explore perceptions of maternal bonding and childbirth-related PTSD but not through qualitative

research. This qualitative study can provide insight into the psychological distress mothers experience and factors that can disrupt their interactions with their infants.

Horesh et al. (2021) argued that childbirth-related PTSD is a unique traumatic event that requires more research. Childbirth-related PTSD may impede maternal attachment and have an indirect negative impact on an infant's health (Williams et al., 2016). Moreover, psychological disturbances impacting maternal bonding can heighten vulnerability in a child's development, including behavioral concerns and difficulties with emotions (Murray et al., 2009). The implications for positive social change include a better understanding of maternal bonding through exploration of postpartum women's experiences, psychological disturbances, and the thoughts of postpartum women at risk of developing childbirth-related PTSD from their perceptions.

Summary

The birth of an infant is generally not thought of as an event that has the potential to evoke PTSD; however, many pathways can lead to the development of childbirth-related PTSD (van Heumen et al., 2008). Regardless of the childbirth route, women can find that their experiences have impacted their physical, mental, social, and emotional well-being (Anderson et al., 2012). Similarly, women with postpartum depression can also experience an impact in those areas and struggle with maternal bonding (Handelzaltz et al., 2021).

Subsequently, several researchers have established a significant link between attachment theory and PTSD through five routes (Bowlby, 1977; Bowlby, 1988; Kobak & Sceery, 1988; van der Kolk, 1989). Women who develop childbirth-related PTSD may

experience several factors that influence the quality of their maternal bonding, which plays a role in the developing attachment style (Bowlby, 1982). Mood disturbances and cognitive distortions resulting from childbirth-related PTSD can cause a shift in the interactions a mother has with her infant, thus driving an unstable attachment style (Bretherton, 2013).

Chapter 2 includes an extensive literature review that details the factors that influence attachment style and the outcomes of insecure attachment styles. The research reviewed also revealed a gap between childbirth-related PTSD and maternal bonding (Handelzaltz et al., 2021). By exploring the perceptions of women with childbirth-related PTSD, this study aims to contribute to the existing body of literature.

Chapter 2: Literature Review

Introduction

The purpose of this qualitative study was to explore the shared perceptions and descriptions of women who have experienced childbirth-related PTSD and the impact it had on their maternal bonding. This chapter will include descriptions of the four attachment styles that develop throughout the lifespan, potential outcomes of insecure attachments, the development of PTSD and childbirth-related PTSD, contributing factors in childbirth-related PTSD, and the significance between attachment theory and PTSD. This chapter will include a review of recent research and data that explore the impact PTSD has on maternal bonding, in addition to difficulties with attachment.

The research conducted by Muzik et al. (2013) established higher levels of maternal bonding disturbance among postpartum women with PTSD, but perceptions were not explored. A phenomenological study would provide further insight on the essential aspects of maternal bonding as it plays a significant role within a child's development (Dubois-Comtois et al., 2013). A phenomenological study would also provide insight into the maternal bonding challenges experienced among women with childbirth-related PTSD. The purpose of this chapter is to enhance the awareness of childbirth-related PTSD and the impact it can have on maternal bonding, which can influence an infant's behavior and attachment style (Behrendt et al., 2019).

Literature Search Strategy

The articles collected and referenced throughout this literature review and dissertation were electronically retrieved through the databases APA PsychArticles, APA

PsychBooks, APA PsychExtra, and APA PsychINFO. The primary keywords, search terms, and combination of search terms used to locate the articles include the following: *Bowlby* AND PTSD, *PTSD* AND *attachment theory*, *attachment theory* AND *children* AND *postpartum*, *postpartum PTSD* AND *children*, *attachment patterns* AND *children* AND *maternal trauma*, *postpartum* AND *PTSD* AND *attachment theory*, *children* AND *postpartum* AND *PTSD*, *attachment theory* AND *children* AND *PTSD*, *maternal* AND *PTSD* AND *attachment*, *separation*, *maternal sensitivity*, *learning theory*, *maltreatment*, *secure base* and *social separation*. The combination of search terms was preferred due to minimal current research published within the last five years.

Theoretical Foundation

John Bowlby's attachment theory (1969) and Mary Ainsworth's (1963; 1968) additional contributions to the theory are deeply rooted in this dissertation. The research and data compiled by Bowlby and Ainsworth determined that there is a strong correlation between infants and children with secure attachment and maternal sensitivity (Ainsworth, 1963; Bowlby, 1969; Bretherton, 1992). Through Ainsworth's expansion of the theory, it was determined that infants and children who had sensitive and attentive mothers tended to be more securely attached when compared to children of mothers who were inattentive and less sensitive (Bretherton, 1992).

John Bowlby (1907-1990)

Within the psychology community, Bowlby raised questions and influenced perceptions of the importance of the infant and mother relationship (Bretherton, 1997). Bowlby's interest in ethology, cybernetics, developmental psychology, and cognition

prompted the development of attachment theory in the 1950s, which many members of the psychological community denounced (Bretherton, 1992). The motivation behind Bowlby's attachment theory began when he was commissioned by the World Health Organization (WHO) in 1949 to compile a report on the postwar mental health of homeless children in Europe (Bowlby, 1951; Bretherton, 1992). The report explored the outcomes of more than five years of war, separation from family members, starvation, and loss (van der Horst et al., 2020). While traveling through Europe compiling data for his report, Bowlby took the opportunity to discuss the effects of maternal separation and deprivation with several practitioners and researchers (van der Horst et al., 2020). These discussions were driven by Bowlby's strong opinions on the development of mental health disorders among children due to inadequate relationships with their mothers (van der Horst & van der Veer, 2010). Bowlby's extensive research for the World Health Organization concluded that for one to grow and prosper psychologically, a mother should exude a warm and continuous relationship with their children (Bowlby, 1951).

Bowlby's conclusions also determined that such intimate and continuous relationships between a child, its mother, or primary caregiver induces enjoyment and satisfaction for both parties (Bowlby, 1950). In future writings, Bowlby (1969, 1973) suggested that the quality of the early parent and child relationship establishes significant patterns for relating to others. In turn, these patterns are internalized and set the foundation for how individuals develop and sustain interpersonal relationships (Bretherton, 1997). Bowlby's seminal work prompts the question of the impact of childbirth-related PTSD has on maternal bonding.

Mary Ainsworth (1913-1999)

Ainsworth's contribution to Bowlby's attachment theory emphasized the child's attachment figure being an immediate caregiver such as the mother (Bretherton, 1992). When a secure base is formed within the attachment, the infant or child can explore their surroundings with minimal distress (Bretherton, 1992). Due to a postdoctoral position obtained by Ainsworth's husband in Kampala, Uganda, Ainsworth observed infant-mother interactions over a nine-month period between 1954-1955 (Bretherton, 2013). Through the data collected in the Ganda project, which entailed regular bi-monthly, two-hour home visits observing mothers, infants, and other family members, Ainsworth developed the concept of maternal sensitivity to infant cues (Ainsworth, 1963; Ainsworth, 1968; Bretherton, 2013). Within this study, Ainsworth was able to differentiate patterns among the Gandian infants and their ability to explore their surroundings, all while utilizing their mother as a secure base (Bretherton, 2013).

In the Ganda project, three attachment patterns were observed among the infants (Ainsworth, 1963). The patterns included the following: (a) securely attached: infant cried a little but seemed able to explore surroundings with mother nearby: (b) insecurely attached: frequently cries even when consoled by mother and explored a little; and (c) infants who did not develop any attachments and did not manifest differential behavior towards their mother (Ainsworth, 1963; Bretherton, 1992). Ainsworth concluded that securely attached infants had sensitive mothers, whereas infants with insecure attachments had less sensitive mothers (Ainsworth, 1963; Bretherton, 1992). Further,

maternal sensitivity to infant cues played a significant role in the development of the infant and mother attachment patterns and styles (Ainsworth, 1963; Ainsworth, 1968).

Bowlby (1969) and Ainsworth's (1963) attachment theory relates to my study, as I seek to explore the perceptions and descriptions of women who have experienced childbirth-related PTSD and the influence it had on maternal bonding. Bowlby and Ainsworth's attachment theory provides a foundation for the importance of maternal attachment, bonding, and sensitivity. The experienced symptomology may play a significant role in one's willingness to form a bond or attachment with their infant or child. Bowlby and Ainsworth's research provides insight into the significance and impact of a mother's attentiveness, warmth, and sensitivity to their infant or child and developing a secure attachment (Ainsworth, 1963, 1968; Bowlby, 1951). Understanding the potential impact childbirth-related PTSD has on maternal bonding provides an opportunity to understand the developing attachment style between the infant or child, which can also be explored in future studies.

Conceptual Framework

Attachment theory provided the theoretical foundation for the conceptual framework of this investigation. Many elements influence the establishment of a bond between a mother and a newborn; however, women with childbirth-related PTSD showed a less maternal connection to their infants (Dekel et al., 2018). According to Bowlby's (1969) attachment theory, the interactions a mother has with their child might lead to the development of an insecure attachment. The associated traits might develop due to

distrust, fear of rejection, negative self-talk, low self-image, and questioning others (Bowlby, 1969).

Bowlby's (1982) empirical research demonstrated an association between a child's emotions, ability to adapt and explore, and responsiveness to childhood care. The attachment theory paradigm provides a framework for identifying the various levels of maternal bonding reported by the study's participants. Utilizing attachment theory as a theoretical and conceptual framework allowed for identification of associated themes emerging from participants' responses during the interview. Attachment theory as a conceptual framework has also aided in identifying aspects contributing to maternal bonding issues. The identified factors and connections helped illuminate how a child's attachment pattern evolves and develops.

Literature Review

Attachment Style Categories

Based on the empirical research provided by Bowlby and Ainsworth, the development of an attachment style occurs during infancy and early childhood (Ainsworth, 1968; Bowlby, 1951). An infant who has developed a secure attachment is notably comfortable within their surroundings, displays confidence in exploring the surrounding environment, and feels a sense of security (De Wolff & Van Ijzendoorn, 1997). The development of a secure attachment among infants and young children is associated with parental sensitivity, responsiveness, and warmth (Bowlby, 1951; De Wolff & Van Ijzendoorn, 1997; Koehn & Kerns, 2018).

