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Secure Attachment Styles and Depression in Adolescents with Co-rumination as a Moderator

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Walden University

College of Education and Human Sciences

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Kimberly L. Ethridge-Murray

has been found to be complete and satisfactory in all respects,
and that any and all revisions required by
the review committee have been made.

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Walden University
2024

Abstract

Secure Attachment Styles and Depression in Adolescents with Co-rumination as a

Moderator

by

Kimberly L. Ethridge-Murray

Ed.S., University of Alabama at Birmingham, 2004

M.S., Jacksonville State University, 1999

B.S., Jacksonville State University, 1997

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Walden University

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Abstract

Depression among adolescents has increased over the years and can affect development and potentially lead to substance abuse, self-injurious behavior, and suicide. Adolescents with secure attachments to parents have been found to have fewer symptoms of depression. Co-rumination with friends has shown to be related to positive quality in friendships due to self-disclosure between friends; however, co-rumination also is related to an increase in depression. The purpose of this quantitative study is to examine whether adolescent's attachment style with parents is associated with depression and whether this association is moderated by co-rumination with friends. The theories that were used to ground this study included attachment theory by Bowlby and Ainsworth and response styles theory by Nolen-Hoeksema. Bowlby and Ainsworth's theory of attachment proposes that individuals develop different attachment styles based on early relationships with parents, which has implications for emotional well-being. Nolen-Hoeksema's response style theory is based on the premise that people can respond to a depressive mood by either ruminating or distracting themselves. This quantitative study included a nonexperimental design and secondary data that was collected from 628 adolescents who just completed seventh and 10th grade. Results indicated that there was not a significant relationship between secure attachments and depression, however co-rumination was a significant predictor of depression. Findings in this study are consistent with previous research that co-rumination among adolescents can lead to depression. Implications for positive social change indicates that it may be beneficial to teach adolescents problem solving strategies to decrease co-rumination among adolescents' friendship dyads.

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Dedication

I dedicate this dissertation to my fun-loving, energetic boys, Jackson and Nicholas. You two keep me on my toes in a good way! I love you both!

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I couldn't have reached this goal without the help of my dissertation committee. To Dr. Rose thank-you for your wisdom and support throughout this process. I really appreciate your feedback and patience with me. To Dr. Hertenstein I appreciate your knowledge and guidance throughout this journey.

To my family and friends, I truly appreciate all the support and encouragement you offered through this journey. To my parents, I am humbled by your love and support throughout the years with all four of my degrees. I am done with school now. To my sister, Kelly, thanks for supporting my thirst of knowledge throughout the years. To Matthew, I know this has been a challenge for you seeing me through this degree. I appreciate you helping our children and me throughout this journey.

To Jackson and Nicholas, you both were in middle school when I started this degree and now you are in high school. Soon you will be making decisions about your future. Jackson you are a very friendly, respectful, inventive, and motivated person who will go far in life. Nicholas you are an honest, determined, imaginative and sociable person who can take charge and handle any situation. I want you both to know that anything is possible, you just have to decide on what is worth your passion. I love you both to the moon and back.

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Chapter 1: Introduction to the Study

The developmental changes in areas such as social, affective, and cognitive domains during adolescence contribute to an increased vulnerability to depression (Rawatlal et al., 2015). Depression in adolescents has increased over the years (Shorey et al., 2022). Adolescents with secure attachments to parents have been found to have fewer symptoms of depression than adolescents with less secure attachment (Colonness et al., 2011; Groh et al., 2017). However, not all adolescents who have a less secure attachment will be similarly depressed.

In this study, I considered co-rumination as a moderator to test the idea that adolescents with less secure attachments may be especially likely to be depressed if they co-ruminate with friends. Co-rumination, defined as the excessive discussion of problems between friends with a focus on negative emotions, is a phenomenon frequently observed in adolescent friendships (Rose, 2002). The transition to adolescence brings new challenges with friendships becoming a primary relationship (Homa & Chow 2014; Smith 2021). Based on previous research, co-rumination with friends has shown to be related to positive quality in friendships due to self-disclosure between friends; however, co-rumination also is related to an increase in depression possibly due to the negative focus (Homa & Chow, 2014; Rose et al., 2007; Smith, 2021). This may be beneficial for teaching adolescents' more helpful ways to problem solve with friends.

This chapter includes discussion of the following topics:

- Background
- Problem Statement

- Purpose of Study
- Research Questions
- Theoretical Framework for the Study
- Nature of the Study
- Definitions
- Assumptions
- Scope, Delimitations and Limitations
- Significance
- Summary

Background

Secure attachments between parents and children suggest that the parent is a source of comfort and security for the child. This relationship is important because it is the foundation for social competence later in the child's life and is important in fostering appropriate emotional regulation and self-reflection (Fonagy, 2003; Svanberg et al., 2010). A metanalytic study found that adolescents with secure attachments were less likely to demonstrate depressive symptoms as compared to adolescents with an insecure attachment (Spruit et al., 2020).

The degree of depression, however, is expected to vary among adolescents with less secure attachment to parents. Specifically, the association is expected to be moderated by co-rumination. The co-rumination construct entails the repetitive discussion of personal problems with friends, with an emphasis on negative emotions (Rose, 2002). Notably, the majority of research on the co-rumination construct has been

conducted within the context of same-sex friendships. Importantly, previous research indicates that the association between stressful experiences and depression is strongest for youth who co-ruminate (Rose, 2002). What has not been studied extensively is the relationship between adolescents' secure attachment styles and adolescents' own depression and if co-rumination moderates this relationship.

