



MSU Graduate Theses

Fall 2022


Parent Style of Coping Based on Attachment in the NICU

Claire Elizabeth Payne

Missouri State University, Claire021@live.missouristate.edu

As with any intellectual project, the content and views expressed in this thesis may be considered objectionable by some readers. However, this student-scholar's work has been judged to have academic value by the student's thesis committee members trained in the discipline. The content and views expressed in this thesis are those of the student-scholar and are not endorsed by Missouri State University, its Graduate College, or its employees.

Follow this and additional works at: <https://bearworks.missouristate.edu/theses>

 Part of the [Development Studies Commons](#), [Other Mental and Social Health Commons](#), and the [Other Social and Behavioral Sciences Commons](#)

Recommended Citation

Payne, Claire Elizabeth, "Parent Style of Coping Based on Attachment in the NICU" (2022). *MSU Graduate Theses*. 3807.

<https://bearworks.missouristate.edu/theses/3807>

This article or document was made available through BearWorks, the institutional repository of Missouri State University. The work contained in it may be protected by copyright and require permission of the copyright holder for reuse or redistribution.

For more information, please contact [BearWorks@library.missouristate.edu](mailto: BearWorks@library.missouristate.edu).

PARENT STYLE OF COPING BASED ON ATTACHMENT IN THE NICU

A Master's Thesis

Presented to

The Graduate College of

Missouri State University

In Partial Fulfillment

Of the Requirements for the Degree

Master of Science, Child Life Studies

By

Claire E. Payne

December 2022

PARENT STYLE OF COPING BASED ON ATTACHMENT IN THE NICU

Childhood Education and Family Studies

Missouri State University, December 2022

Master of Science

Claire E. Payne

ABSTRACT

This quantitative study sought to identify any relationship between attachment type and coping style in the Neonatal Intensive Care Unit, to better understand and provide resources and support to families in this environment. This study included ten participants who had an infant in the Neonatal Intensive Care Unit for at least five days. Each participant met the additional criteria of being older than the age of 18 and speaking English. Responses were recorded through a self-report survey, consisting of 115 Likert scale statements. Results indicated that most parents self-report secure attachment and that styles of coping varied within those securely attached, with escape-avoidance being most prominent. Analysis of the secondary categories of attachment indicated the following results: in insecure avoidant attachment, escape-avoidance is the most common coping style; in insecure ambivalent attachment, problem solving is the most common; and in disorganized attachment, escape-avoidance is the most common. Therefore, amongst the primary and secondary attachment types, escape-avoidance was indicated as the most commonly utilized coping style. By exploring and analyzing these parent self-reports, Neonatal Intensive Care Unit resources and support may be adapted to cater to all types of attachment and all styles of coping.

KEYWORDS: coping, parents, neonatal intensive care unit, attachment, NICU

PARENT STYLE OF COPING BASED ON ATTACHMENT IN THE NICU

By

Claire E. Payne

A Master's Thesis
Submitted to the Graduate College
Of Missouri State University
In Partial Fulfillment of the Requirements
For the Degree of Master of Science, Child Life Studies

December 2022

Approved:

Lindsey Murphy, Ph.D., Thesis Committee Chair

Denise Cunningham, Ph.D., Committee Member

Elizabeth King, Ph.D., Committee Member

Julie Masterson, Ph.D., Dean of the Graduate College

In the interest of academic freedom and the principle of free speech, approval of this thesis indicates the format is acceptable and meets the academic criteria for the discipline as determined by the faculty that constitute the thesis committee. The content and views expressed in this thesis are those of the student-scholar and are not endorsed by Missouri State University, its Graduate College, or its employees.

ACKNOWLEDGEMENTS

The completion of this study could not have been possible without the assistance and support of so many people, whose names I do not have the space to type out. Their contributions and encouragement are sincerely appreciated and gratefully acknowledged. However, the group I would like to express particularly include the following:

Dr. Lindsey Murphy, Dr. Elizabeth King, and Dr. Denise Cunningham, for their positive guidance throughout this long process.

To my mom, dad, and sister for their endless support and encouragement, thank you.

To my friends and classmates who made this stressful time a little less stressful.

And above all, to my Father in Heaven, the author of knowledge and wisdom, for his countless love and mercy.

Thank you all.

TABLE OF CONTENTS

Introduction	Page 1
NICU, Attachment, Parents Coping	Page 1
Statement of the Problem	Page 2
Purpose of the Study	Page 3
Significance of the Study	Page 3
Literature Review	Page 4
History of Attachment	Page 4
Attachment Types	Page 5
Attachment in the NICU	Page 8
Coping for Parents	Page 10
Methodology	Page 13
Participants	Page 13
Procedures	Page 13
Data Collection	Page 14
Measures	Page 15
Data Analysis	Page 16
Results	Page 18
Parent Rating of Attachment	Page 18
Parent Rating of Style of Coping	Page 20
Analysis	Page 21
Summary	Page 22
Discussion	Page 23
Attachment Assessment	Page 23
Ways of Coping Survey	Page 24
Analysis	Page 25
Importance of the Study	Page 27
Limitations	Page 28
Future Research	Page 28
Summary	Page 29
References	Page 30
Appendices	Page 33
Appendix A. Informed Consent	Page 33
Appendix B. Missouri State University IRB Approval	Page 35
Appendix C. Hospital IRB Approval	Page 36
Appendix D. Attachment Assessment	Page 37
Appendix E. Ways of Coping Survey	Page 39

LIST OF FIGURES

Figure 1. Attachment Types	Page 6
Figure 2. Primary and Secondary Types of Attachment	Page 19
Figure 3. Fegran's Characteristics of Attachment	Page 20
Figure 4. Indicated Percentage of Style of Coping	Page 21
Figure 5. Most Common Styles of Coping Based on Secondary Attachment Types	Page 22

INTRODUCTION

NICU, Attachment, Parents Coping

Attachment is essential to human interaction and development, yet it can be significantly challenged in a Neonatal Intensive Care Unit. Attachment develops as a child forms a consistent relationship with someone, such as parent, that he or she is strongly disposed to be within close proximity to (Bowlby, 1988). It can be formed securely or insecurely (Bowlby, 1988), either creating a sense of individuality and autonomy, or leaving individual needs insufficiently met creating an anxious or insecure mental state (Bowlby, 1988). Secure attachment is often a source of positive coping that leads to optimal functioning and mental health of both children and their parents, whereas insecure attachments may lead to more negative coping techniques (Hughes et al., 1994; Sullivan et al., 2011).

Whether a secure or insecure attachment is made, coping is an essential part of emotionally and psychologically recovering from stressful situations. From seeking out social support from others, perhaps the attached figure or parent, to avoiding the situation, everyone has their own way of coping, some positive and some negative (Hughes et al., 1994). Learning how to effectively cope and receiving the right type of support can help reduce the stress that stems from those difficult situations.

The Neonatal Intensive Care Unit (NICU) is a nursery in a hospital that provides essential, 24-hour care to sick and premature babies, with the help of specially trained healthcare workers and equipment (Lucile Packard Children's Hospital, 2020). When a baby is born, they may have difficulty making the transition outside the womb. When this transition is strained,

babies can need some extra care from the NICU to ensure their heart, lungs, brain, etc. are working properly and developing optimally.

Due to the intensity of having an infant in the NICU, and despite the constant and detailed care that medical staff provide, parents are still faced with challenges and stress of having an infant in the hospital. Additionally, these challenges and stressors may cause both the attachment process to be halted or interrupted for parents and infants (Pennestri et al., 2015). As stated above, attachment in the parent-child dyad is essential for the growth and development of children. However, the attachment process may be even more important in dyads that involve children born prematurely. This study aims to examine any possible relationship between attachment and styles of coping, to provide information to NICU staff on how to proactively identify vulnerable parents and infants who might be progressing towards an insecure attachment. From this examination, it is hopeful that resources may be developed, adapted, and provided to best support parents and infants in the NICU.

Statement of the Problem

Attachment, whether secure or insecure, plays a critical role in everyone's development, and in NICU settings the attachment process between parents and infants is at risk. Similarly, developing a coping outlet or style is important in helping individuals manage and endure stress, and in NICU settings, stress is high, leaving healthy coping processes often halted or at risk. This study aimed to uncover any potential relationship between attachment types and coping style, in hopes of identifying vulnerable parents and infants who may be at risk for forming an insecure attachment. With the information found, resources may be adapted or created to assist NICU staff and parents in supporting the positive development of infants.