Infants and young children who have parents or caregivers that are not sensitive to their responses and cues for support develop an avoidant or insecure-avoidant attachment style (Bretherton, 2013). An infant or young child's development of an avoidant attachment will result in their becoming independent of their physical and emotional needs, therefore, limiting the interaction between mother and infant and/or young child (Costa Martins et al., 2012). When considering maternal bonding, Nordahl et al. (2020) reported that parental stress mediated the association between adult attachment style and bonding. In their study, Nordahl et al. (2020) noted higher scores of attachment avoidance and anxiety related to increased stress, which significantly decreased the quality of mother-infant bonding.

Disorganized attachment occurs when the parent or caregiver prompts fear in the child. Additionally, disorganized attachment can occur due to abuse or trauma, but it is not the only factor in development (Granqvist et al., 2017; Van Ijzendoorn et al., 1999). This also prompts confusion and distress within an infant or young child as the parent or caregiver who was supposed to provide security and safety has become the child's source of fear (Duschinsky, 2018; Main & Hesse, 1990). Behaviors associated with infants and children who have developed a disorganized attachment include (a) fearful disposition, (b) distress, (c) crying, (d) inability to self-regulate, (e) confusion, and (f) displays of aggression and other behavioral concerns (Granqvist et al., 2017; Main & Hesse, 1990).

The final attachment style in Bowlby and Ainsworth's attachment theory is ambivalent/insecure. Ainsworth et al. (1978) associated ambivalent attachment with infants and children who experienced inconsistent parenting from mothers. These

theorists concluded that low maternal availability is linked to the development of an ambivalent/insecure attachment (Cassidy & Berlin, 1994). Infants with insecure/ambivalent attachment will experience severe distress upon the departure of a parent, is hesitant with unknown individuals, and the distress is not ameliorated on the return of the parent; also, the child may also display some aggression towards the parent (Cassidy & Berlin, 1994; Cooke et al., 2019).

Development of Stability of Attachment Style Throughout the Lifespan

Bowlby's empirical research established a connection between the care a child receives during early childhood and their emotions, ability to adapt, explore, and react (Bowlby, 1982). These connections provided insight into the attachment style that is developed in a child. Additionally, Bowlby (1982) provided evidence that a child's attachment style remains stable throughout the lifespan unless a life-changing or critical event occurs. Bowlby (1982) shared examples of events that limit the stability of a formed attachment style throughout the lifespan such as an accident or chronic illness. These events may (a) increased childcare demands, (b) a more protective mother, (c) a less responsive mother, and (d) distraction or depression in the mother (Bowlby, 1982). Changes to how a mother relates and interacts with their child prompts instability of a developing attachment style and influences cognitive development (Bretherton, 2013; Paulus et al., 2018).

Although the contributions made by Bowlby, Ainsworth, and other theorists have provided significant insight on attachment theory (Bretherton, 2013), changing attachment styles, and stability, some areas still require further exploration (Del Giudice,

2019; McConnell & Moss, 2011). Del Giudice (2019) responded to a gap in the literature with longitudinal studies exploring attachment stability from middle childhood through adulthood. Additionally, McConnell and Moss (2011) also shared an interest on the scarcity of integrated findings on attachment stability throughout the lifespan. The review conducted by McConnell and Moss (2011) determined that (a) infants with greater instability experience higher levels of disruption within their family, abuse, and/or life altering events; (b) stability or instability among preschoolers fluctuated due to the quality of received caregiving and the quality of the mother/child relationship; feeling supported in their family unit and interaction patterns in the family influence stability in adolescents; and in adulthood, a fluctuation of stability is experienced due to personal and environmental influences. Interestingly, the commonality of experienced behaviors and the quality of relationships from womb to tomb set a foundation for stable individuals.

Stability and Change of Attachment in Early Childhood

Bowlby (1982) and Ainsworth's (1978) contributions to attachment theory has indicated the importance of the relationship between an infant/child and its mother; obstructions within the relationship can impact the child's development. In a longitudinal study, Bar-Haim et al. (2000) examined stability and change of attachment among 14-, 24-, and 58-month-old children. The researchers categorized the attachment styles as (a) avoidant, (b) secure, and (c) anxious/ambivalent. Stability was observed between 14 and 24 months, with 64% of the children remaining in the same attachment category (Bar-Haim et al., 2000). Attachment stability was not determined among the 58-month-old participants in the study (Bar-Haim et al., 2000). The attachment categories in the study

that displayed higher percentage rates of stability among the specific age groups were secure and anxious/ambivalent (Bar-Haim et al., 2000). It was also reported by the children's mothers that changes in attachment categories were the result of higher rates of adverse life events, as opposed to the children who displayed stability due to positive events, living conditions, and employment opportunities (Bar-Haim et al., 2000).

Stability of Attachment in Adolescence

Adolescence is a period that can be described as difficult and complex. Adolescents acquire an increase of desire and need for autonomy as they navigate through the transition from childhood to adolescence (Theisen et al., 2018). The analyses conducted by Theisen et al. (2018) determined that children transitioning towards adolescence became more avoidant towards their mothers, with boys experiencing higher percentages of maternal avoidance during this period when compared to females. The researchers also suggest that adolescents become "less emotionally dependent on their mothers" throughout the aging process (Theisen et al., 2018, p. 144). The researchers defined these shifts as normative in the development of attachment from childhood through adolescence (Theisen et al., 2018).

A five-year longitudinal study conducted by Jones et al. (2018) assessed 277 adolescents; to date, it is the most extensive longitudinal sample assessing attachment stability in adolescents. The researchers established that stability did not appear to decrease during adolescence (Jones et al., 2018). Adolescents who were categorized with instability and changes in attachment style experienced higher rates of (a) parent-adolescent conflict, (b) interparental conflict (e.g., money), and (c) parental separation or

divorce (Jones et al., 2018). Despite the myriad of adolescent changes, personal, environmental, and or social, “adolescence appears to be a time of attachment stability” (Jones et al., 2018, p. 876).

Stability of Attachment in Adults

Although stability in one’s attachment generally occurs in late adolescence, it is not uncommon for adults to experience a fluctuation in their attachment (Zhang & Labouvie-Vief, 2004). In one four-year longitudinal study, the findings suggest that attachment style and stability can change due to the demise of a romantic relationship among young adults (Scharfe & Cole, 2006). Personal distress, anxiety, and depressive symptoms are also influential factors of stability (Scharfe & Cole, 2006).

In contrast, Zhang and Labouvie-Vief (2004) discussed current literature findings in adult attachment and its significant role in adulthood functioning, with minimal focus on attachment stability and change. Over a 6-year period, the researchers determined that stability was observed in the research participants but changes in attachment style were related to age (Zhang & Labouvie-Vief, 2004). Higher levels of stability and dismissiveness were found among older participants when compared to younger adults (Zhang & Labouvie-Vief, 2004). The researcher’s findings also suggest a relation between the fluctuation in attachment security, coping, and well-being (Zhang & Labouvie-Vief, 2004).

Outcomes of Insecure Attachments

The development of an attachment style is the result of the quality of parenting, sensitivity, and attentiveness a child receives from their primary caregiver (Bowlby,

1951). The impact attachment styles have on an individual is an area that continues to be explored within the research community. Research conducted by Cooke et al. (2019) sought to examine the quantitative strength among the relationship of attachment and emotion regulation of children under the age of 18. The study's findings suggest that children who were avoidantly attached experienced less global positive affect, presented more significant difficulties with emotion regulation, and were noted to use cognitive and social support strategies less often when coping with distress (Cooke et al., 2019). Overall, the study's findings suggest children with secure attachments experience higher global positive affect, less global negative affect, higher emotion regulation, proper utilization of cognitive coping strategies, and utilize social support coping strategies compared to children with insecure attachment styles (Cooke et al., 2019).

Based on Bowlby's (1951) attachment theory, one can experience the continuity of impact from the infant or child and mother relationship throughout one's lifespan. The relation between maternal psychosocial distress, quality of mother-child interactions, child attachment behaviors, and behavioral problems in middle childhood within a six-year longitudinal study was explored by Dubois-Comtois et al. (2013). Their study's findings revealed that preschool children of mothers with psychosocial distress displayed higher rates of internalizing and externalizing behavior problems (Dubois-Comtois et al., 2013). The study also suggests that the quality of mother-child interactions played a significant role among adaptation problems in school aged children and suggests a relation between a mother and child's relational attachment patterns and a child's susceptibility in developing psychopathological problems (Dubois-Comtois et al., 2013).

In a different study, Hairston et al. (2018) explored the correlation between adult attachment styles, personality traits, and bonding issues among postpartum women. The researcher's findings suggest that a mother's attachment style played a significant role in developing bonding issues (Hairston et al., 2018). Comparatively, Kahn and Renk (2018) explored the mediating role between a mother's depressive symptoms, childhood maltreatment experiences, and developed patterns of insecure attachment with their children. Kahn and Renk's (2018) study suggest that adverse childhood experiences and maltreatment experienced by mothers correlated positively and significantly with avoidant patterns, anxiety, and disorganized mother and child attachment. The severity of mental health symptoms and disorders can increase throughout the lifespan (Matthews et al., 2016). Matthews et al. (2016) suggested that experienced caregiver attachment difficulties can play a significant role in the developing psychosis and other mental health disorders. These findings merit the importance of maternal bonding for infants and children.

Maternal Bonding

Researchers describe maternal bonding as "an emotional state of the mother" and refer to the emotions and thoughts a woman feels towards her newborn and herself as a parent (Bicking Kinsey & Hupcey, 2013). The bond between a mother and infant (maternal bonding) is believed to develop and evolve through time (Muzik et al., 2013). Although, the seminal work conducted by Klaus and Kennell (1982) suggests that bonding between a mother and her child occurs immediately after birth.