The current study was necessary because determining the connection between attachment styles and depression and whether the tendency to co-ruminate moderates this connection may be beneficial in the identification of at-risk students. I examined whether having a less secure attachment is associated with depressive symptoms most strongly for adolescents who also co-ruminate. Being able to identify at-risk students, in turn, may be beneficial in teaching adolescent's appropriate ways to cope with insecure attachments, including developing adaptive skills for problem solving with friends.

Problem Statement

Depression among youth is a serious problem, so knowing factors that contribute to depressive symptoms is important. Previous work indicates that not having a secure attachment to parents is related to depressive symptoms (Spruit et al., 2020). However, although researchers have investigated this issue, the topic has not been explored by determining whether adolescents' tendency to co-rumination moderates the relation between attachment and depression. The purpose of this study was to examine the association between adolescents' attachment styles with parents and depression and whether the association is moderated by co-rumination with friends.

Purpose of the Study

The purpose of this quantitative study was to examine whether adolescent's attachment style with parents is associated with depression and whether this association is moderated by co-rumination with friends. In this study, the independent variable was a secure attachment style, the dependent variable was depression, and a moderating variable was co-rumination. I used data collected by Rose in 2007-2009. The participants were seventh and 10th graders. To address the gap in the literature, I used previously collected data to examine the relationship between the independent variable, attachment style and the dependent variable, depression and whether the relationship is moderated by adolescents' co-rumination.

Research Questions and Hypothesis

Research Question 1 (RQ1): What is the relationship between secure attachment style and depression?

Null Hypothesis (H_01): No significant relationship exists between secure attachment style and depression.

Alternative Hypothesis (H_{a1}): A negative relationship exists between secure attachment style and depression.

Research Question 2 (RQ2): Does co-rumination with friends moderate the relationship between secure attachments with parents and depression?

Null Hypothesis (H_02): Co-rumination does not moderate the relationship between secure attachments and depression.

Alternative Hypothesis (H_{a2}): Co-rumination is expected to moderate the relation

between secure attachments and depression such that the relationship between secure attachments and depression is stronger for youth who are relatively high on co-rumination.

Theoretical Framework for the Study

The theories that I used to ground this study were attachment theory by Bowlby and Ainsworth and response styles theory by Nolen-Hoeksema. Bowlby's theoretical work focused on attachment bonds between infants and their mothers indicated that attachment bonds are the foundation for developing relationships with others (Bowlby, 1969). Ainsworth expanded on Bowlby's theory by discussing attachment styles that include secure, avoidant, and ambivalent (Ainsworth, 1989). A secure attachment style develops when a child's attachment figure meets the child's needs. Insecure attachment styles can be avoidant or ambivalent. An avoidant attachment style emerges when the primary caregiver addresses the child's needs but does so in an indifferent or neglectful manner. Conversely, an ambivalent attachment style takes shape when the attachment figures inconsistently meet the child's needs (Costello, 2017). Different researchers have used different terms to refer to these styles. For example, avoidant attachment style is sometimes referred to as a dismissing attachment style and an ambivalent attachment style is referred to as a preoccupied attachment style (Costello, 2017).

Based on attachment theory, infants develop internal working models based on past caregivers' experiences that shape the infant's attachment style (Sherman et al., 2015). Infants with responsive caregivers develop the idea of the self as worthy, however infants with inconsistent caregivers will develop a negative perception of themselves

(Bowlby, 1973; Sherman et al., 2015). The internal working models help reinforce experiences and support attachment styles throughout life. Internal working models can be revised based on new experiences, but to bring about change in the model these experiences have to occur at a high frequency rate (Sherman et al., 2015). In this study, I focused on secure attachment and the degree to which adolescents have a secure attachment to parent. For the current research, less secure attachments were not further classified into types (e.g., avoidant, ambivalent).

The response styles theory by Nolen-Hoeksema (1991) emphasizes that how people respond to depressive symptoms determines the outcome of their symptoms. The response styles theory emphasizes two strategies that people can use to respond to a depressive mood (Nolen-Hoeksema 1991). The first is rumination, in which the person's attention is focused on the meaning and consequences of the depressive symptoms (Roelofs et al., 2009). Some people tend to ruminate when dealing with depression, which does not promote healthy problem solving and is associated with increased depression (Papageorgiou & Wells, 2004). The second response style is distraction in which the person's attention is a diversion away from the problem (Roelofs et al., 2009). Based on the response styles theory the construct of co-rumination was developed with co-rumination being a social form of rumination (Rose 2002; Smith 2021).

The logical connections between the framework presented and the nature of my study include that Bowlby and Ainsworth's theory of attachment proposes that individuals develop different attachment styles based on early relationships with parents, which has implications for emotional well-being, including depressive symptoms. Nolen-

Hoeksma's response style theory is based on the premise that people can respond to a depressive mood by either ruminating or distracting themselves.

Nature of the Study

To answer the research questions in this study, I used a non-experimental design to examine the relationships between adolescents' secure attachment styles and their reports of depression as well as whether the relationship is moderated by co-rumination. I used secondary data obtained from a dataset originally compiled by Rose in 2007. Authorization to use this dataset was secured from Dr. Rose, who granted permission for its incorporation in the present study. Secure attachment style is the independent variable. The co-rumination scores are the moderating variable and depression is the dependent variable.

Definitions

Adolescents: Individuals who are described between the ages of 10 and 19 years of age (World Health Organization, 2014).

Co-rumination: The excessive discussion of problems between friends with a focus being on negative emotions (Rose 2002).

Depression: A mood disorder that includes symptoms such as depressed mood, difficulty managing daily activities, sleep and appetite disturbance, and trouble concentrating (U.S. Department of Health and Human Services, n.d.). This study will focus on the symptoms instead of the diagnosis.

Friendship: People who share the same belief of how to behave as a friend toward each other and behave in that manner (Kitts & Leal 2022).