Purpose of the Study

The purpose of this study is to identify any relationship between attachment type and coping style in the Neonatal Intensive Care Unit, to better understand and provide resources and support to families in this environment. It explores parent-child attachment, focusing on the different attachment styles and styles of coping, and the relationship between the two in specifically the Neonatal Intensive Care Unit. The study is guided by the following questions:

RQ1. How do parents rate their attachment?

RQ2. What styles of coping are most common among parents in the NICU?

RQ3. How does NICU parent attachment style with their infant relate with their coping style?

Significance of the Study

The findings of this study will contribute to the development of infants in the NICU considering that parent-child attachment and parent style of coping play a significant role in the well-being of a developing infant. Hospitals will be able to train NICU staff to better support parents in building secure attachments with their infants based on parent coping strategies.

LITERATURE REVIEW

Attachment is the deeply rooted psychological connectedness of one person to another (Ainsworth & Bell, 1970; Bowlby, 1988; Bretherton, 1992; Sullivan et al., 2011). More specifically, attachment is an aspect of the child-parent relationship, involved with ensuring the safety, security, and protection of the child (Benoit, 2004). Theorists believe that the earliest bonds formed between children and their mothers have a significant impact in their lifelong development. Children who maintain proximity to their attached figure are more likely to receive comfort and protection and are more likely to have positive development into adulthood (Bowlby, 1969). However, this is only possible if the attachment is positive, or secure.

Attachment does not have to be a two-way avenue and can involve one individual with a strong devotion to another individual without the bond being reciprocated (Bowlby, 1969). When this happens, an insecure attachment may be formed. The primary goal of attachment is for a child to have a secure base to explore away from, but, when necessary, also have a place of comfort to safely return to (Bretherton, 1992).

History of Attachment

John Bowlby is known as one of the first attachment theorists. He graduated from the University of Cambridge with extensive training and education in developmental psychology, which was utilized in his clinical work with children in hospitals and institutions (Rosmalen et al., 2015). In this role, Bowlby was able to observe family interactions which led to his analyzation of parent-child attachment. As stated above, he observed and later described attachment as a connectedness between two or more people, specifically in the context of parent-

child relationships. Specifically, though, Bowlby was interested in understanding how anxiety and/or distress may impact how children and their parents form relationships (Bowlby, 1982), which will be noted in Figure 1. His primary focus was on the development and process of forming attachment.

His attachment theory implies that infants have a natural instinct to form bonds with their parents, and that this bond is formed through behavioral patterns from the parents' perspectives. For example, when a baby cries, parents respond by feeding or soothing, and because the parent provides that necessity, the child becomes attached (Bowlby, 1982). This theory was later expanded by Mary Ainsworth who conducted research on attachment with a focus on security and separation in parent-child dyads. Pulling concepts from developmental psychology, psychoanalysis, and information processing, Bowlby and Ainsworth reinvented views on human connection and separation, and pushed these concepts into new directions (Bretherton, 1992).

Attachment Types

Attachment styles may be categorized as either secure or insecure. Insecure attachments may then be organized into ambivalent, avoidant, or disorganized categories (Ainsworth & Bell, 1970). These categories are based upon levels of avoidance and levels of anxiety. For example, secure attachments present with characteristics of low avoidance and low anxiety. Equivalently, disorganized attachments present with characteristics of high avoidance and high anxiety. The descriptions of each of these attachment styles are shown below, see Figure 1.

Secure Attachment. Child-parent secure attachment begins during pregnancy and is strengthened throughout (Sullivan et al., 2011). During the third trimester, infants develop auditory and olfactory abilities, allowing them to learn about the mother's voice and odor,

leading to a stronger connection at birth. Postpartum, physical contact between the infant and parents is crucial for kick-starting a secure attachment. Newborns have sensory awareness, and

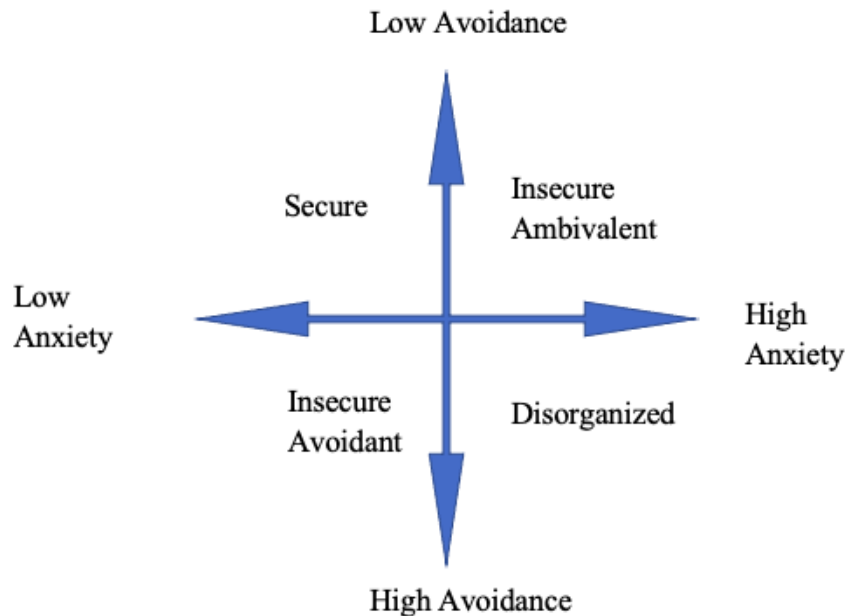


Figure 1. Attachment Types.

the ability to share and feel emotions, which enable them to form attachments and engage in social relationships early in their life (Flacking et al., 2012). Attachment continues to develop throughout childhood. When a secure attachment has been formed early in development, infants become upset when separated from their parent, as noted in Ainsworth’s “Strange Situation” study (Ainsworth & Bell, 1970). The child can be consoled by other adults, but clearly prefers their parent. When the parent returns, the strives to be near them, quickly calming. It is this reunion that is most important in assessing attachment. This pattern reflects a healthy and secure attachment (Lightfoot et al., 2013).

Avoidant Attachment. Children with avoidant attachment styles are almost indifferent to their parent being present in the room. They may cry when their parent leaves the room, or they may not even notice that they have left (Rosmalen et al., 2015). If the child becomes visibly upset, a stranger can comfort and console them just as effectively as their parent, and when the parent re-enters the room, the child may avoid or turn away from the parent, rather than reestablishing contact (Lightfoot et al., 2013).

Ambivalent/Resistant Attachment. Children with ambivalent or resistant attachment styles struggle with both the mother being present and the mother leaving (Rosmalen et al., 2015). They choose to stay close to her rather than exploring the room they are in, yet still appear anxious when she is near. The child will become upset when the mother leaves but is not comforted by her return. Additionally, upon the mother's return, the child will resist any effort she makes to comfort them (Lightfoot et al., 2013). It appears that no matter the efforts, the child is not easily calmed.

Disorganized Attachment. Children that fit into the disorganized attachment style group lack any organized reasoning for dealing with the strange situation. Some children might desperately cling to their mothers while screaming, some may approach the mother while refusing to look at her, and some may stand at the door and scream while she is gone but avoid her when she returns (Lightfoot et al., 2013); and some may stare dazedly at their mother or caregiver and refuse to budge an inch in their presence (Main & Solomon, 1990). The overarching theme in this attachment style seems to be that there is not a theme. Children will respond in very incoherent and disorienting ways. Of the four patterns of attachment, children with a disorganized attachment style are at risk for serious psychopathology and maladjustment.

They are more vulnerable to stress, have problems with regulation, and struggle to control negative emotions (Benoit, 2004).

These four styles create the basis for parent-child attachment. Bowlby and Ainsworth's research on attachment suggests that forming attachments to a parent, specifically a secure attachment, is a critical part of human survival. Once the attachment has been formed, the child will utilize their parent as a secure base to explore the world and develop relationships with other people (Sullivan et al., 2011). Bowlby's attachment theory and Ainsworth's Strange Situation Test revolutionized the world's understanding of attachment and sets the foundation for all other areas of development.