Klaus and Kennell often compared animal and human behavior, particularly the disruption that occurs when an animal's offspring is removed from the mother shortly after birth (Klaus & Kennell, 1982; Klaus, Voos, & Kennell, 1976). Klaus and Kennell explored maternal bonding and levels of attachment experienced among mothers who experienced long periods of separation from their newborns (Kennell et al., 1974). Levels of maternal bonding and attachment are impacted by experiencing separation from their newborns during the first postpartum hours, external stressors, delivery experiences, illnesses, and limited social/familial support (Klaus & Kennell, 1982). Mothers unable to bond with their infants during the first hours after delivery may also experience differences in maternal attentiveness and responsiveness to their infant's needs and cries (Kennell et al., 1974). Kennell et al.'s (1974) study findings suggest that an infant's development is significantly influenced by the mother's interactions with their infants and extended contact periods.

Development of PTSD

The complexities of PTSD have prompted past and present theorists and researchers to explore the disorders development, predispositions, symptomatology, and effect (Armour et al., 2010; Horesh et al., 2021; Marshall & Frazier, 2019). Through the exploration of hysteria among raped women, hysteria was also a noted symptom among World War II (WWII) combat soldiers (Herman, 1992). Combat soldiers who experienced symptoms of hysteria which included mutism, sensory loss, and or motor paralysis, were diagnosed with the term traumatic neurosis. A less conservative approach, electric shock, was used to treat the combat soldier's symptoms, with the primary

treatment goal focusing on their return to combat versus talk therapy and desensitization of their symptoms (Herman, 1992).

After WWII, the American Psychiatric Association (APA) introduced the diagnosis known as posttraumatic stress disorder into the Diagnostic and Statistical Manual of Mental Disorders (DSM) (Herman, 1992). It is not uncommon for individuals to connect the diagnosis of PTSD with military service members, but the disorder can develop among non-military- connected adults and children. During the women's liberation movement in the 1970s, it was determined that PTSD was more common among non-military women when compared to combat soldiers (Herman, 1992). Briere (2004) explained that females or an ethnic minority subsequently increases the likelihood of trauma risk and unfavorable outcomes. Detailed in the current version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5), PTSD can occur following a traumatic event such as (a) life-threatening event, (b) sexual violence, (c) serious injury, (d) witnessing a serious injury or death, natural or human-made disasters, and (f) repeated exposure to uncomfortable or unliked events and or details as experienced among emergency medical personnel, law enforcement officers, medical professionals, and victims of child abuse (APA, 2013).

Establishing the diagnosis criteria for PTSD based on the DSM-5, the presence of one or more intrusive symptoms associated with an individual's trauma or traumatic event are experienced after the event for a month or more (APA, 2013). Intrusive symptoms defined by the DSM-5 include the following:

1. Involuntary, reoccurring, and distressing memories of the event.

2. Recurrent distressing dreams.
3. Flashbacks of the event or feeling like the event is reoccurring.
4. Intense psychological distress.
5. Noticeable reactions and behaviors towards internal or external cues that resembles similarities of the traumatic event.
6. Avoidance of memories, thoughts, feelings, people, places, and things associated with the event.
7. Irritability and behavioral disturbances (includes reckless or self-destructive behavior, inability to concentrate, and hypervigilance).
8. Inability to recall details that occurred during the traumatic event.
9. Persistent negative emotional state (anger, fear, horror, guilt, shame, detachment).
10. Sleep disturbance (APA, 2013).

Theorists suggest that trauma survivors who tend to avoid trauma triggers are more likely to experience increased PTSD symptoms and difficulties in coping and controlling their symptoms (Rauch & Foa, 2006). This is to say that the severity of PTSD symptoms is believed to be correlated with trauma trigger avoidance.

Development of Childbirth Related PTSD

Childbirth can influence aspects of a mother's physical, social, mental, and emotional wellness (Dekel et al., 2019a). It is described differently among women based on their lived experiences. A women's perception of the events unfolding throughout their birthing and laboring process will also be different, as no two experiences will be alike. Bringing a child Earthside can be empowering for women as they gain an

understanding of an unknown inner strength they have never experienced. On the other hand, it can also prompt feelings of insecurity and decrease levels of self-esteem (Kendall-Tackett, 2014).

Anderson et al. (2012) reviewed several studies that suggest women can develop childbirth-related PTSD after complicated and uncomplicated childbirth. Several factors that can influence the risk a woman has in developing childbirth-related PTSD. A study conducted by Çapik and Durmaz (2018) established that having a fear of childbirth predicts childbirth-related PTSD. A systematic review performed by Anderson et al. (2012) defined influential factors in the development of PTSD after childbirth as follows:

- Complications in the pregnancy
- Requiring an emergency cesarean
- Requiring the utilization of an instrumental delivery (e.g., forceps, vacuum)
- Receiving inadequate care or support during labor
- Requiring an episiotomy
- Severe labor pain
- Postpartum complications
- Preterm labor
- First time mothers
- History of mental health conditions
- Life stressors
- Early or young maternal age

A study conducted by van Heumen et al. (2018) suggests that women were at a higher risk of developing childbirth related PTSD if they experienced low social support, experienced a life-threatening traumatic birth involving themselves or their baby, threatened injury or actual death of their baby, and had poor coping. Furthermore, Elmir et al. (2010) explored the perceptions of the traumatic birth experiences of women. Based on their study findings, Elmir et al. (2010) suggested that the women who (a) felt invisible or unseen during childbirth, (b) did not have control of their environment and experience, (c) lacked emotional support during labor, (d) felt they were treated inhumanly, (e) felt trapped or in a reoccurring dream, (f) experienced disassociation, and (g) experienced a "rollercoaster" of emotions developed a higher association of poor psychological and emotional outcomes. All the perceived factors detailed in Elmir et al.'s (2010) study can be defined as a traumatic birth experience, impacting the development of childbirth-related PTSD.

Association of Attachment and PTSD

Researchers questioned if attachment theory and style among adults were associated with negative impact and development of posttraumatic symptoms after a traumatic event (Arikan et al., 2016). The study conducted by Arikan et al. (2016) suggests that attachment anxiety plays a significant role developing posttraumatic symptoms, negative self-cognitions, and the maintenance of posttraumatic stress among their research participants who have experienced a traumatic event. Similarly, Ogle et al. (2015) also suggested that greater PTSD symptom severity could be predicted among research participants with higher attachment anxiety and avoidance. Analogously,

MacKinnon et al.'s (2018) study aimed to build and extend existing literature and research by examining the integrative process of attachment style and interpersonal trauma in the development and longer-term maintenance of childbirth-related posttraumatic stress symptomology in a large community sample of women. Their study's findings suggest that regardless of the attachment style among the women, history of interpersonal trauma, and childhood maltreatment, there is an increase within a women's vulnerability of experiencing and defining childbirth as traumatic (MacKinnon et al., 2018).

Conflicting findings in current literature exploring the relation between attachment theory and PTSD may be explained by the type of traumatic event experienced. Some focus on childbirth-related trauma while others focused on high-risk occupations (Arikan et al., 2016; Mackinnon et al., 2018). Marshall and Frazier (2019) reviewed the most current longitudinal and meta-analysis studies on posttraumatic stress disorder symptoms and attachment insecurities among mothers through the theoretical lens of attachment theory. Marshall and Frazier's (2019) findings suggest mixed results, with one study determining no reciprocal association with PTSD symptoms and others finding a reciprocal association with PTSD symptoms and attachment avoidance. Marshall and Frazier's (2019) review provides invaluable data on the significance of attachment theory and how individuals experience and adjust to their experienced trauma.

PTSD and Maternal Bonding

The bond between a mother and an infant is said to evolve over time (Muzik et al., 2013). Previous research has suggested difficulties in maternal bonding can be

experienced among women who developed postpartum depression (Handelzaltz et al., 2021). Still, little is known about maternal bonding complications among women with childbirth-related PTSD (Handelzaltz et al., 2021). Understanding the impact of posttraumatic symptoms and the levels of severity among individuals led me to question if childbirth-related PTSD also impacts maternal bonding. A study conducted by Dekel et al. (2018) suggests that women who experienced childbirth-related PTSD displayed lower levels of maternal attachment to their newborns when compared to postpartum women who did not experience PTSD-related symptoms after childbirth. Additionally, Dekel et al. (2018) discussed the minimal studies exploring maternal attachment and childbirth-related PTSD, which is vital to my present research and can minimize the current gap in the literature.

Moreover, Erickson et al. (2019) reviewed the role sensitive parenting and a healthy mother-infant relationship has on a secure attachment bond. The researchers sought to summarize previous literature on the relation of maternal-infant bonding within the context of trauma, perinatal depression, and PTSD (Erickson et al., 2019). The summarization of literature regarding maternal PTSD, Erickson et al. (2019) found the perinatal period for women is a stage of increased risk for the initial onset and exacerbation of PTSD symptoms. Erickson et al. (2019) analyzed previous literature conducted by Schechter et al. (2005), which concluded women with previous trauma exposure who ultimately develop childbirth-related PTSD, experienced higher PTSD symptoms and greater difficulties within their parent-child bonding and relationship. Additionally, a study of perinatal women with PTSD concluded a higher disturbance in

maternal bonding at six weeks postpartum when compared to mothers who experienced decreasing prenatal PTSD symptoms or were stable (Muzik et al., 2013). Erickson et al.'s (2019) literature review analyzed risk factors to childbirth-related PTSD, difficulties in the maternal-child relationship, factors of insecure attachments and valuable interventions.

In a more recent study, Mayopoulous et al. (2021) explored the impact the COVID-19 pandemic has on birthing mothers to establish a relation to childbirth-related traumatic stress. Mayopoulous et al., discussed the significant increase of depression and anxiety symptoms among postpartum mothers during the COVID-19 pandemic and its impact on the mother-infant bonding experience. The data compiled by Mayopoulous et al. (2021) suggests that the women in their COVID-19 study group had a higher acute stress response associated with childbirth-related posttraumatic stress disorder. Although difficulties in maternal bonding were not explored in this study, it highlights the significance of birth-related experiences and how they play a role in developing posttraumatic stress disorder after childbirth.