Secure attachment style: An attachment style that develops when the attachment figure is available to the child's needs and encourages the value of having close relationships (Costello, 2017).

Assumptions

I made assumptions in the development of this study. The first assumption was that the participants understood the questions on the questionnaires and gave honest responses. I also assumed that the adolescents were a reasonable representative sample, at least of adolescents in small cities in the Midwestern United States. In addition, I had to assume the data were in full compliance with ethical standards.

Scope and Delimitations

In this study, I examined the relationship between adolescents' secure attachment styles and their reports of depression and whether the relationship is moderated by co-rumination in early and middle adolescence. This study was limited to only seventh and 10th grade students and does not include information about the relationships of younger or older individuals. In addition, the study does not include adolescents who do not attend public school and live in a bigger city.

Limitations

A potential barrier to using previously collected data is making sure the data do not contain any identifiable information. Numbers were assigned to replace the students' names so all identifying information was removed. Another limitation is that I was not part of the data collection and needed to ensure that ethical standards were followed by reviewing the initial Institutional Review Board (IRB) application.

Significance

In this study, I addressed a gap in the research by examining the relationship between adolescents' secure attachment styles to parents and depression and whether the relationship is moderated by their tendency to co-ruminate with friends. Although previous research indicates that having a secure attachment to parents is associated with having fewer depressive symptoms, whether this association is moderated by co-rumination with friends is not known.

In an effort to promote positive social change, knowing about whether adolescents' risk for depressive symptoms is related to their attachment to parents and to their tendency to co-ruminate could be useful in intervening with adolescents. Extending past research by testing co-rumination with friends as a moderator may potentially provide information about which adolescents with less secure attachments are most at risk for depression. This information could be potentially beneficial for understanding the likelihood that adolescents with less secure attachment styles will develop depressive symptoms and which of these adolescents (i.e., those who co-ruminate with friends) are most at risk.

Summary

Based on the gap in the literature, I examined the relationship between the degree to which adolescents have secure attachment styles with parents and depression and whether the relationship is moderated by adolescents' engagement in co-rumination with friends. I used attachment theory and response styles theory as the theoretical foundations for this study. The results of this study may contribute to social change by being useful

for health professionals and school staff in identifying the adolescents with less secure attachments as most at risk. If adolescents who co-ruminate with friends are most at risk, it may be beneficial to teach these adolescents effective coping styles including in terms of ways to problem solve with friends. Chapter 2 includes an extensive review of the literature and theories that framed the study.

Chapter 2: Literature Review

Introduction

Depression in adolescents can affect development and lead to potential substance abuse, self-injurious behavior, and suicide among adolescents (Miller et al., 2020).

Depression rates have steadily increased over the years (Shorey et al., 2022). In addition, adolescents with less secure attachments to parents have been found to have more depressive symptoms than those with secure attachments (Colonnesi et al., 2011; Ebrahimnezhad et al., 2012; Groh et al., 2017). In this study, co-rumination among adolescent's friendship is considered a moderator between secure attachment styles and depression.

The following topics are included in this chapter:

- Literature Search Strategy
- Attachment Theory
- Response Style Theory
- Depression
- Attachment
- Attachment styles and depression
- Co-rumination in adolescent friendships
- Attachment and depression: Co-rumination as a moderator

Literature Search Strategy

To search for relevant literature, I searched through several databases, including PsycInfo, EBSCO, SocIndex, and MEDLINE/PubMed. The search was limited to peer-

reviewed scholarly journals and books. The literature search included journals, dissertations, and books dating from 1960 to 2022. I included the following terms: *attachment theory*, *response styles theory*, *depression*, *secure attachment style*, *co-rumination*, and *adolescent friendships*. I found several authors whose work contributed to the search terms such as Bowlby, Ainsworth, Nolen-Hoeksema, and Rose.

Theoretical Foundations of the Study

I used two theories to frame the study. These theories are attachment theory (related to secure attachments as a predictor of depression) and response styles theory (related to development of the co-rumination construct).

Attachment Theory

Bowlby's (1969) theoretical work with attachment bonds between infants and their mothers suggested that attachment bonds are the foundation for developing relationships with others. An infant is born with many behavioral systems that are activated by auditory, visual, or tactile stimuli in the environment (Bowlby 1969). These stimuli shape attachment behavior toward caregivers. Attachment theory proposes children with secure attachments will have better interpersonal relationships and fewer internalizing problems throughout development (Groh et al., 2017).

More specifically, infants' early caregiver experiences form internal working models for current and future relationships with others (Bowlby, 1969/1982; Spruit et al., 2020). Bowlby suggested that internal working models are formed based on previous attachment and bonding experiences that influence future relationships (Bowlby 1969, 1982). Bonding encompasses the physical proximity and emotional connection that

children establish with their adult caregivers. Bonding represents an intrinsic human need for safety and security, and the social and emotional nature of relationships between the self and others early in life act as a template for individuals' relationships later in life (Bowlby 1969, 1982).

Securely attached infants are more likely to have mental representations of caregivers being available in times of distress and can manage distress more efficiently than insecurely attached infants (Cassidy et al., 2013). For example, when a child becomes distressed, the child with a secure attachment uses the parent as a safe haven. A key proponent to attachment theory is that attachment style impacts socio-emotional development (Fearon & Roisman, 2017). Based on attachment theory children with secure attachments with parents have positive relationships with peers because children develop a positive self-worth (Shomaker & Furman, 2009). Children with insecure attachments with their parents struggle with social competence and developing positive friendships (Shomaker & Furman, 2009).