Attachment in the NICU

Interruption in the NICU. The parent-infant attachment process can often be hindered or obstructed due to factors, such as the illness, parental psycho-emotional distress, and hospital admission after birth (Kim et al., 2020). This interruption can make the natural process delay or halt altogether and may result in insecure attachment formation (Pennestri et al., 2015). Despite the professional care that nurses and doctors provide to the infants in the NICU, parents are faced with various challenges. These challenges may include, but are not limited to, being separated from their child, feeling as though they have no control, and handing over the care of their new infant (Phuma-Ngaiyaye & Welcome, 2016). These factors, on top of many others, play a role in delaying the parent-child attachment process, which is why it is suggested that hospital staff should implement specific resources or strategies that support parent-infant attachment while providing specific care in NICU programs (Phuma-Ngaiyaye & Welcome, 2016).

Interventions to Support NICU Attachment. Due to the nature and results of these interruptions, extra intentional steps must be taken to facilitate it in the NICU environment (Kim et al., 2020). This can be a complex goal because despite a mother's attempt to create and maintain that attachment to her infant, the infant may be reluctant to receive their approaches (Browne, 2005). In these attempts, the mother may overwhelm the infant with new social or physical interaction, to which the infant would reply in distress. Therefore, it is essential for interventions that are meant to assist in the attachment process are implemented subtly and carefully (Browne, 2005).

There are three characteristics of the attachment process that need to be addressed when intentionally trying to kick-start the attachment process in stressful settings: proximity, reciprocity, and commitment (Fegran et al., 2008). When interacting with infants, proximity, such as physical touch, and visual contact are some of the most influential communication avenues (Fegran et al., 2008). Positive touch may include breast-feeding, infant massage, skin-on-skin contact with both mother and father, and simple holding/hugging if appropriate. Effective visual contact communication includes parents giving clear cues and identifying their infant's cues (Browne, 2005). Reciprocity in the attachment process means including the child "as an active partner in the process of interaction" (Fegran et al., 2008, p. 811). This means taking those identifiable infant cues and appropriately responding to them with the goal of creating a two-way communication path (Browne, 2005). Lastly, commitment in the attachment process means taking the relationship that is being formed and actively working to maintain and advance it (Fegran et al., 2005).

Parent-child attachment during the first few months of life is critical for child development (Phuma-Ngaiyaye & Welcome, 2016). When the process is delayed by illness or

prematurity, there are things that parents can do to help move attachment in the right direction. There are even things that doctors, nurses, and hospital staff can do to help facilitate the process, in addition to the parents' attempts (Fegran et al., 2008). However, despite the push for parental involvement and the recognition of things that can be done to assist, the attachment process in the NICU is still at risk and a parent's style of coping may impact this process.

Coping for Parents

Stressors in the Hospital. Most parents become stressed or experience stressors when their child or infant is admitted to the NICU due to prematurity or illness (Affleck et al., 1990). According to Lazarus and Folkman's stress and coping model, a stressor is anything in a situation that is evaluated as stressful to the individual (Hughes et al., 1994). Aside from the seemingly obvious stressors that come with the hospitalization of a child, many parents are affected by one or more of the following additional challenges: separating from their child, feeling as though they have lost control as new parents, and sharing the care of their new infant with medical staff, while still including their child in their current actions and decisions (Phum-Ngaiyaye & Welcome, 2016). These stressors may affect parents' physical ability, mental or cognitive ability, and/or their ability to sleep, creating fatigue and reduced well-being (Busse et al., 2013). Having a child in the NICU can also affect a couple's relationship with each other and with other members of their support system (Affleck et al., 1990). These stressors only scratch the surface of what a parent might feel when they have a child in the NICU, and these stressors can create many psychological and physiological problems. However, research tells us that how a parent has the opportunity to cope and/or has access to coping resources in order to address these stressors can greatly impact their experience.

Coping. From the same phenomenological model of stress and coping mentioned above, coping is the methods or techniques used by an individual to manage stress created from a specific situation or stimuli (Hughes et al., 1994). It is, by definition, how a person thinks or responds to that situation or stimuli (Hughes et al., 1994). Folkman and Lazarus (1986), in their *Ways of Coping* scale, included eight total coping styles that included: confrontive coping (making risky or aggressive efforts to change a situation), distancing (minimizing a situation's significance), self-controlling (attempting to control feelings in response to a situation), seeking social support (leaning on another for emotional, mental, or physical support), self-blame (attributing the cause or result of a situation to oneself), escape-avoidance (avoiding dealing with the situation), planful problem solving (analyzing the situation in hopes of resolving it), and positive reappraisal (attempting to learn and grow from the situation).

Coping is an essential part of emotionally and psychologically recovering from stressful situations. From seeking out social support from others to trying to escape the situation, everyone has their own way of coping, some positive and some negative (Hughes et al., 1994). Learning how to effectively cope and getting the right type of support can help reduce the stress that stems from those situations. Additionally, each situation has its own set of external stimuli that affect how a parent identifies a stressor and how they may cope.

Attachment is critical for infant development (Phuma-Ngaiyaye & Welcome, 2016), and in the NICU, attachment between parents and infants is at risk (Kim et al., 2020). Identifying any relationship that exists between coping style and attachment will be essential to providing support and resources to better facilitate healthy attachment between infants and parents in the NICU. Similarly, developing a coping outlet or style is important in helping individuals manage and endure stress, and in the NICU, healthy coping processes are at risk, as well. This study aims

to fill the gap and discover a relationship between parent-infant attachment types and parent coping style/processes. If a relationship is found, it will help resources be created and adapted to better assist NICU parents, lowering stress levels, supporting the attachment process, and helping infant development in the NICU.

METHODOLOGY

This quantitative study sought to understand how parent-child attachment relates with the style of coping parents most used when their child was in the NICU. This approach allowed for a deeper understanding of parent experiences in the NICU and provided a way to discover how parents cope. The study was guided by the following questions:

RQ1. How do parents rate their attachment?

RQ2. What styles of coping are most reported among parents in the NICU?

RQ3. How does NICU parent attachment style with their infant relate with their coping style?

Participants

The sample included ten participants from mixed demographics that were recruited from a west Texas Neonatal Intensive Care Unit. Of the ten participants, seven were female and three were male. Each participant had an infant in the Neonatal Intensive Care Unit for at least five days, with a range of 8 to 70 days, a median of 20.5 days, a mean of 30.6 days, and a mode of 17 and 45 days. Each participant met the criteria of being older than the age of 18, speaking English, and having a child in the NICU for a minimum of 5 days. All participants signed a fully informed consent form, see Appendix A. The researcher had no direct relationship with any of the chosen participants that would create a conflict of interest.

Procedures

Institutional Review Board (IRB) approval was granted through both institutions, Missouri State University (IRB-FY2021-340 - November 24, 2020) and the hospital

(STUDY2021000547 - September 20, 2021), see Appendix B and C. Upon approval, recruitment began. Recruitment for this study was narrowed to one neonatal intensive care program in a west Texas urban area. Through email and telephone avenues, the researcher contacted and communicated with the director of the NICU program, outlining the purpose and importance of the study. Once the director agreed to allow participation, flyers created by the researcher were distributed by hospital staff to eligible parents. This flyer included a QR code that parents scanned taking them directly to the survey. This ensured that all data collection remained anonymous and eliminated any unnecessary steps towards participating in the study. Program directors were not informed of who chose to participate or not participate in the study. The informed consent form was the first question of the survey and required an answer. The participant indicated if they consented or not by checking a "yes" or "no" box, after reading the information provided. If the participant checked the "no" box, they were sent to the end of the survey and no information was collected. Data was collected from survey responses.

Data Collection

Data was collected from survey responses. The survey was conducted in two parts: one measuring attachment, the other measuring style of coping. The two-part survey took place in a single session. Surveys took approximately 20 minutes to complete and were administered through Qualtrics via QR code distribution. At the beginning of the survey, there was reiterated information about the study and there were clear statements that individuals were not required to participate and may decline, even after the Qualtrics QR code had been opened. This was also clearly outlined in the consent document at the beginning of the Qualtrics survey. At the beginning of the survey, participants were given the consent information and indicated if they

consented to participate in the study. No identifiable information (name, address, IP address) was recorded. Only typical demographic information (age, gender, and length of hospital stay) and answers to survey were collected.

Data collection began in Fall of 2021 and ended January 2022. Data collected from Qualtrics survey was downloaded in de-identified form. Each participant was assigned a participant number thus all analysis was conducted without participant identifying information.