Summary and Conclusions

This literature review has analyzed research articles on attachment theory, PTSD, childbirth-related PTSD, and suggestive outcomes and impact. The seminal work conducted by Bowlby (1969,1973) and Ainsworth's (1963,1968) contributions to attachment theory emphasized the importance of the mother-infant or child relationship. The mother-infant or child relationship sets the trajectory in developing attachment styles, difficulties in interpersonal relationships, behavioral concerns, and the

development of mental health disorders (Bowlby, 1973; Dubois-Comtois et al., 2013; Matthews et al., 2016; Scharfe & Cole, 2006).

Although Marshall and Frazier's (2019) study suggests mixed results, the developed attachment style in an individual can influence the development of PTSD after a traumatic experience. The same notion is applied when considering factors that influence childbirth-related PTSD (Anderson et al., 2012). Additionally, women's perceptions of their childbirth experience play a significant role in developing childbirth-related PTSD (Elmir et al., 2010). Dekel et al.'s (2018) study suggest that women who experienced childbirth-related PTSD displayed lower levels of maternal attachment to their newborns when compared to postpartum women who did not experience PTSD-related symptoms after childbirth. Concurrently, little is known about maternal bonding complications among women with childbirth-related PTSD (Handelzaltz et al., 2021). Furthermore, Dekel et al. (2018) discussed the minimal studies exploring maternal attachment and childbirth-related PTSD, which is significant regarding perceptions of maternal bonding. This gap is essential to my present qualitative research and can minimize the current gap in the literature.

Chapter 3 provides a detailed description of the research design, methods, and rationale intended for use in this study. The chapter also describes the researcher's role in the study, participant recruitment methods, selection methods, data collection tools, and how the data will be analyzed. Lastly, the researcher explores the study's trustworthiness and ethical considerations and concerns related to the study.

Chapter 3: Research Method

Introduction

This qualitative study investigated common perceptions and descriptions of women who have had childbirth-related PTSD and the repercussions on their maternal bonding. Muzik et al. (2013) found that postpartum women with PTSD have greater levels of maternal bonding disturbance, although the researchers did not investigate perceptions. A phenomenological investigation can shed additional light on these crucial factors influencing a child's development (Dubois-Comtois et al., 2013). An investigation of childbirth-related PTSD and the associated difficulties of maternal bonding can increase awareness, which can affect newborn behavior and attachment style (Behrendt et al., 2019). Increasing awareness has the potential to prompt social change in an under-focused area.

This chapter provides a complete explanation of the procedures used to conduct the study. The topics will include the research design and rationale, the researcher's role in the study, methodology, description of the used measures, a description of participant recruitment, data analysis plan, trustworthiness, and ethical considerations for participant protection. The information in this chapter will guide future researchers, thus allowing the study to be replicated or expanded.

Research Design and Rationale

RQ: What are the mother-infant bonding lived experiences of women diagnosed with childbirth-related PTSD?

Qualitative Methods

The principal goal of this study was to understand women's perceptions of maternal bonding after developing childbirth-related PTSD. A phenomenological research design was used for this study due to its ability to emphasize lived experiences, which are equally important compared to numerical statistics (Moustakas, 1994). Husserl (1965) shared his thoughts on phenomenology studies as he concluded that it is the "study of science" since it alone examines what any remaining sciences basically underestimate or overlook; it is the actual embodiment of their own items. A secondary goal of this study was to increase awareness about the impact of childbirth-related PTSD and maternal bonding issues on child development. Bekker and Clark (2018) shared the importance of qualitative study findings as the ability to translate data to increase awareness of essential issues.

Role of the Researcher

As the primary researcher in this study, I performed different duties. First and foremost, I adhered to the ethical guidelines and code of conduct produced by the American Psychological Association. The guidelines set the tone for an ethical study, ensures its integrity, and protects researchers and the participants (APA, 2017). Upon university and IRB approval, the American Psychological Association (2017) suggests the researcher's role in the study extends to (a) obtain informed consent from the participants; (b) discuss the right to decline or to withdraw from the research; (c) disclose the foreseeable consequences of declining or withdrawing from the research; (d) understand factors that may impact the participant's willingness to participate due to

potential risk, adverse effects, and discomfort; (e) disclose research benefits; (f) disclose the limitations of confidentiality; (g) disclose any incentives for participation; and (h) provide contact information if questions about the research or the participant's rights.

My responsibility in this study was to orchestrate, gather, dissect, and articulate the insights and perceptions detailed by the study participants in a way that was evenhanded and liberated from internal biases. It is equally essential to maintain professional boundaries and develop rapport with the research participants to achieve a clear study. Developing and maintaining rapport with the research participants allows the participants' perceptions to be understood and adequately translated. Ultimately, I worked to satisfy all roles in the most unbiased and conceivable manner. Smith (2006) discussed the importance of maintaining reflexivity by reflecting one's thoughts or biases to modify thought processes accordingly. Being cognizant of internal biases increased the credibility and trustworthiness of the study (Smith, 2006).

Methodology

Participant Selection Logic

Hycner (1999) insightfully mentioned that a phenomenon directs the methods a researcher utilizes and the intended population in research. Given my focus on perceptions of maternal bonding after childbirth-related PTSD, women formally diagnosed with childbirth-related PTSD were the appropriately identified population for this study. Age was also thoroughly considered. Arrington Sanders (2013) shared unequivocal data and findings of magnetic resonance images comparing cognitive development among adults and adolescents. The data suggest that emotional and

cognitive development is not equal to physical and visual maturation. For this reason, the research participants were no younger than 21 years of age and older.

Creswell (2007) suggests a sample size between five to 10 participants to obtain proper saturation in a phenomenological study. With consideration, 10 English speaking participants who had been diagnosed with PTSD following childbirth were recruited for this study, thus allowing in-depth interviews. Other demographic factors, such as race or socioeconomic status, were not considered. Nevertheless, diversity among the participants relating to ethnicity, religion, and socioeconomic status is coveted.

Purposeful sampling and snowball sampling were utilized to recruit women who met the criteria for the intended study. As explained by Patton (2014), purposeful sampling in qualitative research provides appropriate sampling techniques and the selection of participants for information-rich data. Information-rich data in purposeful sampling occurs due to the participants' knowledge or experience with the phenomenon of interest, which is childbirth-related PTSD. Recruitment was achieved by contacting the administrator of one or more birth trauma support groups on social media platforms, who approved the intent of recruitment.

Instrumentation

This study utilized one instrument to collect data. I developed an interview guide containing a series of prepared questions that was used to collect data within the study. The interview guide also served as a guideline for the semi-structured interviews. During the semi-structured interviews, I video-recorded the virtual meeting for additional data analysis. Additionally, I used the dictating tool in Microsoft Word, which allowed me to

confirm accuracy, meaning, intended usage of word descriptions, or feeling, and make corrections if necessary. Utilizing an interview guide for a semi-structured interview provides flexibility and ample opportunity for the participants to fully express their experiences and perceptions. Additionally, a semi-structured interview also honors cultural beliefs and issues to be explored within its development. Moreover, the participants had the autonomy to decide to answer the question or respectfully decline.

Content validity was established through different validity procedures. Researcher reflexivity allowed me to self-disclose any biases, beliefs, and assumptions that may shape the study (Creswell & Miller, 2000). Researcher reflexivity is an important aspect to avoid biases that no researcher should take lightly. Throughout the semi-structured interview process, I conducted member checks to ensure my interpretation best represented and confirmed the participants' responses. I also provided the transcriptions to the participants for review and input on content accuracy (Creswell & Miller, 2000). The self-report scale and member checks prompted a sense of collaboration among the research participants and increased validity through the participants' lens in the study (Creswell & Miller, 2000).

Procedures for Recruitment, Participation, and Data Collection

I collected the data from various internet-based support groups. Collecting data from several groups minimized the limitation of recruiting too few participants. I found 10 active Facebook childbirth-related PTSD support groups. Out of the groups, the highest group members were totaled at 12,000 group members, and the lowest had 90 group members. I collected the data from each of the 10 recruited participants during one

30-60 minute recorded voice or video call meeting. Decker et al. (2013) acknowledged preferred outcomes research participants should experience after data collection and during the debriefing process. I debriefed the participants to increase understanding, support, and promote safety (Decker et al., 2013). The procedure plan below was used by as a guide and an effort towards an audit trail:

1. Contact administrators from internet-based group pages.
2. Provide the contacted administrators with information about the aim of the study, the participant criteria, data collection procedures, and contact information for those interested in participating in the study.
3. Contact all interested participants through their preferred contact method to confirm criteria-based qualification, explain the purpose of study, explain the voluntary nature of study participation, explain their options to decline from the study, confirm participation in the study, and schedule an appointment for the semi-structured interview.
4. Contact all qualified participants to conduct semi-structured interviews. Prior to conducting the semi-structured interviews, reiterate the study's purpose, explain the confidentiality procedure and contract, published scales, the interview process and procedures, disclose the utilization of the Microsoft Word dictation tool to confirm accuracy, interpretation, and meaning, debriefing and 7-day check-in. Confirm potential participants' wishes to be included in the study and obtain emailed consent to opt in the study.
5. Conduct the recorded, semi-structured interview and use the dictation tool on

Microsoft Word. At the close of the interview, review and confirm transcription with participants to confirm accuracy and proper interpretation and descriptions.

6. Participants will be asked the preferred method of contact via email, voice call, video call, or SMS for their 7-day check-in. Provide participants with my contact information if any questions or concerns arise.
7. Debrief to promote overall support and safety.
8. Schedule 7-day check-in for perspective research participant on Google calendar and set a reminder.
9. Contact participants for their scheduled check-in. Thank participants for their voluntary participation in the study.
10. Review the data collected from semi-structured interview transcriptions.
11. Analyze and review the data by coding for patterns and establishing themes according to thematic analysis (described below).