Response Styles Theory

Response styles theory was developed by Nolen-Hoeksema (1991). This theory is based on the premise that how people respond to depressive symptoms is related to whether they develop depressive symptoms and how long depressive symptoms last (Nolen-Hoeksema, 1991). There are at least two major ways that people can respond to a depressive mood, either with a ruminative response or distraction (Nolen-Hoeksema, 1991). Rumination happens when an individual perseverates on negative thoughts and concentrates on the causes and meanings of depressive symptoms (Nolen-Hoeksema et

al., 2000). People who respond with a ruminative response style tend to focus on their depressive mood, which prevents the person from doing something about the depressed mood (Nolen-Hoeksema, 1991). People who have a ruminative response style think about their negative feelings excessively, which prolongs their depressive symptoms (Nolen-Hoeksema, 2000). The second response is distraction indicating the person's attention is distracted away from the problem, and the person's tendency to develop depressive symptoms is lessened (Roelofs et al., 2009).

I chose response styles theory as a theoretical foundation for this study because the construct of co-rumination was developed based on the response style theory. Co-rumination is characterized by perseverating on a problem in a social form, taking the form, for example, of excessive discussion of problems between friends with a focus on negative emotions (Rose 2002). Both co-rumination and rumination focus on the negative aspects of, and the emotions related to the problem. In addition, both co-rumination and rumination is related to depression (Dam et al., 2014; Schwartz-Mette & Smith, 2018; Stone et al., 2010).

Literature Review related to Key Variables

Depression in Adolescence

Depression is a mood disorder that presents with emotional problems and sometimes physical symptoms. Depression is characterized by feelings of inadequacy, depressed mood, sleep difficulties, weight loss or gain, and withdrawal from pleasurable activities (Spruit et al., 2020). Based on the Diagnostic Statistical Manual-Fifth Edition (American Psychological Association, 2013), there are two differences between

symptoms in childhood and adults. Children can display irritability instead of sadness and weight loss or gain (American Psychological Association, 2013). Adolescents' depressive symptoms tend to be like those seen in adults. Symptoms must be present for at least two weeks and cause functional impairment (American Psychological Association, 2013).

Importantly, researchers have found that children and adolescents who have subthreshold depressive symptoms, typically operationalized in terms of depressed affect, also experience other severe impairments and are at risk of being diagnosed with depression at a later time (Keenan et al., 2009; Wesselhoeft et al., 2013). Subclinical depressive symptoms are typically assessed with questionnaires. For example, depressive symptoms in adolescents are a risk factor for suicide (Petito et al., 2020), which is the second leading cause of death in adolescents and young adults (Goldestein et al., 2022). In addition, co-morbidity of depression symptoms and other mental health disorders can be linked to at-risk behaviors such as social challenges, academic difficulties, and non-suicidal self-harm (Shorey et al., 2022).

Depression in adolescents has steadily increased over the years. In a meta-analytic study, Shorey et al., (2022) used 72 studies published from 2001 to 2020 to examine prevalence rates of depression. Results indicated elevated depression symptoms in adolescent's aged 10 to 19 years and revealed a 14% increase of symptoms among adolescents from 2001-2010 and 2011-2020 (Shorey et al., 2022).

Attachment

Ainsworth and Bell (1970) defined attachment as “an affectional tie that one person forms himself and another specific one” (p. 50). An attachment is a relational

bond between two people that develops over time with the goal to maintain a degree of proximity with each other (Ainsworth & Bell 1970). Behaviors such as crying or rooting are ways an infant seeks contact with parents. Attachment bonds are developed with primary caregivers during the first year of life (Bowlby 1969, 1982). Attachment can differ among infants based on the quality of care received by the caregiver (Sherman et al., 2015).

Caregivers who respond sensitively to an infant's proximity behavior will cause the infant to be securely attached, and the caregiver becomes both a safe haven and a secure base for the infant to explore (Spruit et al., 2020). Individuals with secure attachments feel that their needs will be met by their attachment figure (Costello, 2017). Insecure attachments can take different forms. Avoidant attachment is the result of a caregiver responding with insensitivity, anger, or annoyance to the individual's needs (Costello, 2017). Anxious attachments relationships happen when a child is unsure what to expect in terms of the response from the attachment figure (Costello, 2017). Disorganized attachment develops when the attachment figure is unsafe or in a frightened state themselves and cannot offer reassurance (Costello, 2017). All forms of insecure attachments confer risk for problematic relationships and development (Allen et al., 2020).

The implications of attachment styles extend past infancy and influence the development of future relationships. In fact, based on the initial attachment bonds established as infants, the attachment system is thought to be active across the lifespan (Lim et al., 2021). Bowlby proposed that past experiences in terms of attachment

relationships influence future attachments to others through internal working models (Bowlby, 1969/1982, Costello, 2017). Internal working models are thought to develop based on the caregivers' behaviors and the relationship between the child and caregiver (Bowlby 1969/82).

Caregivers' responses to infants' experiencing distress are thought to shape children's internal working models. For example, an infant whose caregiver is responsive and has a secure attachment will likely form an internal working model that includes the expectation that others will respond in a supportive manner when they express distress (Sherman et al., 2015). Accordingly, adolescents' attachments to parents, which are influenced by their early experiences with parents, are important for development because these representations lead to expectations about closeness with others (Shoemaker & Furman 2009).

Multiple assessments of attachment have been developed and the assessments vary based on age. To assess attachment in young children, Ainsworth and Bell conducted the strange situation study. The strange situation study was used to assess 1 year olds' attachment styles with parents. The assessment was carried out over nine episodes starting with the least fear-provoking situation of mother, baby and observer entering the room together. The episodes increase in fear provocation until the last episodes in which the stranger and baby are in the room alone together (Ainsworth & Bell 1970).