Measures

Attachment. Styles of attachment were measured using a 5-point quantitative Likert scale assessment that is a self-report variation of the Attachment Assessment by Gray (2019) and had been adapted to fit the parameters of this study, see Appendix D. The assessment included 49 statements that were used to evaluate the pattern of relatedness between children and their caregivers and helped identify the style of attachment most prominent in their relationship. Parents responded by rating a statement from 1-5 (1 = “Never True,” 2 = “Rarely True,” 3 = “Neutral,” 4 = “Sometimes True,” 5 = “Always True”). The points were scored to determine the style of attachment (secure, insecure anxious, insecure avoidant, or disorganized) and to determine patterns of that relationship. In addition to the previously written Attachment Assessment questions, Fegran’s three characteristics of attachment, proximity, reciprocity, and commitment, were also evaluated by adding questions related to these characteristics (Fegran et al., 2008).

Coping Style. Parents participated in a 66-item quantitative questionnaire where they reported what activities they participated in as part of their coping. The questionnaire was a self-report revised version of the Ways of Coping survey developed in 1986 by Lazarus and

Folkman, see Appendix E. The survey evaluated the most commonly use style of coping amid a stressful situation. Parents responded by rating a statement from 0-4 (0 = “Not Used,” 1 = “Used Somewhat,” 2 = “Used Quite a Bit,” 4 = “Used a Great Deal”). The points were scored to determine the most prominently used style of coping (confrontive coping, distancing, self-controlling, seeking social support, self-blame, escape-avoidance, planful problem solving, and positive reappraisal).

Data Analysis

After the quantitative two-part survey was conducted and concluded, the researcher analyzed the data for each part using descriptive statistics, which helped the researcher discover patterns in the survey responses. The following descriptive statistics were used to discover patterns in the data: mean (the average value among a set of values), percentage (how a value or group of respondents within the data relates to a larger group), and frequency (the number of times a value is found).

This information gathered from both the Attachment Assessment and the Ways of Coping survey was analyzed by creating a percentage of how the most dominant styles of coping were divided amongst the participants. These percentages were created by tallying reported characteristics of attachment and coping styles. When a characteristic of attachment or a style of coping was indicated, a tally was placed accordingly. Each category’s tallies were then added together to determine the highest scoring attachment type and styles of coping. Finally, these numbers were divided by the total number of responses to create a percentage.

After discovering patterns in the survey parts, the researcher evaluated the relationship between both groups of quantitative data. Data was collected and recorded using a computer

assisted data analysis system called Qualtrics. Data analysis and organization was completed utilizing Microsoft Excel.

RESULTS

The primary research questions that the data analysis and results follow included the following: How do parents rate their attachment? What styles of coping are most common among parents in the NICU? How does NICU parent attachment style with their infant relate with their coping style?

Parent Rating of Attachment

The analyzed data showed the results of the assessment and indicated that all ten participants (100%) reported a secure attachment with their infant. Additionally, as the results to this research question showed little variance, the researcher examined the data more closely and determined the distribution across the participants second most reported types of attachment, see Figure 2. As indicated, the second most reported type of attachment was distributed evenly across participants, with 30% (3 participants) reporting Insecure Avoidant, 30% (3 participants) reporting Insecure Ambivalent, 30% (3 participants) reporting Disorganized, and 10% (1 participant) reporting more than one second most common type of attachment. The participant reporting more than one type of attachment, scored equally in the Insecure Avoidant and Insecure Ambivalent categories.

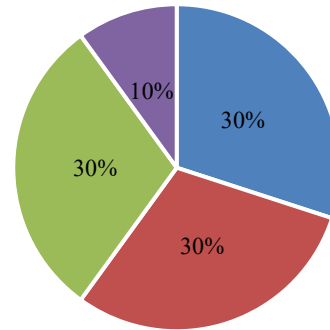
In addition to the Attachment Assessment, this portion of the survey also examined if participants were engaging in Fegran's characteristics of attachment. These characteristics of attachment include Proximity, Reciprocity, and Commitment. These questions were subjected to frequency counts, in which the participants response scales (1-5) were categorized to show how

Primary Type of Attachment



■ Secure Attachment

Secondary Type of Attachment



■ Insecure Avoidant ■ Insecure Ambivalent
■ Disorganized ■ More than one

Figure 2. Primary and Secondary Types of Attachment.

much a characteristic was displayed in their attachment process and then added together to examine the variance in the utilized characteristics.

The results of this examination indicated that proximity was the highest scoring of the characteristics, with a mean of 13.8. This was followed by reciprocity, with a mean of 13.6, and commitment, with a mean of 12.8. These results showed little variance between the characteristics and displayed that the characteristics were prominent and present in the attachment process of parents to their infants while in the NICU, see Figure 3.

Overall, the results of the attachment assessment indicate that the highest scoring, self-reported type of attachment was secure attachment and that the second highest was evenly distributed between the other types amongst the participants. Additionally, Fegran's three characteristics of attachment were prominently displayed in the results, proving their existence and importance.

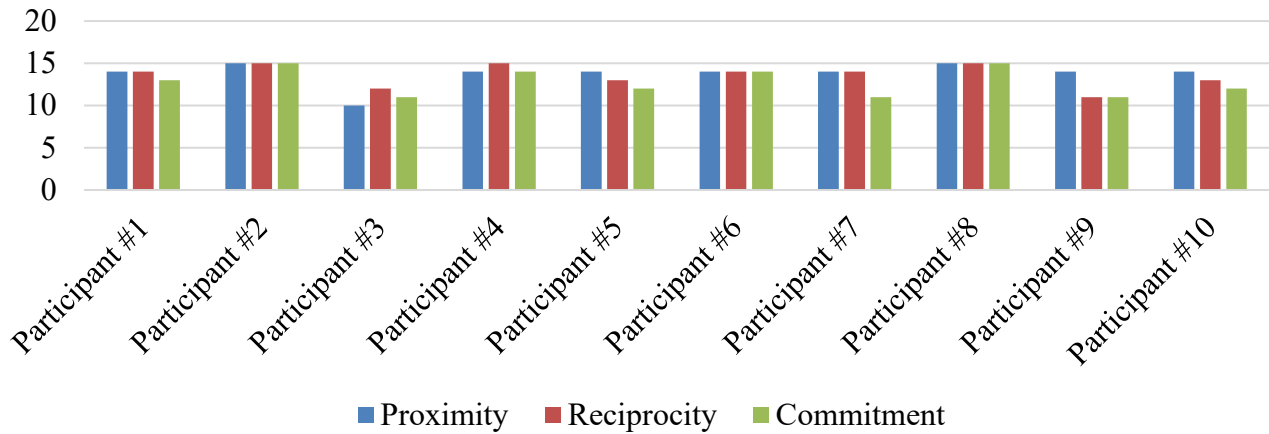


Figure 3. Fegran’s Characteristics of Attachment.

Parent Rating of Style of Coping

For this portion of the study, ten completed questionnaires were the base for computing the results. The Style of Coping Assessment was completed utilizing questions from the Ways of Coping scale by Folkman and Lazarus (1986). Data gathered through this assessment was subjected to frequency counts, in which the participants response scales (0-3) were categorized by styles of coping and then added together to find the highest reported styles of coping for each participant. This allowed participants to indicate their least used style of coping, as well as their most used style of coping. The results indicate that the most utilized style of coping within this data sample was escape-avoidance, with a mean of 14.1. This was followed by reappraisal, with a mean of 13.3, and planful problem solving, with a mean of 10.2. The styles of coping vary from participant to participant. Additionally, half of the participants (50%) reported high utilization of more than one style of coping. This data, which shows the distribution of styles of coping amongst the participants, see Figure 4.