Data Analysis Plan

Before data processing, videotaped interviews were downloaded to my personal computer. During the autonomous transcription process utilizing Microsoft dictate to Text software, a virtual audio cable was established and substituted computer speakers for transcription purposes. Because the interviews were captured on one device concurrently, the recordings were transcribed, reviewed with the participants, and compared to reduce the chance of inaccuracy. The most accurate transcription was then used to listen to the recorded interviews and correct any inaccuracies.

The transcribed interviews were analyzed using the Colaizzi method (Shosha, 2010) and interpretative phenomenological analysis (IPA) as defined by Larkin and Thompson (2012). The first stage in the Colaizzi method is to read each transcript several times to clearly understand the participants' perspectives and prominent themes (Shosha, 2010). It was expected that there will be repetition of prominent themes across the participants. Additionally, unanticipated yet similar responses may be experienced by multiple participants. In preparation for this, the researcher attempted to set aside preconceived expectations of what participants may or may not have experienced. Responsive researcher thoughts and feelings were recorded in the researcher's reflexivity journal. The transcripts were thoroughly analyzed line by line to discover essential experiences and perspectives for the subject (as stated in IPA) supersedes (Larkin & Thompson, 2012). According to the Colaizzi approach and the IPA, the second phase is to detect and document emerging patterns and themes that are given significance in the context of the participants' situations (Larkin and Thompson, 2012; Shosha, 2010). Identified themes were aligned with the theoretical/conceptual framework to provide greater insights into the participants, their experiences, and perceptions.

The data, meanings, and themes were grouped into a logical framework that demonstrates the transitions from coded data to themes and clusters of themes and the connections between them. A collaborator has analyzed the arranged data in line with IPA to determine the plausibility of the researcher's data interpretation. The following stage would be to write a descriptive narrative based on individual interviews. In

addition, data from the semi-structured interviews allowed the researcher to grasp better the participants' situations and enriched person descriptions.

The examination and summary of demographic data were included in the analysis. It provided a chance for participants to add to the descriptions of participant conditions and individual settings. The data from the semi-structured interview and transcriptions was added to the grouped patterns and themes for each participant as a supplement. The combined data was analyzed, and the composite structural description style of the contextual narrative was linked to participant views towards maternal bonding. It was used to guide the combined structural description style of the contextual story.

Issues of Trustworthiness

Confirmability, credibility, dependability, and transferability are the four main components of qualitative data trustworthiness (Lincoln & Guba, 1985). Among the approaches used to maintain overall trustworthiness are audit trails, member checks, peer debriefing, thick description, and triangulation. Barusch et al. (2011) explained that assessing the usage of tactics to assure the trustworthiness of qualitative research, sampling procedure and triangulation were the most popular means of establishing trustworthiness among the 80 research papers examined. To strengthen the credibility of the data collected and provided, this study used an audit trail, member checks, purposeful sampling, referential accuracy, thick description, and triangulation. Additionally, to avoid researcher bias, bracketing and reflexivity procedures were used throughout the investigation.

Credibility

The accuracy and truthfulness with which qualitative research findings are represented are measures of research credibility. Methods for initiation of credibility include member checking, referential accuracy, and triangulation. According to Lincoln and Guba (1985), member checking is critical for ensuring the research's trustworthiness. The researcher conducted member checking throughout the interviews to ensure that the interpretations reflected the meanings ascribed by the person. Referential correctness entails identifying and incorporating data that will not be included in the first data analysis as a way of verification (Lincoln & Guba, 1985). Although this additional information will originally be meant to expand the description of participants, it will benefit from verifying the study outcomes and served as an additional data source for triangulation.

Transferability

Findings in qualitative research that fulfill the criteria of transferability can be applied to people or groups other than those who participated in the study (Creswell, 2009). Extensive or thick description is linked to determining the transferability of research results. Capturing the core of each participant's experiences and perceptions and transmitting it to the reader is critical to the effectiveness of the research and distribution of the findings to examine the experiences and perceptions of women who experienced childbirth-related PTSD. The participants were encouraged to provide detailed and intricate comments but maintain awareness of their limitations and triggers, allowing the

researcher and reader to internalize and relate to the participant's experiences and perceptions.

Dependability

The dependability requirement for trustworthiness implies that the study will resist repeatable inspection (Lincoln & Guba, 1985). This means that if a new researcher followed the same study process with a similar population sample, comparable results would be obtained. A certain level of external auditing is to be expected throughout a Ph.D. dissertation. However, it is unknown if this will achieve the degree of objective review required to ensure the accuracy of the data gathering and analysis used in this work. As a result, an audit trail was used to track the actions and outcomes of this study.

Confirmability

Confirmability is the final component in qualitative research to establish trustworthiness. The purpose of confirmability is to confirm that the interpretations of the collected data display the actual perspectives of the participants rather than the researcher's prejudices and biases. Lincoln and Guba (1985) recommended conducting audit trails, reflexivity, and triangulation to affirm confirmability. An audit trail requires establishing a way of recording the necessary actions taken to conduct a research project. Comprehensive records of the research was preserved and maintained throughout the data collection and analysis processes.

For reflexivity to occur the researcher must recognize their personal prejudices, beliefs, and biases and understand their ability to impact the study and research process and conclusions (Lincoln & Guba, 1985). Reflexivity is a process that occurs throughout

the entirety of the study and influences the efficacy of bracketing (Fischer, 2009). Fischer (2009) describes the process of establishing brackets or "shelving" factors that may influence the study's data. Discussing and processing personal biases with other researchers also reduces researcher bias (Noble & Smith, 2015). Utilizing various methods to validate the interpretation of data is known as triangulation (Lincoln & Guba, 1985). As mentioned in the credibility section, member checking ensures the data interpretation reflects the participant's intended meaning rather than researcher bias.

Ethical Procedures

Research comprising of human participants who may or not be categorized in a vulnerable population requires delegating several methods and standards to affirm risk exposure. According to The Belmont Report (1979), individuals meet the criteria as a vulnerable research subject if they are considered a racial minority, have diminished mental capacity, have severe mental health conditions or disorders, are physically ill, institutionalized, and educationally or economically disadvantaged. The U.S. Federal Regulations of Human Research describes vulnerable individuals if they require special protections such as: children, prisoners, pregnant women, mentally disabled, and economically or educationally disadvantaged (Sieber, 2012). Although the research participants would not be classified as a vulnerable population, their experiences and potential of PTSD may render them more vulnerable than their unaffected cohort. Considerations were made throughout the study to minimize any potential triggers that can impact the participants and cause harm. The Belmont Report and the U.S. Federal Regulations of Human Research covered basic ethical principles that should be adhered

to minimize harm: beneficence, justice, and respect. These ethical principles are essential to fulfilling the objectives of this research.

The participants were recruited from selected internet-based support groups. The participant's right to informed consent requires information regarding the study, research methodology, and a comprehension of the research's utilized terminology and voluntary aspect. There were no anticipated ethical concerns with the recruitment process. The participants employed their autonomy to agree or decline participation. Due to the potential vulnerability in this population, ethical concerns were taken into consideration but not anticipated related to data collection. Participants were provided consent to participate in the video-recorded virtual interviews. Additionally, the platform used for the video interviews and recorders prompted a consent notification providing an option to continue or leave the meeting. The video recorded interviews were downloaded to the researcher's laptop. The data was not stored on the server of the internet service provider, therefore access to the data was restricted. This has ensured the protection of confidential data and information provided by the participants.

The approval of the study procedure by the Institutional Review Board (IRB) promotes researcher responsibility and conformity to ethical standards and principals. Additionally, specialized training in the area of human participants is necessary to obtain IRB approval. The researcher successfully completed the CITI Program human subjects protection training module to achieve certification in working with human participants. Prior to contacting the internet-based support group admins and potential research participants, relevant applicable documentation will be submitted to and approved by the

Walden University IRB #09-30-22-0577785. The IRB application boosted this researcher's knowledge with the ethical processes and factors that may have gone previously unnoticed. Consequently, all the procedures will be thought to have been carried out according to IRB guidelines.

Summary

This study incorporated one method of data collection to explore perceptions and experiences of women who had or perceived to have childbirth-related PTSD. The study involved participants completing and engaging in a recorded semi-structured interview. Different strategies were used to minimize researcher bias to increase the trustworthiness of the findings. The American Psychological Association's, U.S. Federal Regulations of Human Research's, The Belmont Report's and Walden University's guidelines were strictly followed. The data was analyzed using a combination of the Colaizzi and IPA data analysis methodologies. The semi-structured interviews helped improve researcher data fluency and participant voice accuracy. Following the processes indicated in this chapter has resulted in a thorough exploration of the experiences and perceptions detailed by the participants. Chapter 4 provides an in-depth discussion of the data collection, analysis process, and study findings.

Chapter 4: Results

The primary goal of this study was to broaden the understanding and awareness of maternal bonding after the experience of traumatic childbirth. Specifically, I explored the perceptions and experiences of women with perceived childbirth-related PTSD and the challenges, if any, within the confines of mother and child bonding. With that objective, six interview questions were developed concentrating on the level of bonding and satisfaction of mother-child bonding; five additional questions were asked regarding childbirth experience and child development. Interview-based data collection, analysis, and interpretation provided insights into the participants' unique experiences.

This chapter provides an in-depth discussion of the data collection, analysis process, and study findings. Research participants are identified by coded numeric identifiers. One of this chapter's primary goals is to offer readers an understanding of each participant's perceptions and experiences, both at the time the trauma occurred as well as the participants' ongoing perceptions and resulting behaviors. The sections in this chapter include the participants' descriptions of their particular perceptions, as well as the common themes unearthed through thematic analysis.

Research Setting

For the purpose of confidentiality, I conducted 10 virtual interviews in the confines of my private office; the participants were in a confidential location of their choice. The interviews were conducted with no other individual in attendance, and nine out of the 10 interviews were conducted without interruption. The risk of influence on

participant responses and researcher interpretation was higher during the one interview with interruptions; however, a well-founded assumption is that no environmental factors influenced the data collection process. Participants determined the date and time to participate in the interviews based on their availability. Each of the participants was asked if they preferred check-ins and follow-up questions to be conducted virtually or via electronic mail; all 10 participants chose electronic mail due to its flexibility and the ease of referring to follow-up questions and providing additional information if the participant chose to do so.