Observations of the strange situations, especially in terms of the reunification after separation, are used to classify infants' attachment styles. Ainsworth (1979) found

that babies either used their parents as a secure base, demonstrated signs of anxiety, or avoided the mother upon reunification. Based on young children's response to being separated and reunited with parents, they were classified as having a secure, avoidant, or ambivalent attachment styles. A secure attachment style develops when a child's attachment figure is available to the child's needs. Babies in this group demonstrated distress when separated from the parent and were more likely to explore their surroundings (Ainsworth, 1979). Babies with an avoidant attachment style rarely cried when the mother left and upon return, the babies either avoided or ignored the mother. Babies with an ambivalent attachment style demonstrated anxiety and intense distress upon separation and reunification with the mother (Ainsworth, 1979; Costello, 2017; Malik et al., 2021).

For adolescents and adults, attachment is assessed through interviews and self-report measures. The Adult Attachment Interview (AAI) is used to assess adults' memories of attachment relationships in childhood (Shaver et al., 2000). The AAI is an open-ended interview with answers verbally transcribed, and adults are classified as being secure, dismissing and preoccupied (Shaver et al., 2000). Another measure is the Attachment Style Questionnaire (ASQ) which is a self-report questionnaire used to assess attachment styles. The ASQ consists of five factors including confidence, discomfort with closeness, need for approval, preoccupation with relationships, and relationships as secondary, with higher scores on the confidence scale coinciding with secure attachments (Andersson & Perris, 2000). For this study the Behavioral Systems Questionnaire (BSQ) was used to assess attachment styles based on adolescents' self-perceptions (see Furman

et al., 2002). The scale provides scores for secure, dismissing, and preoccupied attachment styles. The current research focuses on the scale assessing secure attachment.

Co-Rumination

Co-rumination involves rehashing problems and focusing on negative feelings. Co-rumination is usually studied in friendship dyads. Developing friendships is a central task in adolescence. Friends are essential in that friends become social and cognitive resources for each other to navigate daily events (Hartup, 1996). Friends become a source of social support and friendships contribute to healthy social and emotional development (Hartup, 1996).

Research has shown there can be positive and negative outcomes with peer friendships. In terms of positive outcomes, friendships that portray self-disclosure and support lessen the risk of psychological and peer difficulties (Etkin & Bowker, 2018, Rubin et al., 2015). Friendships can offer a buffer against negative peer pressure and victimization (Bagwell et al., 2021, Hodges et al., 1999).

While close friendships are crucial for positive development and adjustment, they can also yield negative consequences, such as co-rumination. Co-rumination is defined as the excessive discussion of a problem between friend dyads with the focus on negative feelings (Rose, 2002). Co-rumination was conceptualized to be like rumination with the difference being that co-rumination takes place in a social context (Rose, 2021). More specifically, co-rumination is a form of disclosure within a relationship that can lead to high quality friendships: however, because co-rumination focuses on negative feelings, it can be related to depression and anxiety (Rose, 2002). As expected, given the research on

rumination, research on co-rumination has found that friends who engage in co-rumination have a higher risk for internalizing symptoms (Rose et al., 2007; Stone et al., 2010). This association may be because co-rumination focuses on negative and repetitive social sharing, which could increase emotional adjustment problems over time (Rose, 2021).

In addition to the main effects of co-rumination on depression, co-rumination has been found to moderate associations between other risk factors and depression. For example, Huang et al. (2022) studied the relationship between peer victimization and depression and whether co-rumination moderates the relationship between peer victimization and depression. Results from this study indicated that adolescents who experienced peer victimization were especially likely to experience psychological distress if they co-ruminated with friends (Huang et al., 2022).

Co-rumination questionnaire (CRQ) is typically used to assess co-rumination and produces a score based on questions involving frequent discussion of problem, repetition of discussing the same problem, encouragement of problem talk, and dwelling on negative aspects of the problem (Rose, 2002). Another way to assess co-rumination is through observation. Specifically, friendship dyads are observed in a room for sixteen minutes discussing each friend's problem and the degree of co-rumination is coded (Rose et al., 2014). Another method that has been used is the daily-diary method. This method involves having subjects complete a morning and evening assessment of recent co-rumination (White & Shih 2012). In the proposed study, co-rumination was assessed with the Co-Rumination Questionnaire.

Attachment Styles and Depression

Having a secure attachment with parents is related to experiencing fewer internalizing problems (Colonness et al., 2011; Groh et al., 2017). This is likely because insecure attachments create a vulnerability to emotional problems (Shaw & Dallos 2005). For example, one meta-analytic study revealed a correlation between insecure attachment and depression (Spruit et al., 2020). Based on the results of 124 studies, the researchers concluded that having a secure attachment helped to prevent depressive symptoms (Spruit et al., 2020). Bowlby (1969) believed that early attachment experiences with caregivers contributes to generalized experiences of positive self-worth. In addition, elevated stress levels related to insecure attachments can impact emotional regulation difficulties (Spruit et al., 2020).

Attachment and Depression: Co-Rumination as a Moderator

Co-rumination as a moderator has been studied with the relationship between emotional competencies and depressive symptoms. As predicted, co-rumination had an effect on adolescents with poor emotional competencies and the development of depressive symptoms (Miller et al., 2020). In this study co-rumination is used as a moderator in the relationship between secure attachment styles and depression.

Summary and Conclusions

The current chapter reviewed response styles theory and attachment theory, which both informed the current study. In addition, studies related to the research questions involving the relationship between having a secure attachment style with parents and

depression, as well as whether co-rumination with friends moderates the relationship between secure attachment styles and depression as reviewed.

Chapter 3: Research Method

Introduction

The purpose of this study was to examine the relationship between secure attachment styles and depression, as well as co-rumination as a potential moderator of the relationship between a secure attachment style and depression. In this chapter, I discuss the research design and rationale. I also discuss the quantitative methodology including the population and sampling procedures and a data analysis plan.