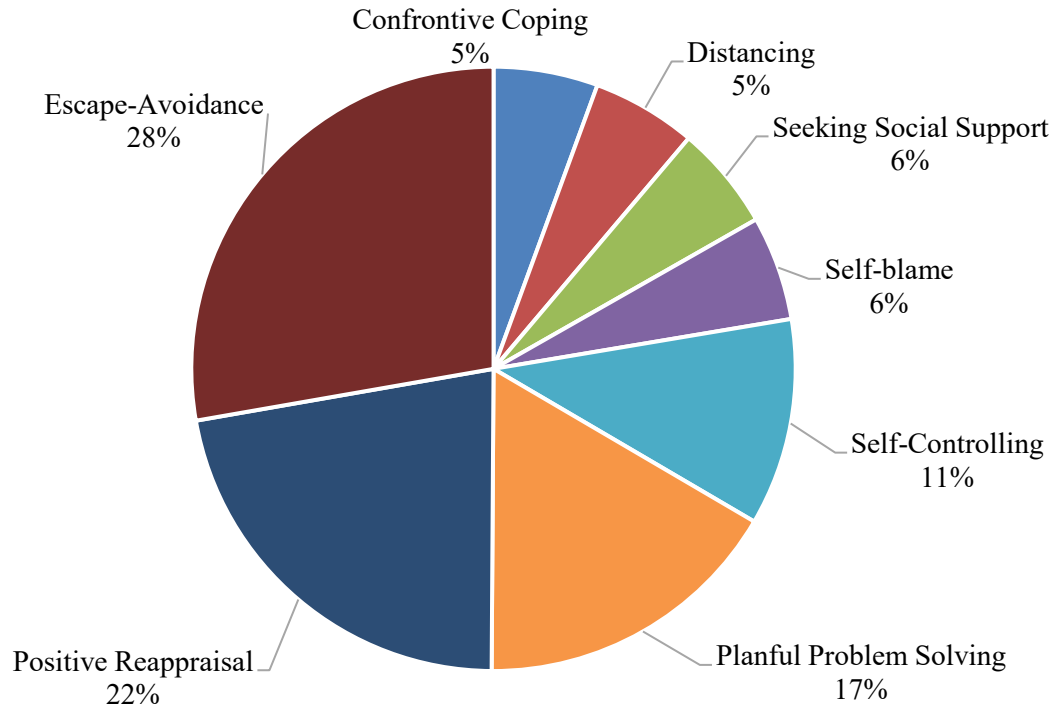


Figure 4. Indicated Percentage of Style of Coping.

Analysis

Additional exploratory analysis was made, examining the secondary types of attachment and coping styles that were reported. As demonstrated in the Figure 1, the secondary types of attachment were evenly distributed amongst the non-secure categories (30%- insecure avoidant, insecure ambivalent, and disorganized), with 10% of the respondents having more than one secondary type. From this secondary analysis, data showed that for insecure avoidant, the most common style of coping was escape-avoidance, for insecure ambivalent, the most common style of coping was problem solving, and for disorganized, the most common was escape-avoidance, see Figure 5.

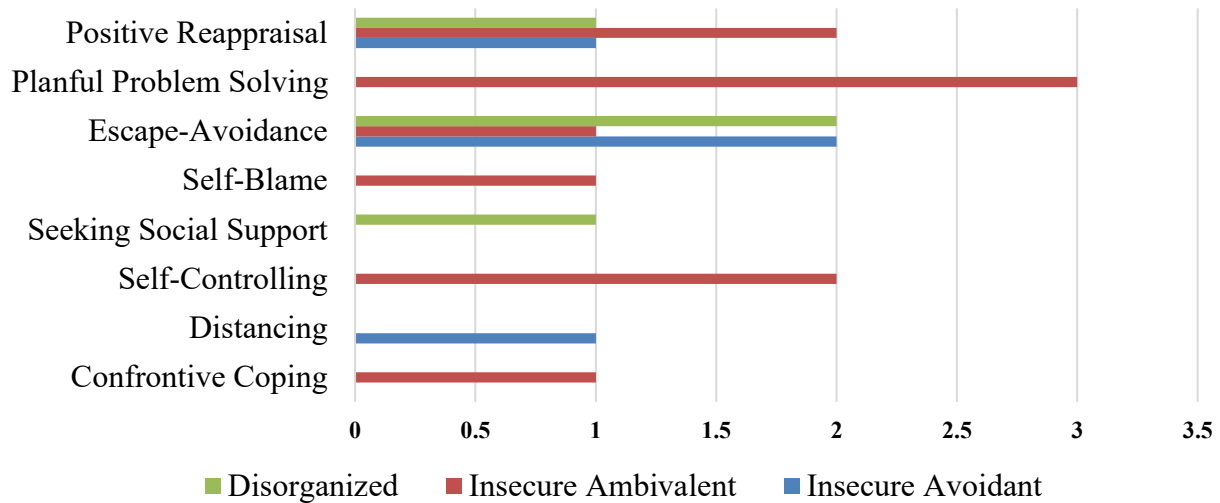


Figure 5. Most Common Styles of Coping Based on Secondary Attachment Types.

Summary

The results of this survey showed that 100% of participants self-reported Secure Attachment with their infants in the NICU, with the second most indicated attachment style being evenly distributed among the remaining types. Additionally, the most commonly identifies style of coping was reported as Escape-Avoidance (28%), followed by Positive Reappraisal (22%) and Planful Problem Solving (17%). However, due to limited variance in types of Attachment reported, the correlation between the two subsets of data was unable to be analyzed and would require further research. In further analysis, an exploratory analysis between secondary types of attachment and common styles of coping was conducted. Results indicate that for insecure avoidant and disorganized attachment, escape-avoidance was the most utilized coping style, and for insecure ambivalent attachment, planful problem solving was reported as the most used.

DISCUSSION

The results of this study showed that all participants reported a secure attachment to their infant and that the major styles of coping utilized included escape-avoidance, positive reappraisal, and planful problem solving. However, due to limited variance in the reported attachment types and a small sample size, a correlation was unable to be made between the primary attachment type and coping styles. During a secondary analysis, a descriptive analysis was conducted between secondary types of attachment and coping styles, indicating that for insecure avoidant and disorganized attachment, escape-avoidance was the most utilized, and for insecure ambivalent, planful problem solving was the most utilized.

Attachment Assessment

From this assessment, the results showed that each participant self-reported a secure attachment. This contradicts Fegran's results that parents found it challenging to start the attachment process during the first few days in the NICU (Fegran, et. al., 2008). With previous research, such as the studies by Fegran et al. (2008) and Kim et al. (2020), displaying this challenge, the researcher of the present study anticipated more variance in attachment types due to the stressful environment, personality differences, and the length and quality of the parent's NICU stay, which are discussed in literature. For fathers who have only had one week of physical and personal interaction with their infant, a 100% secure attachment seems unlikely to the researcher, but cannot be entirely ruled out. However, for mothers, it seems more feasible to create this secure attachment due to the attachment process beginning in the womb (Sullivan et al., 2011). Keeping this in mind, mothers have had several months to develop this attachment.

Limitation in the attachment assessment results must also be recognized as it is likely that this study included self-report bias. Self-report bias is a common limitation when assessing behavior and participants are less likely to report negatively about themselves, than to share information that may be socially unacceptable or considered embarrassing.

Ways of Coping Survey

Participants in this study displayed a wide variety of common coping behaviors utilized throughout their stays in the NICU. The most reported style of coping in this survey was escape-avoidance, which differed from Hughes' et al. use of the survey in his research (1994). Hughes' et al. study *How Parents Cope with the Experience of Neonatal Intensive Care* discovered that seeking social support and positive reappraisal were the most report styles of coping among both males and females. These two styles of coping were heavily seen in the current study, with positive reappraisal being the second most reported. However, seeking social support was the 6th most reported coping strategy, alongside self-blame. This result may be contributed to lack of social opportunities due to COVID-19 precautions, visitation restrictions, and infant lowered immune systems while in the NICU. Further research should be done to assess this result.

Another interesting find within this survey was the last coping technique, which was "I jogged or exercised." This statement was the only statement in both the Attachment Assessment and the Ways of Coping survey that had 100% unanimity in responses: "Not Used." The researcher found this interesting as exercise is a common and healthy coping outlet that is widely suggested by professional counselors. In a study by Childs & de Wit (2014), research showed that exercise lowers cortisol levels, protects against the negative emotional consequences of stress, and is purported to relieve stress. For fathers who participated in this study, this coping

technique was expected to be utilized more. However, for mothers who participated, given their recent physical exacerbation and precautions set by physicians, it makes logical sense that jogging and exercise be utilized in a limited capacity.

Analysis

For a correlation to occur between the primary attachment types and styles of coping, more variances would have had to be presented in the Attachment Assessment. With a larger sample size, this could have been accomplished. Therefore, an exploratory and descriptive analysis was conducted to identify patterns or observations.