Demographics

Ten female participants were included in this study. The demographics included nine non-Hispanic Caucasian women and one mixed race Pacific Islander, all ranging in age from 29-37 years. All the women held degrees in higher education; two received a Bachelor's degree, and seven held a Master's degree. Seven women had one biological child; two women from this group also had adopted an older child; two women had two children; and one had four children. Nine of the participants resided in the United States, and one resided in Canada. Seven participants were born in the United States. Seven of the women delivered their newborns via cesarean section, and three were via vaginal delivery. I did not explore socioeconomic status, marital status, and employment status in this study. Table 1 depicts the demographic characteristics of the participants of this qualitative study.

Table 1

Participant Demographics

Participant	Sex	Age at Interview	Number of Children	Type of Birth
VAM-10OTF	Female	33	1	Vaginal
HVC-11NBF	Female	37	1 adopted, 1 bio	Vaginal
SFC-11NBF	Female	30	1	Cesarean
SLT-07NBS	Female	29	2	Cesarean
VAE-11NBT	Female	32	1	Vaginal
SMC-11NBS	Female	35	1	Cesarean
MTC-12NBN	Female	32	2	Cesarean
CJS-10SEO	Female	34	4	Cesarean
SKC-13NBT	Female	33	1	Cesarean
SCH-19NBN	Female	36	1 adopted, 1 bio	Cesarean

Data Collection

Each of the 10 participants were asked to provide responses to 11 questions during one interview. The interviews were conducted between October 12th and November 9th, 2022. The lengths of the interviews varied depending on how comfortable and open the participants were in providing expansive responses. The shortest interview lasted 15 minutes, whereas the others ranged between 45-65 minutes. Additionally, seven demographic based questions were sent via electronic mail 5-7 days after the initial interview.

The first few minutes were spent establishing a rapport with each participant and to ensure the audio was working properly. I reviewed each participant the consent form and obtained their verbal consent to participate. I also offered to review the consent form again with each participant if additional clarification was required. I then explained in detail to the participants the importance of autonomy and advised them about the potential for emotional triggers that may surface because of the questions posed during

the interview process. I explained to the participants the importance of research ethics, as well as the steps I had taken to not impose any harm to their current mental health status. Then, I encouraged the participants to notify me if they felt triggered, required additional time to respond to questions, wanted to continue the interview on a different day, or if they wanted to discontinue the interview.

The interviews were recorded with two digital recorders to minimize the potential of losing data due to technical difficulties and to ensure interviews were recorded to their entirety. Originally, I planned to concurrently transcribe while conducting the interviews with Microsoft Words dictate (talk-to-text) software. I noticed discrepancies and typographical errors during the interviews and stopped the transcription until the recordings were completed.

All the participants completed the interviews in the comfort of their home. Several participants utilized their home offices to complete the interviews, while the others occupied their living rooms. During the interview with participant JLG-10SEO, there were two distractions during the interview. The distractions during the interview were the result of her children entering the room and requiring attention. The participant asked to pause for a moment and asked her spouse to attend to the children. I concluded that once the distractions were eliminated, the participant was able to engage in the interview, and these distractions did not detract from the participant's comfort or ability to be open and expansive in her responses.

Upon completing the transcription of the interviews, the participants were contacted via electronic mail to ensure that responses were accurately transcribed.

Additionally, participants were asked to add any missing information or provide clarification to the transcriptions. After receiving clarifications and additional information provided by the participants, I added the information and made note of the added information and/or clarifications by utilizing a different font color. This allowed me to correct any errors in the transcriptions and provide further expansion of the participant's experiences.

One of the challenges initially encountered was the number of prospective participants that communicated their interest in participating, but who would not confirm that they were biologically female. From the initial emails, I discovered that one or more of the initial respondents were the same person. I came to this conclusion because the verbiage in several of the initial responses to the recruitment ad were the same. Further, in these initial encounters, the respondents refused to allow the researcher to confirm that the prospective respondents were biologically female by their refusal to turn on their cameras. As a result, I found it necessary to engage in additional recruitment. Subsequently, prospective participants agreed to engage their cameras so that the researcher could confirm that every participant was a biological female, in keeping with the inclusion criteria for participation. Each participant consented to engage their cameras during the interviews; however, no video recordings were created.

Data Analysis

To define the interview analysis protocol, fundamentals from the Colaizzi technique (Shosha, 2010) and interpretative phenomenological analysis (Larkin & Thomspon, 2012) were integrated. Each interview was transcribed using Microsoft

Word's dictate (talk-to-text) software application and checked for accuracy. The audio recordings of the interviews and the transcriptions were reviewed at least five times to increase familiarity with the participants experiences, perceptions, and a sense of their individuality. The transcriptions were thoroughly examined to uncover recurring themes and key words in the participant statements. Subsequently, the audio recordings and transcriptions were reviewed to locate statements that addressed the study questions. Congruous responses to the research questions were highlighted and compared to identify reoccurring themes and patterns. It was noted that several of the participants experienced a sense of loss and guilt following the birth of their child. Several participants mentioned the importance of the "golden hour," which is the first hour after birth. Participant SFC-11NBT stated, "the golden hour, which is so talked about, I didn't get any of." Participant SKC-113NBT, a 33-year-old Caucasian woman stated, "The PTSD relating to my birth experience felt like something to move either over, through, or around and I was just making up for what we didn't get in that initial golden hour." Lastly, the themes were aligned with attachment theory and styles.

Participants were contacted via their method of preference to verify the statements made during the interviews. Participants were asked how they were doing, if any uncomfortable feelings or triggers were prompted after the interview, and any disclosed changes were documented. Follow-up demographic questions were sent to the participants. The participants were also asked to provide the number of children they have. Identified patterns were reviewed, double-checked for identification precision,

assessed for thick descriptions, aligned with the literature, and aligned with attachment theory.

Evidence of Trustworthiness

Credibility

To ensure credibility, I initiated member checking, referential accuracy, and triangulation. As stated by Lincoln and Guba (1985), member checking is critical for ensuring the research's trustworthiness. I conducted member checking throughout the interviews to ensure that the interpretations reflected the participants meanings. Member checking also allowed me to receive clarification on discrepancies stated within the childbirth experience and observed bonding characteristics. All 10 participants were available for follow-up communication, verification of data interpretation, and to review the transcriptions. Referential accuracy was established while identifying participant mood and emotions through their body language. Congruency with participant statements and their body language became important in providing thick descriptions required for triangulation.

Dependability

A different researcher may identify alternative themes and overt statements, thereby jeopardizing the dependability of the research findings. By contrast, participant demographics are not subjective or influenced by researcher bias. An audit trail was used to track the actions and outcomes of this study, with all data collection and analysis made. As a result, it is believed that a solid base for dependability was established, and that repeatability of participant perceptions was achieved.

Confirmability

To ensure confirmability of the interpretation of the data collected, the researcher used member checking, referential accuracy, reflexivity, audit trails, bracketing, and triangulation. Congruous with the establishment of an audit trail, substantial recorders were maintained in relation to participant recruitment, data collection, and data interpretation. Correlated to reflexivity, to minimize my potential influence on biases and beliefs on the interpretation of participant responses, continuous efforts of awareness were made and acknowledged. Open-ended interview questions allowed the participants to respond as briefly or as in depth as possible, while also allowing myself to obtain clarification and/or information about the questions posed and the associated responses. Active listening and bracketing (probing) was performed throughout the interview process. Bracketing allowed the exploration of factors that may influence the study's data. Utilizing various methods to validate the interpretation of data is known as triangulation (Lincoln & Guba, 1985). Member checking was also performed throughout each interview to ensure the data interpretation reflects the participant's intended meaning rather than researcher bias. The effect of researcher bias was decreased, resulting in a more accurate depiction of participant perspective when these methods were used.

Transferability

Achievement of transferability requires that the interpretations propagated from the data collected in qualitative research can be applied to people or groups other than those who participated in the study (Creswell, 2009). The seminal work conducted by

Klaus and Kennell (1982) suggests that bonding between a mother and child occurs immediately after birth. The individualization of the perception of maternal bonding was apparent within this research and could be the result of a myriad of factors. Some participant viewpoints arose as salient despite participant and birth experience differences. Although representations of maternal bonding such as "I was supposed to feel very close and I felt very far away" (Participant HVC-41NBF) may be a frequent statement that may have been made by most women who experienced a disruption in the initial stages of the mother/child bonding experience immediately after birth. This statement could also be expressed by mothers who have newborns in the NICU immediately after birth. The desire to establish healthy and stable attachments expressed through statements of intentional bonding experiences or the implementation of additional interventions were recited in this participant sample.

Study Results

Thoughts on PTSD after Childbirth and Maternal Bonding

All participants of this study self-reported that they had developed PTSD after childbirth. Eight of the 10 participants experienced internal bleeding or hemorrhaging. Participant SCH-19NBN was a 36- year-old Caucasian woman that experienced entire blood loss four times post cesarean section requiring 50-55 units of blood. "I think part of the bond that I feel with her is also, I was able to breastfeed" she responded when asked what part of the mother-child bonding is going well. She was able to take significant time off from work and continued to work part-time eight months after childbirth due to the

pandemic. The participant shared “we had significantly more time together” as she expressed her thoughts on what part of the mother-child bonding is going well.

A mother of four children who developed PTSD after the birth of her last child, Participant CJS-10SEO stated that she experienced near death after cesarean section. Due excessive hemorrhaging, she nearly died and came to once the artery was repaired and the bleeding was controlled. “His face lights up” she responded when asked what part of the mother child bonding is going well. Her facial expressions displayed seriousness while sharing how afraid she became while not being in close proximity to her child, however, she smiled and joked about how “he’s a major cling on”.

In contrast to other participants, Participant SFC-11NBT stated, “I am 100% not her preferred parent”. A 30-year-old Caucasian woman who has an established support system within her husband and mother who lives nearby. “I felt like I was adopting this child in the NICU” as she described the disconnect between the baby she was “carrying verses the baby she was wheeled into meet”. For this participant, bonding after childbirth was a challenge, “it just felt very unnatural”.