Research Design and Rationale

In this study, I used a quantitative research design to address the research questions. The dependent variable was depression and co-rumination was a moderating variable. The independent variable was secure attachment styles. I used a quantitative design because I examined the relationship between variables (see Creswell & Creswell 2018). I used a nonexperimental design. Nonexperimental designs are used when research is focused on examining predictive relationships among variables without manipulating variables (Creswell & Creswell 2018). Since this study involved secondary analyses of previously collected survey data, a nonexperimental design was the most appropriate design. In addition, there were no time or resource constraints due to use of previously collected data other than obtaining the data and becoming familiar with the dataset.

Methodology

Population

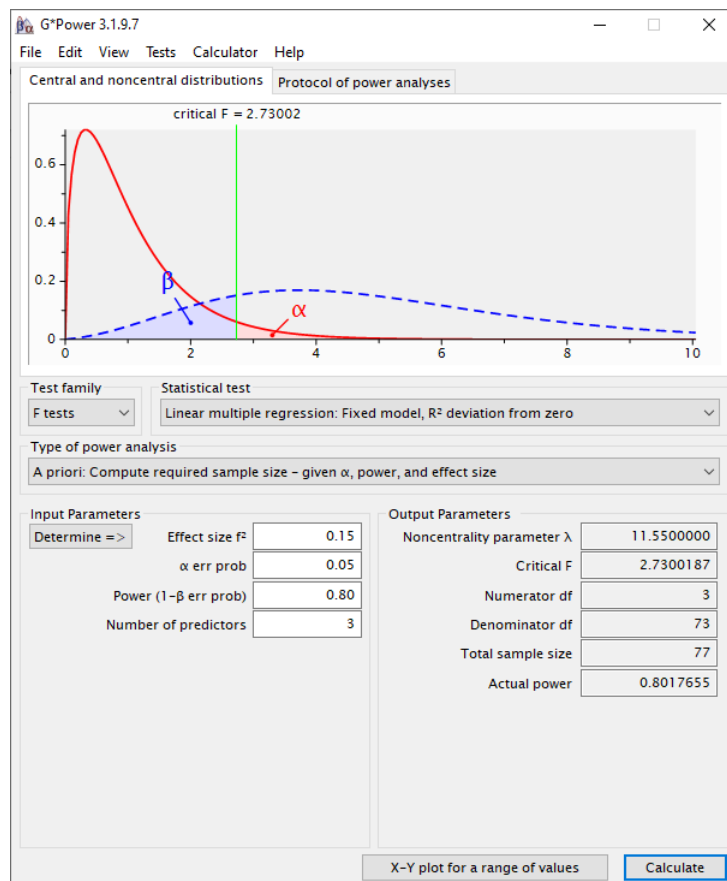
The target population included adolescents in the United States. The World Health Organization defines adolescents as individuals who are between the ages of 10-19 years of age (World Health Organization, 2014). Participants in the study were adolescents from a public school system near a university town who just completed seventh or 10th grades.

Sampling and Sampling Procedures

This study involved secondary analyses of data previously collected by Dr. Rose in 2007-2009. Students were randomly chosen for recruitment from the school district's roster. The families of these students were contacted (Rose et al., 2014; Rose et al., 2016). Of the 937 families contacted, 314 youth participated in the study, each student participated with a friend, resulting in a sample of 628. The final study included 314 seventh graders (154 females and 160 females) and 314 10th graders (148 males and 166 females; Rose et al., 2014; Rose et al., 2016).

G* Power Analysis

To determine appropriate sample size needed, I used a G* Power analysis to detect a significant effect. Using a multiple linear regression with three predictors (secure attachment style, co-rumination, and secure attachment*co-rumination), a small effect size (f^2), an alpha level of .05, and a power of .80 – I determined that a minimum of 77 participants would be sufficient for the data analyses (see Figure 1).

Figure 1*Power Analysis For A Multiple Linear Regression***Procedures for Recruitment, Participation, and Data Collection**

Because the study involved previously collected data, there was no additional recruitment for participants was required. After receiving approval from my chair and committee members, I applied for IRB approval to gain access to the previously collected data. The IRB approval number for this study is 12-21-23-1044610. The final sample for the study was 635 adolescents with 52% females and 48% males (see Rose et al., 2014; Rose et al., 2016).

Instrumentation and Operationalization of Constructs

Depression was assessed with the Center for Epidemiological Studies-Depression (CES-D) which was designed to explore depressive mood among youth (Radloff, 1977). Based on a 4-point scale indicating how frequent they experience the described depressive symptoms with *rarely or none* (1) to *most or all the time* (4).

Co-rumination was measured with the Co-Rumination Questionnaire (CRQ). The CRQ assesses eight components of co-rumination including frequently discussing problems, discussing problems instead of doing something else, encouraging friends to keep discussing problems, repeatedly discussing the same problem, discussing the cause of problems, discussing consequences of problems, discussing other parts of the problem and focusing on negative feelings (Rose, 2002).

Secure attachment styles were assessed by the Behavioral Systems Questionnaire (BSQ). The BSQ was developed by Furman and Wehner (1997) to assess self-perceptions of attachment styles including secure, dismissing, and preoccupied styles.

Research Questions and Hypothesis

Research Question 1 (RQ1): What is the relationship between secure attachment style and depression?

Null Hypothesis (H_01): No significant relationship exists between secure attachment style and depression.

Alternative Hypothesis (H_{a1}): A negative relationship exists between secure attachment style and depression.

Research Question 2 (RQ2): Does co-rumination with friends moderate the relationship

between secure attachments with parents and depression?

Null Hypothesis (H_02): Co-rumination does not moderate the relationship between secure attachments and depression.