In initial analysis, participants reported 100% secure attachment, with escape-avoidance being the primarily utilized style of coping. However, an additional exploratory analysis between the secondary types of attachment and coping styles was completed. As noted in the results section and shown in Figure 5, research indicated that for insecure avoidant and disorganized attachment, escape-avoidance was the most utilized. For insecure ambivalent, planful problem solving was the most utilized. These results were not surprising as the Ways of Coping survey indicated that escape-avoidance was highly utilized amongst parents in general and that escape-avoidance was the style predominantly utilized in initial observations.

Additionally, discovering that escape-avoidance was predominant in both preliminary and additional observations was fascinating, but not surprising, as this study took place during the COVID-19 pandemic. Due to this timeline, opportunities to cope differently (such as seeking out social support) may have been hindered. Furthermore, previous research shows that the COVID-19 pandemic has instilled in our culture that avoidance is necessary to stay safe (World Health Organization, 2020). This avoidance has carried into experiential escapism and avoidance

(Secer et al., 2020), regularly affecting people's ability to experience emotions, thoughts, moments, and feelings that are considered negative (Hayes et al., 1996). This has become an attitude that many individuals are now adopting in the face of stress. Though this research may not apply to each of the participants, it may account for some of the predominance in the escape-avoidance style of coping.

Based on the above research about escape-avoidance, the attachment categories in which they are predominant make sense. For insecure-avoidant attachments, as stated by Lightfoot et al. (2013), if a child becomes visibly upset, a stranger can comfort and console them just as effectively as their parent, and when the parent re-enters the room, the child may avoid or turn away from the parent, rather than reestablishing contact. Furthermore, in disorganized attachments there is incoherence and disorientation, often leaving parent and/or children more vulnerable to stress, regulatory problems, and struggles to control negative emotions (Benoit, 2004). Therefore, the use of escape-avoidance seems a likely coping style.

For insecure ambivalent attachment, planful problem solving was highly utilized. In this type of attachment, there is a level of certainty and control that is necessary for a person to resist anxious and preoccupied tendencies (Lightfoot et al., 2013). As the data seems to share, when uncertainty or lack of control is present, planful problem solving or problem focused coping may be one way that the individual may regain some certainty.

The findings of this analysis and these observations will assist families and NICU staff, considering that parent-child attachment and parent style of coping play a significant role in the well-being of a developing infant. It is hopeful that hospitals that reference these findings will be able to train NICU staff to better support parents in building secure attachments with their infants, through supporting identified styles of coping. With the information gleaned from this

study, parental bonding techniques may be shared with parents and implemented amidst established NICU care (Phuma-Ngaiyaye & Welcome, 2016), as well as support for healthy coping during the process.

Importance of the Study

Attachment plays an important role in human development. Within NICU settings the attachment process between parents and infants is at risk (Kim et al., 2020). Additionally, identifying and relying on coping styles is important in developing stress management skills. Therefore, due to the high levels of stress within NICU settings, healthy coping processes are at risk, as well (Affleck, et al. 1990). This study aimed to fill the gap and examine any relationship between attachment types and coping style. With the information found, the researcher is hoping to provide an avenue and positive rationale to develop resources which support the attachment process of NICU parents and their infants. These resources may be adapted or created with hopes of identifying vulnerable families who may be at risk for forming an insecure attachment and helping support that attachment process. This will further help in the positive development of infants.

The results found in this study are significant, especially in terms of coping styles, because they demonstrated variance in the most common styles of coping amongst parents in the NICU. And, even though, participants responded and resulted with 100% Secure Attachment, many of the statements in the assessment Likert scale were given different scores. This shows that each individual is unique in their approach to infant care and parenting, as well as how they express and adapt to stressful situations. It is hopeful that through this study parents and infants

may be supported in their attachment, coping, and development processes, through the adaptation and creation of resources conducive to individuals and their distinctive needs.

Limitations

Within the bounds of this study, several limitations were identified. The primary limitation noted involves the self-report process during data collection. While it was an expectation that all participants would answer honestly, there was no way to regulate or enforce this expectation. As people are often biased when they report on personal experiences, the participants were likely to respond to questions of this nature with answers that they believed to be socially acceptable or preferred. Therefore, self-report in this survey, especially the Attachment Assessment, may have resulted in biased responses leading to the 100% Secure Attachment result.

An additional limitation of this study was the small sample size. Due to this insufficient sample size, variance was limited leaving one of the research questions unanswered. With a larger sample size, the questionnaires could have resulted in more widespread responses, allowing more for interesting and detailed data results. Further research and a larger participant sample would be required to accurately correlate the two groups of data.

Future Research

Though much was revealed through this research study, there are many opportunities to continue and add to this research. Future researchers could take the time and perform observations of the participants with their infants to eliminate the self-report limitation and bias. This might equate to more variance in attachment types and results. The length of stay in the

Neonatal Intensive Care Unit could also be assessed to evaluate how coping styles change the longer a participant is in such an environment. Lastly, the research could be expanded to look more closely at the genders and ages of the participants/respondents to determine if there are any patterns based on those specific demographics.

Summary

This research study aimed to discover any relationship between attachment types and styles of coping that are common among parents whose infants have been in the Neonatal Intensive Care Unit for more than five days. While a primary correlation was unable to be established, the researcher was able to explore the secondary types of attachment, as well as the most utilized styles of coping among the same population. With the information gathered from this study, it is the hope of the researcher that future NICU staff will be able to examine parental bonding techniques in the midst of care, in order to provide support conducive to all types of attachment and all styles of coping.

REFERENCES

- Affleck, G., Tennen, H., & Rowe, J. (1990). Mothers, fathers, and the crisis of newborn intensive care. *Infant Mental Health Journal, 11*(1), 12–25. [https://doi.org/10.1002/1097-0355\(199021\)11:1<12::AID-IMHJ2280110103>3.0.CO;2-P](https://doi.org/10.1002/1097-0355(199021)11:1<12::AID-IMHJ2280110103>3.0.CO;2-P)
- Ainsworth, M. D. S., & Bell, S. M. (1970). Attachment, exploration, and separation: Illustrated by the behavior of one-year-olds in a strange situation. *Child Development, 41*(1), 49–67. <https://doi.org/10.2307/1127388>
- Benoit D. (2004). Infant-parent attachment: Definition, types, antecedents, measurement and outcome. *Paediatrics & Child Health, 9*(8), 541–545. <https://doi.org/10.1093/pch/9.8.541>
- Bowlby, J. (1969). *Attachment and loss, Vol. I: Attachment*. New York: Basic Books.
- Bowlby, J. (1982) Attachment and loss: Retrospect and prospect. *Am J Orthopsychiatry, 52*(4), 664-678. doi:10.1111/j.1939-0025.1982.tb01456.x
- Bowlby, J. (1988) *A secure base: Parent-child attachment and healthy human development*. New York: Basic Books.
- Bretherton, I. (1992). The origins of attachment theory: John Bowlby and Mary Ainsworth. *Developmental Psychology, 28*(5), 759. <https://doi.org/10.1037/0012-1649.28.5.759>
- Browne, J. V. (2005). Family-based intervention to enhance infant-parent relationships in the neonatal intensive care unit. *Journal of Pediatric Psychology, 30*(8), 667-677. <https://doi:10.1093/jpepsy/jso53>.
- Busse, M., Stromgren, K., Thorngate, L., & Thomas, K. A. (2013). Parents' responses to stress in the neonatal intensive care unit. *Critical Care Nurse, 33*(4), 52–60. <https://doi.org/10.4037/ccn2013715>
- Childs, E. & de Wit, H. (2014). Regular exercise is associated with emotional resilience to acute stress in healthy adults. *Front Physiol. 1; 5*:161. doi: 10.3389/fphys.2014.00161. PMID: 24822048; PMCID: PMC4013452.
- Fegran, L., Helseth, S., & Fagermoen, M. S. (2008). A comparison of mothers' and fathers' experiences of the attachment process in a neonatal intensive care unit. *Journal of Clinical Nursing, 17*(6), 810–816. <https://doi.org/10.1111/j.1365-2702.2007.02125.x>
- Flacking, R., Lehtonen, L., Thomson, G., Axelin, A., Ahlqvist, S., & Moran, V. H., et al. (2012). Closeness and separation in neonatal intensive care. *Acta Paediatrica, 101*(10), 1032–1037. <https://doi.org/10.1111/j.1651-2227.2012.02787.x>

- Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., & Gruen, R. (1986). The dynamics of a stressful encounter: Cognitive appraisal, coping and encounter outcomes. *Journal of Personality and Social Psychology*, 50, 992-1003.
- Gray, D. (2019). *Promoting healthy attachments: Hands-on techniques to use with your clients*. NY: W. W. Norton & Company.
- Hayes, S. C., Wilson, K. G., Gifford, E. V., Follette, V. M., & Strosahl, K. (1996). Experiential avoidance and behavioral disorders: A functional dimensional approach to diagnosis and treatment. *Journal of Consulting and Clinical Psychology*, 64(6), 1152-1168. <https://doi.org/10.1037/0022-006X.64.6.1152>
- Hughes, M., McCollum, J., Sheftel, D., & Sanchez, G. (1994). How parents cope with the experience of neonatal intensive care. *Children's Health Care*, 23(1), 1. https://doi.org/10.1207/s15326888chc2301_1
- Kim, A. R., Kim, S., & Yun, J. E. (2020). Attachment and relationship-based interventions for families during neonatal intensive care hospitalization: A study protocol for a systematic review and meta-analysis. *Systematic Reviews*, 9(1), 1–7. <https://doi.org/10.1186/s13643-020-01331-8>
- Lightfoot, C., Cole, M., & Cole, S. R. (2013). *The Development of Children*. New York: Worth Publishers.
- Lucile Packard Children's Hospital. (2020). The neonatal intensive care unit. Stanford Children's Health. <https://www.stanfordchildrens.org/en/topic/default?id=the-neonatal-intensive-care-unit-nicu-90-P02389>
- Main, M., & Solomon, J., (1990). Procedures for identifying infants as disorganized/disoriented during the Ainsworth strange situation. In M. Greenburg, D., Cicchetti & E. M. Cummings (Eds.), *Attachment in the preschool years: Theory, research, and interventions* (p. 121-160). Chicago: University of Chicago Press.
- Pennestri, M. H., Gaudreau, H., Bouvette-Turcot, A. A., Moss, E., Lecompte, V., Atkinson, L., et al. (2015). Attachment disorganization among children in neonatal intensive care unit: preliminary results. *Early Hum Development* 91:601–6. <https://doi.org/10.1016/j.earlhumdev.2015.07.005>.
- Phuma-Ngaiyaye, E., & Welcome, K. F. (2016). Supporting mothers to bond with their newborn babies: strategies used in a neonatal intensive care unit at a tertiary hospital in Malawi. *Int J Nurs Sci*. 3:362–6. <https://doi.org/10.1016/j.ijnss.2016.10.001>.
- Rosmalen, L., Veer, R., & Horst, F. (2015). Ainsworth's Strange Situation Procedure: The Origin of an Instrument. *Journal of the History of the Behavioral Sciences*, 51(3), 261–284. <https://doi.org/10.1002/jhbs.21729>

- Secer, İ., Ulaş, S. & Karaman-Özlu, Z. (2020). The effect of the fear of COVID-19 on healthcare professionals' psychological adjustment skills: Mediating role of experiential avoidance and psychological resilience. *Front. Psychol.* 11:561536. doi: 10.3389/fpsyg.2020.561536
- Sullivan, R., Perry, R., Sloan, A., Kleinhaus, K., & Burtchen, N. (2011). Infant bonding and attachment to the caregiver: Insights from basic and clinical science. *Clinics in Perinatology*, 38(4), 643–655. <https://doi.org/10.1016/j.clp.2011.08.011>
- World Health Organization [WHO] (2020). Coronavirus disease (COVID-2019): Situation report-54. Available online at: https://www.who.int/docs/default-source/coronaviruse/situation-reports/20200314-sitrep-54-covid-19.pdf?sfvrsncd46351_2.2 (accessed October 10, 2022).

APPENDICES

Appendix A: Informed Consent



Consent to Participate in a Research Study Missouri State University College of Education

Parent Style of Coping Based on Attachment in the NICU

Claire Payne

Introduction

You have been asked to participate in a research study. Before you agree to participate in this study, it is important that you read and understand the following explanation of the study and the procedures involved. The investigator will also explain the project to you in detail. If you have any questions about the study or your role in it, be sure to ask the investigator. If you have more questions later, Claire Payne, the person mainly responsible for this study, will answer them for you. You may contact the investigator(s) at:

Claire Payne: Claire021@live.MissouriState.edu

Dr. Murphy: lindseymurphy@missouristate.edu

You will need to sign this form giving us your permission to be involved in the study. Taking part in this study is entirely your choice. If you decide to take part but later change your mind, you may stop at any time. If you decide to stop, you do not have to give a reason and there will be no negative consequences for ending your participation.

Purpose of this Study

Relationships are essential to human development. They develop when a child finds someone that they want to be close to. The reason for this study is to discover what factors play a role in forming relationships in the NICU and to explore how parents cope in the NICU.

Description of Procedures

If you decide to take part in this study, you will be asked to fill out a 2-part survey. The first part will be a 49-item, multiple-choice questionnaire where you will be asked some information related to your gender, age, length of NICU stay, and your relationship with your infant. The second part of the survey will be a 66-item multiple-choice questionnaire where you will be asked questions about different styles of coping and activities you participated in while your

infant was/has been admitted into the NICU. It will take approximately 65 minutes to complete the survey (5 minutes for reading the information; 30 minutes to complete part-one of the surveys; 30 minutes to complete part-two of the survey). There will be no follow up to this study.

What are the risks?

We estimate that the potential risks of this study are minimal. However, you may experience some psychological discomfort when answering questions about your experiences in the NICU and about your current relationship with your infant.

What are the benefits?

It is not anticipated that you will experience any direct benefits from this study. Nevertheless, your participation in this research will help investigators identify what styles of coping parents utilize when their infant in the NICU based on the type of attachment bond that has been formed. This information may be useful in developing training programs for NICU medical staff to promote parent well-being.

How will my privacy be protected?

Information about you will be coded by number. Your name will not appear on the questionnaire. The information gathered will be accessible only by the investigators and it will be kept in a locked facility. You will not be identified by name in any publications that result from this research. All information from this study will be destroyed 3 years after the study ends.

Consent to Participate

If you want to participate in this study, *Parent Style of Coping Based on Attachment in the NICU*, you will be asked to sign below:

I have read and understand the information in this form. I have been encouraged to ask questions and all of my questions have been answered to my satisfaction. By checking *yes* on this form, I agree voluntarily to participate in this study. I know that I can withdraw from the study at any time.

Appendix B: Missouri State University IRB Approval



To: Lindsey Murphy
Childhood Ed & Fam Studies

RE: Notice of IRB Approval

Submission Type: Initial

Study #: IRB-FY2021-340

Study Title: Parent Style of Coping Based on Attachment in the Neonatal Intensive Care Unit

Decision: Approved

Approval Date: November 24, 2020

This submission has been approved by the Missouri State University Institutional Review Board (IRB). You are required to obtain IRB approval for any changes to any aspect of this study before they can be implemented. Should any adverse event or unanticipated problem involving risks to subjects or others occur it must be reported immediately to the IRB.

This study was reviewed in accordance with federal regulations governing human subjects research, including those found at 45 CFR 46 (Common Rule), 45 CFR 164 (HIPAA), 21 CFR 50 & 56 (FDA), and 40 CFR 26 (EPA), where applicable.

Researchers Associated with this Project:

PI: Lindsey Murphy

Co-PI:

Primary Contact: Claire Payne

Other Investigators:

Appendix C: Hospital IRB Approval



To: Providence Health System
PJHS IRB

RE: Notice of IRB Approval

Submission Type: Initial

Study #: STUDY2021000547

Study Title: Parent Style of Coping Based on Attachment in the Neonatal Intensive Care Unit

Decision: Approved

Approval Date: September 20, 2021

This letter represents the IRB determination of **exempt** for your project, as the involvement of human subjects is limited to one or more Exempt Categories identified in 45 CFR 46.104(d):

Category 2: Research that only includes interactions involving educational tests (cognitive, diagnostic, aptitude, achievement), survey procedures, interview procedures or observation of public behavior (including visual or auditory recordings) if the required criteria is met.