All the participants stated they had experienced PTSD after childbirth. Three of the participants reported being dissatisfied with their level of bonding. Overcompensating and being intentional in the interactions with their children was a common theme uncovered during the interview and appears to be a method of coping with the disruptions in bonding after childbirth. However, the most unexpected was exhibited by Participant SLT-07NBS. “I don’t think that I’ve had like a loving, a truly loving bonding experience with my first because it me it was work”. Additionally, she shared, “I feel more like I was

just somebody watching somebody else's kid". Initially, perceived as a current disconnect in maternal bonding, the participant expressed having a "moment of clarity" after her son's first birthday.

Factors that Influence Maternal Bonding

Birth experience, guilt, PTSD symptoms, and triggers were the most common responses included when participants were asked what part of the mother-child bonding is not going well. Further insights into participant thoughts were captured through introspective personal experiences, which were more singular. For example, Participant VAM-100TF a 33-year-old Caucasian woman without immediate family members in her state of residence and whose support system outside of her husband fell through due to COVID precautions, identified a sense of survival mode as a barrier to maternal bonding. Other physical and mental health challenges were also indicated by some of the participants such as, post-COVID-19 related symptoms, memory loss, and hypervigilance.

Participant SMC-11NBS a 35-year-old Caucasian woman reported that she experienced an amniotic fluid embolism, blood clots in her heart, temporary heart failure, apnea, and underwent 17 blood transfusions. Aside from common PTSD symptoms, she reported experiencing auditory hallucinations. "I was getting no sleep, when I would sleep I would wake up because of loud music playing that wasn't actually playing". The intensity of symptoms appears to have influenced maternal bonding. For Participant MTC-12NBN a 32-year-old Caucasian female, having a cesarean section while in a coma and her newborn spending 71 days in the NICU prompted challenges in maternal

bonding. While her newborn was in the NICU, she engaged in rehabilitation therapy to relearn to walk, eat, toileting on her own, and other basic needs. Participant VAE-11NBT a 32-year-old Caucasian woman said, “I have flashbacks of the newborn stage and when you’re up all the time, I just don’t want to deal with it”. She reported that she struggled with guilt towards the beginning of her maternal bonding experience and still struggles with some triggers. For Participant CJS-10SEO, she experienced hematomas on the cesarean section scar which did not align properly. She described struggling with self-confidence and developing other insecurities which hindered maternal bonding.

Factors that Promote Maternal Bonding and Healthy Attachments

The “golden hour”, feeling supported, being a constant in their children’s lives, and trust were often cited by the participants as factors that promote maternal bonding. When asked to describe their role in the mother-child bonding most mentioned being present in their child’s lives as an important factor. Most participants were educated and aware of factors that promote maternal bonding and healthy attachments. Participant VAM-100TF said, “I have to take care of myself and I have to get the help that I need (therapy) to be present for my kid” and “we’re kind of like creating the container in which she can form secure and healthy attachments”.

Participant SKC-113NBT shared efforts made to establish a successful breastfeeding relationship. “We’ve had many of our own sort of golden hours,” she said as she reflected on the breastfeeding journey. Participant SFC-11NBT indicated that “giving that undivided attention” would make her daughter happier than focusing on external tasks, employment duties, and spouse related duties. Participant CJS-10SEO

presented a discrepant case. A 34-year-old Pacific Islander/Caucasian/Hispanic (mixed race) woman with four children and self-described helicopter mom shared her thoughts on wishing her son "would unbond a little bit". She described her desire to bond and have her son with her at all times allowed him to develop a significant attachment to her. "The level of attachment is still really, really hard because I can't really do much without him; he throws a tantrum" she said.

Attachment Theory

Participant perspectives can be aligned with insecure and secure styles corresponding with John Bowlby's (1969) attachment theory. Although, these are not identified factors in attachment styles, the participant's characteristics such as age, health, and birth experience are at the base of these attachment styles. Overall, mental health and specific limitations resulting from childbirth were among the issues that formed barriers to maternal bonding for multiple participants. After a vaginal birth, Participant VAE-11NBT reported experiencing syncope when the hospital staff realized she was hemorrhaging internally. In the following events, the participant reported experiencing a violation of bodily autonomy when the obstetrician inserted their entire arm in her uterus. "It was really hard" she recalls "I used to leave her in her bassinet just to cry because I didn't want anything to do with her." "I blamed her for me hemorrhaging and almost dying".

For Participant VAM-100TF, she reported experiencing a lack of autonomy throughout her vaginal birth. "They were like talking to my husband and not me," and they were "asking his consent for things". During her first week of being home after the

hospital discharge, she slept “maybe 15 hours” in total. She reported feeling as if she was in “pure survival mode” for the first 13-14 months of her infant’s life. “I did not really feel a sense of being like oh my gosh, I love the baby so much”. She detailed that when her infant was about nine weeks old, she realized she never said she loved the baby, “I felt like a very extreme sense of obligation” “It was life or death you must do everything that this tiny human needs so I felt very like connected in the way of just like this child must survive”.

Many of the participants reported experiencing emotions, thoughts and feelings in an environmental context that impacted their ability to establish immediate bonds with their newborns which ultimately impacted secure or insecure attachment styles. Environmental context among the participants appears to have had a lasting impact. It also drives them to increase maternal and child bonding or overcompensating because of self-reported feelings of guilt. “I do feel like in a lot of ways I am trying to go above and beyond to give her certain experiences” stated Participant SFC-11NBT. Subthemes that emerged were issues with body image, subsequent thought patterns, and cognitive distortions.

Summary

One method of data collection was used to address the primary research question and render the perceptions of ten participants. Data collected via semi-structured interviews served as the primary source of data collection in relation to the research questions. Audio recordings and transcriptions accurately recorded each participant’s

descriptions, increased an understanding of participant's perspectives, and uncovered both common and unique themes and patterns.

Commonalities were identified within participant demographics and experiences. All participants were aged 29 years or older and all self-reported experiencing a traumatic birth. All participants were biological females; seven had one biological child, two had two biological children, and one had four biological children. Most of the participants earned Master's degrees and self-reported knowledge of attachment styles and maternal bonding. Seven of the participants delivered via cesarean section, and five experienced blood loss. The majority of responses to the research interview questions reflected each individual's unique circumstances, lived experiences and perspectives.

The research question explored the mother-infant bonding lived experiences of women diagnosed with childbirth-related PTSD. All of the participants self-reported how the environmental context impacted maternal bonding. Eight of the 10 participants described struggling with maternal bonding after childbirth.

Chapter 5 provides a detailed description of the study findings. The study findings will be extensively discussed and establish a nexus to the literature. The next chapter will also discuss the study's limitations, recommendations, implications, and conclusions in contrast to the literature review.

Chapter 5: Discussion, Conclusions, and Recommendations

This interpretive phenomenological study was conducted to broaden the understanding and awareness of maternal bonding after the experience of traumatic childbirth. The primary goal of this study explored the perceptions and experiences of biological females with perceived childbirth-related PTSD and the challenges, if any, within the confines of mother and child bonding. A secondary goal of this study was to increase awareness and knowledge of the influence of maternal bonding on attachment styles. I addressed the research question: What are the mother-infant bonding lived experiences of women diagnosed with childbirth-related PTSD? This study provided the participants an opportunity to reflect on their birthing experiences and the role it played in their maternal bonding and attachment styles.

Noted findings in relation to the research question involved disruptions in the maternal bonding experience. Limited access to their newborns immediately after birth was seen as a contributing factor and a barrier in maternal bonding and establishing healthy attachments; however, PTSD symptoms were also a contributing factor and a barrier in the maternal bonding experience. For some participants, the symptoms they experienced after childbirth specifically linked to PTSD were debilitating.

Interpretation of Findings

Participants of this research study were biological females who self-reported PTSD after childbirth. Bowlby's (1951, 1977, 1982, 1988) and Ainsworth's (1963, 1968) seminal research on mother-child attachment and the resulting attachment theories, provides the theoretical underpinnings for this study. Bowlby (1950) examined the effects

of maternal separation on child development during the five years after World War II. Bowlby (1950) postulated that children who were separated from and deprived of their mother developed a variety of mental health disorders. The findings of this study confirm a variety of mental health disorders to include PTSD, generalized anxiety, and depression.

Bowlby (1950, 1977, 1982, 1988) theorized that the early relationship between mother and child were significant predictors of future patterns of relationships and how an individual relates to others. Ainsworth (1963, 1968), building on Bowlby's (1950, 1977, 1982, 1988) attachment theory, affirmed that to insure the healthy emotional development of a child, the primary caregiver must provide a secure base from which a child may explore the world around them. Regardless of the complications the participants faced after their childbirth and challenges with the mother-child bonding, the findings confirmed all participants provided a safe and secure base for their child to develop within normal limits and explore their environment cognitively.

Klaus and Kennell (1976, 1982) expanded on the seminal research from Bowlby and Ainsworth by explored maternal bonding and levels of attachment in the context of mothers who have experienced long periods of separation from their infants. These authors postulated that levels of maternal bonding are predictive of attachment between mother and child. These authors suggested that bonding between a mother and her child occurs immediately after birth. Furthermore, these authors posited that maternal attentiveness and responsiveness to their child's needs is predictive of the child's future socioemotional development.

Albeit, this study did not explore the children's socioemotional development, some of the participants restricted their attentiveness and responsiveness to their child. For example, Participant VAE-11NBT was not responsive or attentive to her newborn's cries for the first three months after childbirth. The participant frequently left her infant in the bassinet crying and avoided attending to her needs. This participant reported that her child's tantrums impact the mother-child bonding. Crying is a form of communication for infants and toddlers; however, when a mother is unresponsive to their child's cries, the child's socioemotional development can be assumed to be impacted.