Alternative Hypothesis (H_a2): Co-rumination is expected to moderate the relation between secure attachments and depression such that the relationship between secure attachments and depression is stronger for youth who are relatively high on co-rumination.

Data Analysis Plan

I converted the raw data into SPSS version 29.0 for Windows. The data were cleaned to account for nonresponses and outliers. Participants who are missing responses for the variables of interest will be removed from further analysis. Tabachnick and Fidell (2019) recommend using z -scores (standardized values) to identify outlying values. If the z -scores exceed ± 3.29 standard deviations from the mean, these cases will be considered outliers and will be removed from further analysis.

I used descriptive statistics to examine the trends in the demographics and variables of interest. Frequency and percentage distributions were used for the nominal variables. I calculated means and standard deviations for the continuous variables. Cronbach's alpha test of internal consistency was calculated for the survey scales. The strength of the alpha values was evaluated and interpreted through use of the guidelines identified by George and Mallery (2020), in which $\alpha \geq .9$ Excellent, $\alpha \geq .8$ Good, $\alpha \geq .7$ Acceptable, $\alpha \geq .6$ Questionable, $\alpha \geq .5$ Poor, and $\alpha < .5$ Unacceptable.

RQ1: What is the relationship between secure attachment style and depression?

(H_{01}): No significant relationship exists between secure attachment styles and depression.

(H_{a1}): A negative relationship exists between secure attachment styles and depression.

To address RQ1, I conducted a linear regression to assess the predictive relationship between secure attachment style and depression. A linear regression is appropriate when testing the predictive relationship between an independent variable and a continuous dependent variable (Pallant, 2020). The independent variable corresponded to secure attachment style. The dependent variable corresponded to depression.

Prior to analysis, I tested the assumptions of a linear regression. Normality was assessed with a normal P-P scatterplot. The data in the normal P-P scatterplot closely follow the normality trend line, the assumption of normality was supported. Homoscedasticity will be assessed with a residual's scatterplot. The data in the residuals scatterplot was random indicating the assumption of homoscedasticity was supported.

The F test was used to make the overall determination on whether a significant predictive relationship exists between secure attachment and depression. The R^2 value was used to identify how much variance in depression can be explained by secure attachment. The individual predictor was examined with a t test. The result of the t test was not significant, the unstandardized beta coefficient (B) was interpreted to identify how much depression fluctuates based on one-unit shifts to secure attachment. Statistical significance was evaluated at the generally accepted level, $\alpha = .05$.

RQ2: Does co-rumination with friends moderate the relationship between secure

attachments and depression?

H₀₂: Co-rumination does not moderate the relationship between secure attachments and depression.

H_{a2}: Co-rumination is expected to moderate the relation between secure attachments and depression such that the relationship between secure attachments and depression is stronger for youth who are relatively high on co-rumination.

To address RQ2, I conducted a hierarchical linear regression to assess whether co-rumination moderates the relationship between secure attachment and depression. A hierarchical linear regression is appropriate when testing whether a variable moderates the predictive relationship between an independent variable and a continuous dependent variable (Pallant, 2020). The independent variable was secure attachment style. The dependent variable was depression. The moderator variable corresponded to co-rumination. Using the hierarchical linear regression method, the predictor (secure attachment) and moderator (co-rumination) were entered into the first step. In the second step of the model, the interaction effect was added to the model – secure attachment*co-rumination.

Prior to analysis, I tested the assumptions of a multiple linear regression. Normality and homoscedasticity were assessed using the methods described in RQ1. Absence of multicollinearity was verified with variance inflation factors (VIFs). According to Stevens (2009), if the VIFs are below 10, then there is evidence for absence of multicollinearity.

There are two conditions that must be held to support moderation. The primary condition for moderation is that the regression model with the interaction term (secure attachment*co-rumination) must explain significantly more variance than the model without the interaction (Baron and Kenny, 1986). The first condition was evaluated, the change in the R^2 between models 1 and 2 was reported. The second condition for moderation involves assessing the interaction term (secure attachment*co-rumination) for statistical significance with a t -test. The findings of the interaction term are not statistically significant ($p < .05$), the second condition for moderation was not supported (Baron and Kenny, 1986). Both conditions were not supported, there was not sufficient evidence for moderation. The same inferential statistics described in RQ1 was reported (F test, R^2 , t test, B). As a follow-up procedure, a simple slopes analysis was conducted to further investigate the significant interaction terms.

Threats to Validity

To interpret the results of the study, it was essential to consider potential threats to internal and external validity so that the results are not misinterpreted. Internal validity threats include any experimental procedures or experiences of the participants that can threaten the researcher from drawing correct inferences from the data (Creswell & Creswell 2018). One potential threat to internal validity is determining if instruments measure what they are supposed to measure. The instruments used in this study were chosen because they measure what the survey is supposed to measure. The measures chosen have been proven to have good internal reliability and consistency in previous studies.

External validity threats happen when the research findings are generalized to others inappropriately (Creswell & Creswell 2018). Results from this research study should not be generalized to other populations that are not consistent with the current demographics. These results can be generalized to adolescent's who have just completed seventh or 10th grades, attends public school in a mid-sized town in the Midwest of the United States. To diminish the threat of external validity, the results should not be generalized to younger children as this study is based on adolescents and children from different cultures. Another potential threat to validity includes reactive effects of the study. Since this study involved test subjects to disclose personal information, the subjects may not have been honest with their responses. To address this, subjects were in a room by themselves when asked to complete the questionnaires.

Ethical Procedures

Because I used archival data collected by Dr. Amanda Rose in 2007 and 2009, data collection had already happened. Ethical procedures were reviewed by the IRB application process before the original research. Both parental consent and youth assent were obtained from the original study. In the original study, confidentiality was explained to the participants. All identifying information was removed and coded by numbers. In addition, participants were informed that they could skip questions they were uncomfortable answering and could stop participating at any time.