Researchers Associated with this Project:

PI: Lindsey Murphy

Co-PI:

Primary Contact: Claire Payne

Other Investigators:

Appendix D: Attachment Assessment

Attachment Assessment (Adapted)

Rate these statements from 1-5

1 = Never True; 2 = Rarely True; 3 = Neutral; 4 = Sometimes True; 5 = Always True

1. ____ My infant clings to me when uncertain.
2. ____ My infant looks at me, then quickly looks away.
3. ____ I am thinking about something else when engaging with my infant.
4. ____ I ask others for help in the overall care of my infant.
5. ____ My infant follows me with their eyes as I move.
6. ____ I find myself talking to my partner or hospital staff more than I talk to my infant.
7. ____ My infant clings to me but does not settle or calm better with body contact.
8. ____ I describe my infant as, “just like that. They have always been that way.”
9. ____ I am impatient with my infant’s anxiety.
10. ____ My infant initiates a smile to me.
11. ____ My infant is restless when I am holding them.
12. ____ My infant watches me warily.
13. ____ I engage in skin-on-skin contact with my infant.
14. ____ My infant shows enhanced happiness when I show them attention.
15. ____ My infant does not connect with my facial expressions, and then turns away.
16. ____ My infant looks away from me to calm down.
17. ____ I am immediately involved in my infant’s care.
18. ____ I am confident in my actions and feelings towards my infant.
19. ____ I make statements like: “I don’t know what you want. I don’t know what to do.”
20. ____ My infant is uninterested in holding or playing with the toys I give them.
21. ____ My infant freezes when I come near.
22. ____ My infant looks to me when confused, then looks reassured.
23. ____ I feel the need to be close in proximity to my infant at all times.
24. ____ I spend a lot of time in tense silence.
25. ____ I am able to recognize my infant’s signals and respond accordingly.
26. ____ My infant sits or lays with their back to me.
27. ____ I feel responsible for the safety, growth, and development of my infant.
28. ____ My infant becomes upset when I leave the room. They calm when I come back.
29. ____ I show my anxiety to my infant with non-verbal cues or facial expressions.
30. ____ My infant stiffens when I touch them.
31. ____ My infant becomes still faced when I hold them.
32. ____ I repeatedly move out of social distance from my infant.

33. ____ I sit or stand so that my infant is unable to see my facial or body expressions.
34. ____ I mirror the facial/body expressions of my infant when interacting with them.
35. ____ My infant seeks my attention by making sounds, leaning forward, frowning, etc.
36. ____ I am unable to hold my infant's attention.
37. ____ My infant covers their face or turns away when I come close.
38. ____ I talk about my point of view, rather than my infant's point of view.
39. ____ I am able to interpret my infant's expressions and know what they need or want.
40. ____ My infant cries when I leave the room and does not calm when I re-enter.
41. ____ It does not bother me when my infant ignores or resists interacting with me.
42. ____ I feel that my infant fills a large emotional void.
43. ____ My body and voice tones stay steady and calm, when my infant is dysregulated.
44. ____ My infant avoids my gaze.
45. ____ Being physically close to my infant brings me love, security, and joy.
46. ____ When holding my infant, I actively don't allow my infant to nestle.
47. ____ My infant looks dazed, moves in slow-motion.
48. ____ I am sarcastic or critical with my infant.
49. ____ My infant relaxes when I hold or touch them.

Style of Attachment	Corresponding Question Numbers
Secure Attachment	1, 5, 10, 14, 22, 28, 34, 39, 43, 49
Insecure Avoidant	3, 6, 9, 15, 19, 24, 29, 33, 38, 46
Insecure Ambivalent	2, 7, 11, 17, 20, 26, 30, 36, 41, 48
Disorganized	4, 8, 12, 21, 31, 32, 37, 40, 44, 47

Fegran's Characteristics of Attachment	Corresponding Question Numbers
Proximity	13, 23, 45
Reciprocity	17, 25, 35
Commitment	18, 27, 42

Appendix E: Ways of Coping Survey

Please read each item below and indicate, by using the following rating scale, to what extent you used it to cope with your infant being in the Neonatal Intensive Care Unit.

Not Used	Used Somewhat	Used Quite A Bit	Used a Great Deal
0	1	2	3

- _____ 1. Just concentrated on what I had to do next – the next step.
- _____ 2. I tried to analyze the problem in order to understand it better.
- _____ 3. Turned to work or substitute activity to take my mind off things.
- _____ 4. I felt that time would make a difference – the only thing to do was to wait.
- _____ 5. Bargained or compromised to get something positive from the situation.
- _____ 6. I did something which I didn't think would work, but at least I was doing something.
- _____ 7. Tried to get the person responsible to change his or her mind.
- _____ 8. Talked to someone to find out more about the situation.
- _____ 9. Criticized or lectured myself.
- _____ 10. Tried not to burn my bridges, but leave things open somewhat.
- _____ 11. Hoped a miracle would happen.
- _____ 12. Went along with fate; sometimes I just have bad luck.
- _____ 13. Went on as if nothing had happened.
- _____ 14. I tried to keep my feelings to myself.
- _____ 15. Looked for the silver lining, so to speak; tried to look on the bright side of things.
- _____ 16. Slept more than usual.
- _____ 17. I expressed anger to the person(s) who caused the problem.
- _____ 18. Accepted sympathy and understanding from someone.
- _____ 19. I told myself things that helped me to feel better.
- _____ 20. I was inspired to do something creative.
- _____ 21. Tried to forget the whole thing.
- _____ 22. I got professional help.
- _____ 23. Changed or grew as a person in a good way.
- _____ 24. I waited to see what would happen before doing anything.
- _____ 25. I apologized or did something to make up.
- _____ 26. I made a plan of action and followed it.
- _____ 27. I accepted the next best thing to what I wanted.
- _____ 28. I let my feelings out somehow.
- _____ 29. Realized I brought the problem on myself.
- _____ 30. I came out of the experience better than when I went in.
- _____ 31. Talked to someone who could do something concrete about the problem.
- _____ 32. Got away from it for a while; tried to rest or take a vacation.
- _____ 33. Tried to make myself feel better by eating, drinking, smoking, using drugs or medication, etc.
- _____ 34. Took a big chance or did something very risky.
- _____ 35. I tried not to act too hastily or follow my first hunch.

- _____ 36. Found new faith.
- _____ 37. Maintained my pride and kept a stiff upper lip.
- _____ 38. Rediscovered what is important in life.
- _____ 39. Changed something so things would turn out all right.
- _____ 40. Avoided being with people in general.
- _____ 41. Didn't let it get to me; refused to think too much about it.
- _____ 42. I asked a relative or friend I respected for advice.
- _____ 43. Kept others from knowing how bad things were.
- _____ 44. Made light of the situation; refused to get too serious about it.
- _____ 45. Talked to someone about how I was feeling.
- _____ 46. Stood my ground and fought for what I wanted.
- _____ 47. Took it out on other people.
- _____ 48. Drew on my past experiences; I was in a similar situation before.
- _____ 49. I knew what had to be done, so I doubled my efforts to make things work.
- _____ 50. Refused to believe that it had happened.
- _____ 51. I made a promise to myself that things would be different next time.
- _____ 52. Came up with a couple of different solutions to the problem.
- _____ 53. Accepted it, since nothing could be done.
- _____ 54. I tried to keep my feelings from interfering with other things too much.
- _____ 55. Wished that I could change what had happened or how I felt.
- _____ 56. I changed something about myself.
- _____ 57. I daydreamed or imagined a better time or place than the one I was in.
- _____ 58. Wished that the situation would go away or somehow be over with.
- _____ 59. Had fantasies or wishes about how things might turn out.
- _____ 60. I prayed.
- _____ 61. I prepared myself for the worst.
- _____ 62. I went over in my mind what I would say or do.
- _____ 63. I thought about how a person I admire would handle this situation and used that as a model.
- _____ 64. I tried to see things from the other person's point of view.
- _____ 65. I reminded myself how much worse things could be.
- _____ 66. I jogged or exercised.

8 Coping Styles	Corresponding Question Numbers
Confrontive Coping (8)	5, 6, 7, 17, 28, 34, 46, 62
Distancing (9)	4, 12, 13, 15, 21, 24, 41, 44, 53
Self-controlling (8)	10, 14, 35, 37, 43, 54, 63, 64
Seeking Social Support (6)	8, 18, 22, 31, 42, 45
Self-Blame (6)	9, 25, 29, 51, 61, 65
Escape-Avoidance (13)	3, 11, 16, 32, 33, 40, 47, 50, 55, 57, 58, 59, 66
Planful Problem Solving (7)	1, 2, 26, 39, 48, 49, 52
Positive Reappraisal (9)	19, 20, 23, 27, 30, 36, 38, 56, 60