It was determined that eight of the participants voiced their discontent about not having an adequate amount of time to bond with their newborns immediately after birth. There appeared to be a disconnect in the mother and infant relationship due to the disruption of bonding after childbirth. For example, Participant SLT-07NBS struggled to recognize the level of love they have and developed for their child up until their child was one and one-half years old. The events that unfolded after the delivery of her newborn prompted the disruption of maternal bonding, which impacted the mother-child bonding period (Klaus & Kennell, 1982). Additionally, this participant expressed actively experiencing difficulties in the mother-child bonding as she self-reported her child is a PTSD trigger.

For Participant VAM-100TF, she did not feel a true sense of love for her child until 13-14 months after childbirth. For this participant, maternal bonding was not a priority due to the severity of PTSD symptoms; however, this did not detract from caring for her child and she viewed it as an "extreme obligation" and was in "pure survival

mode." There was an emphasis placed on the "golden hour" for mothers to bond with their newborns. Klaus and Kennell (1976) also identified a few hours after childbirth as a "sensitive" period.

Dekel et al. (2018) identified lower levels of maternal attachment to newborns among women who experienced childbirth-related PTSD. Dekel et al.'s (2018) research into levels of attachment and mother-child bonding suggested that many factors influence the bond between mother and child at birth. Dekel et al.'s (2018) findings were taken into consideration when establishing themes and patterns among the participants who expressed difficulties in maternal attachment. Consistent with Dekel et al.'s (2018) study findings of lower maternal attachment among women with postpartum PTSD, 80% of the women in this study reported lower maternal attachment for at least three months postpartum. Additionally, all the participants self-reported that their childbirth related experience facilitated their PTSD symptoms. A myriad of factors is linked to negative childbirth experiences that may impact mother-child bonding. Consistent with Anderson et al. (2012), participants in this study encountered influential factors in the development of PTSD after childbirth. The influential factors include the following:

- Emergency cesarean sections
- Inadequate care or support during labor
- Severe labor pain
- First-time mothers
- History of mental health conditions
- Perineal tears

- Hemorrhaging
- Blood transfusions
- Risk of death
- Limited access or temporary separation of infant

Mayopoulous et al. (2021) explored the significant increase of depression and anxiety symptoms among postpartum mothers during the COVID-19 pandemic and its impact on the mother-infant bonding experience. The data obtained by Mayopoulous et al.'s study (2021) suggests that the women in their COVID-19 study group had a higher acute stress response associated with childbirth-related posttraumatic stress disorder. Several of the participants in this study gave birth to their children during the COVID-19 pandemic. Consistent with both Dekel et al. (2018) and Mayopoulous et al. (2021), difficulties in maternal bonding were present among the participants due to childbirth-related stressors and PTSD symptoms. Congruous with Mayopoulous et al. (2021,) all the participants self-reported experiencing higher acute stress response as one of their symptoms. Common reported symptoms of acute stress response were anxiety, sadness, social withdrawal, inactivity, anger, despair, and overstimulation.

Limitations of the Study

I used various methods to ensure the trustworthiness of the data collection, analysis, and interpretation; for example, I used purposeful sampling, audit trails, member checking, triangulation, referential accuracy, thick descriptions, and confirmation of interpretations to ensure the trustworthiness of this study. A total of 11 open-ended interview questions were asked, which may have limited the quality of the

results. I acknowledged constraints such as biases, population accessibility, and transferability. Each of these limitations is explored below.

Bias

The probability of researcher bias, such as confirmation bias, was minimized by conducting bracketing and strategies of reflexivity. Nonetheless, managing researcher bias does not remove the impact of respondent biases. Interviewer bias could occur due to my occupation as a mental health therapist and exposure to women diagnosed with PTSD after childbirth. There was a potential for me to develop dual roles while conducting this study: as researcher and as therapist. However, this was addressed by minimizing subsequent follow-up questions and member checking. Respondent bias was noted in the responses made by a few of the participants. Although they acknowledged the confidentiality of the data and identifiers, the participants intentionally selected words to represent their maternal bonding. Three participants voiced concern about the potential of being linked to the study and the potential to be viewed negatively as a mother. The participants were aware of the biases regarding how mothers should feel towards their infants/children, which made it difficult for some of them to speak freely about their perceptions and experiences.

Population Accessibility

Women diagnosed with PTSD after childbirth are at a greater risk for experiencing triggers and depressive symptoms. As a result, the participants might have determined they did not want to participate in this study. Participants in this study were willing to discuss their experiences and perceptions relative to a PTSD diagnosis after

childbirth. Additionally, there are other factors that could influence members in this population to decline participation in this study, such as disconcertment with video and audio recording. Moreover, during the first recruitment trial, I determined that prospective participants who communicated their interest in participating would not confirm that they were biologically female. From the initial emails, I discovered that one or more of the initial respondents were the same person due to the rhetoric in several of the initial responses to the recruitment ad being the same. During initial encounters, the respondents refused to allow me to confirm that the prospective respondents were biologically female by refusing to turn on their cameras.

Sample Size

While ten biological females participated in this study, which is suitable for phenomenological research (Creswell and Miller, 2000), a larger sample may have identified alternative themes and expressed different perspectives than the ones described by the participants in this study. However, a larger sample size for this study with a sensitive topic is unethical. Obtaining saturation with a smaller sample size was not a concern in this study.

Transferability

Like prior research, cultural differences in maternal bonding and attachment were not investigated as part of this research (Dekel et al., 2018; Williams et al., 2016). Hence, some of the findings of this research may not be generalizable to biological females who have given birth, experienced a traumatic childbirth and were diagnosed with PTSD after childbirth comparable to the participants who reside in other countries and subject to

different cultural norms and values. Despite this, prior research also indicates that a mother's distress during birth and health complications in the infant were common factors leading to a disconnect of attachment (Dekel et al., 2018). As a result, the experiences and perspectives discussed in this study may stimulate subsequent research.

Data collection

This study had one data collection method to explore the perceptions and experiences of maternal bonding among biological women who self-reported PTSD after childbirth. The researcher did not utilize self-report assessment tools to evaluate the bonding between mother and child. The researcher predicted the use of self-report assessment tools would allow further insights of the strengths and deficits in mother and child bonding. Additionally, self-report assessments would have allowed the researcher to compare and contrast the results with previous studies. For example, in this study, the researcher could have compared the data to the transcriptions of the interviews.

Recommendations

All participants in this study self-reported that their childbirth experience led to PTSD symptoms. For example, some participants reported either a nurse or an obstetrician having poor bedside manners or escalating events during their labor that prompted emergency cesarean sections. It was relevant that PTSD symptoms made it challenging for the participants to bond with their newborns how they envisioned. Quantitative research could be used to explore which PTSD symptoms were most impactful in maternal bonding. Additionally, a large-scale quantitative study could

provide insight into the impact of childbirth-related PTSD symptoms and attachment and further explore their relation.

Childbirth evokes different emotions and fears among biological females. After childbirth, several factors can prompt depressive symptoms, anxiety, baby blues, and postpartum depression. However, PTSD after childbirth is not a common diagnosis that is considered. Large-scale quantitative and qualitative studies can explore the frequency of PTSD after childbirth. Future studies could also explore frequent factors that prompt PTSD after childbirth among biological females.

Implications

Increasing awareness of PTSD after childbirth is significantly essential. It should be noted that the current version of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR) (2022) does not describe childbirth as a traumatic event. Including childbirth as a traumatic event in the DSM-5-TR would allow mental health providers and medical practitioners to recognize PTSD after childbirth as an option. Additionally, including childbirth as a traumatic or intrusive event in the DSM-5-TR would allow biological females who struggle with PTSD symptoms after childbirth to feel seen.

Positive social change relating to the challenges of maternal bonding among biological females diagnosed with PTSD after childbirth, beyond the reach of the researcher’s interactions can be achieved on the community, organizational, and national levels. Increasing awareness of PTSD after childbirth, the experiences, the influencing

factors, and the outcomes associated with maternal bonding and attachment styles can inform policy and prompt the development of preventative strategies and interventions.

Improving the life experiences of biological females struggling with PTSD after childbirth for altruistic reason can readily occur on the community and organizational level. From a financial viewpoint, community and national level interventions and preventive methods may reduce medical costs. The yearly cost of maternity-related hospitalizations in the United States exceeds $27 billion (Kozhimannil et al., 201). As indicated by Kozhimannil et al. (2014), the utilization of doula support during labor lowers the odds of emergency cesareans, decreases perinatal complications, and decreases overall maternity-related financials.

Conclusions

The birth of a child is viewed as a joyous occasion, with the greatest gift of all being one's child. Biological females encounter several factors that can impact their childbirth experience (Anderson et al., 2012). A biological female's experience during childbirth influences the development of mental health disorders, including postpartum depression and PTSD. The debilitating symptoms of PTSD can influence the level of maternal bonding between a mother and her infant. Although the researcher could not conclude that participation in this study impacted the participants' life, eight participants reported feeling excited about the research and its positive impact on postpartum mothers, childbirth-related PTSD, and the birthing community. It is hoped that this study represented the influence of PTSD after childbirth on the mother-child bond. It is also hoped to raise awareness about childbirth-related PTSD, traumatic childbirth experiences,

and the importance of the golden hour. Medical providers, birthing professionals, and mental health professionals must recognize PTSD in addition to postpartum depression, address the significant impacts, and offer support to impacted biological women and their families.

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Appendix: Recruitment Flyer

Would you like to participate in a research study about childbirth-related PTSD and maternal bonding?

About the study

A new study seeks to explore common perceptions held by women who have had childbirth-related PTSD and challenges with their maternal bonding. For this study, you are invited to describe your challenges with maternal bonding and childbirth-related PTSD.

You are eligible if:

- English speaking
- Female
- Are 21 years of age or older
- Have been diagnosed with PTSD after childbirth

Participants will receive:

- $20 Amazon gift card at the conclusion of the interview
- A summary at the conclusion of the study

If interested in participating in this study please contact:
Sheila Baez [redacted]

What is needed:

- Available for one recorded phone/video interview (30-60 minutes)

This study is part of the doctoral study for Sheila Baez, MS, MPh, LPC-R a Ph.D. candidate at Walden University. Self assessments and interviews will be conducted during Summer/Fall 2022.

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