Summary

This chapter included information regarding the research design for this quantitative study. The data analysis plan included information about descriptive

statistics and statistical analyses used to answer the research questions. I explained threats to validity and ethical procedures.

Chapter 4: Results

Introduction

The purpose of this study was to examine whether adolescent's attachment style with parents is associated with depression and whether this association is moderated by co-rumination with friends. I addressed two research questions. The first research question was used to examine the relationship between secure attachment styles and depression. The second research question was used to examine whether co-rumination moderates the relationship between secure attachment styles and depression.

In this chapter, the findings of the data analyses will be presented. Frequencies and percentages are used to identify the trends in the nominal variables. Means and standard deviations will be used to examine the trends in the continuous-level variables. To address the research questions, a series of linear regressions will be conducted. Statistical significance will be evaluated at the generally accepted level, $\alpha = .05$.

Data Collection

The data used for this study were collected by Dr. Amanda Rose between 2007 and 2009. Questionnaires were completed (including CES-D, CRQ, and BSQ). As stated in Chapter 3, adolescents who attended a public school district in a midwestern city were randomly chosen to be invited to participate in the study.

Results

A total of 628 participants responded to the survey questionnaire. Two participants did not respond to the co-rumination questionnaire and one participant did not respond to the depression questionnaire. These students were not included in the data

analyses. Outliers were identified by standardizing the scores for co-rumination, secure attachment, and depression. Tabachnick and Fidell (2019) indicated that outliers correspond to z-scores exceeding ± 3.29 standard deviations from the mean. Seven high outliers were identified for high depression scores and these cases were subsequently removed. The final sample consisted of 618 participants, with 310 seventh graders and 308 10th graders. Frequencies and percentages for sex, age, ethnicity, and race are presented in Table 1.

Table 1*Frequencies and Percentages for Student Demographics by Grade Level*

Variable	Grade	
	7	10
Sex		
Female	157 (50.65%)	161 (52.27%)
Male	153 (49.35%)	147 (47.73%)
Age		
12	19 (6.13%)	0 (0.00%)
13	269 (86.77%)	0 (0.00%)
14	22 (7.10%)	0 (0.00%)
15	0 (0.00%)	22 (7.14%)
16	0 (0.00%)	255 (82.79%)
17	0 (0.00%)	29 (9.42%)
18	0 (0.00%)	2 (0.65%)
Ethnicity		
Latino	9 (2.94%)	14 (4.67%)
Not Latino	297 (97.06%)	286 (95.33%)
Race		
American Indian	3 (0.97%)	0 (0.00%)
Asian	5 (1.62%)	5 (1.64%)
Hawaiian	0 (0.00%)	1 (0.33%)
African American	90 (29.13%)	87 (28.62%)
European American	196 (63.43%)	191 (62.83%)
Other	15 (4.85%)	20 (6.58%)

Secure attachment scores ranged from 1.00 to 5.00, with $M = 3.57$ and $SD = 0.82$.

Co-rumination scores ranged from 1.00 to 5.00, with $M = 2.89$ and $SD = 0.85$.

Depression scores ranged from 1.00 to 2.90, with $M = 1.56$ and $SD = 0.38$. The descriptive statistics for the variables are presented in Table 2.

Table 2*Summary Statistics for Variables of Interest*

Variable	<i>n</i>	Min	Max	<i>M</i>	<i>SD</i>
Secure attachment	618	1.00	5.00	3.57	0.82
Co-rumination	618	1.00	5.00	2.89	0.85
Depression	618	1.00	2.90	1.56	0.38

RQ1: What is the relationship between secure attachment style and depression?

H_{01} : No significant relationship exists between secure attachment styles and depression.

H_{a1} : A negative relationship exists between secure attachment styles and depression.

To address RQ1, a linear regression was conducted to examine the predictive relationship between secure attachment and depression. The predictor variable was secure attachment. The criterion variable was depression.

Prior to analysis, the assumption of normality and homoscedasticity were evaluated with scatterplots. The data in the normal P-P scatterplot followed the normality trend line, with minor deviations (see Figure 1). Howell (2013) indicates that minor deviations from a normal distribution are not problematic when the sample size for analyses exceeds 50 cases. Therefore, the assumption of normality was supported. The assumption of homoscedasticity was supported with a residuals scatterplot. There was

random spread in the residuals scatterplot, providing support for the homoscedasticity assumption (see Figure 2).

Figure 2

Normal P-P Scatterplot for Regression With Secure Attachment Predicting Depression

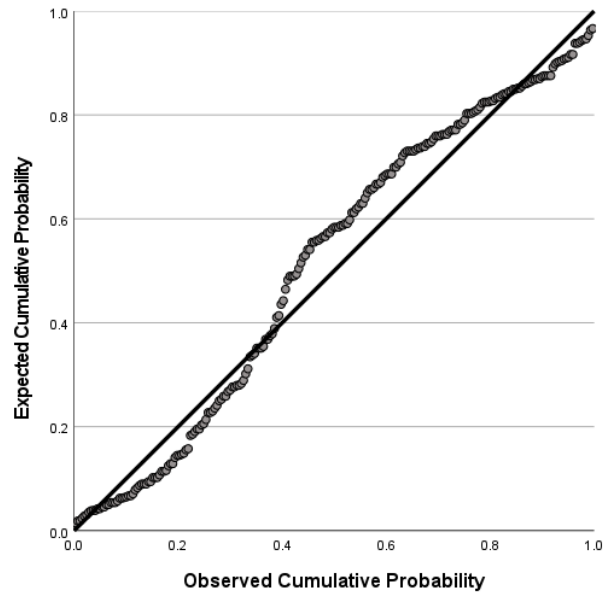
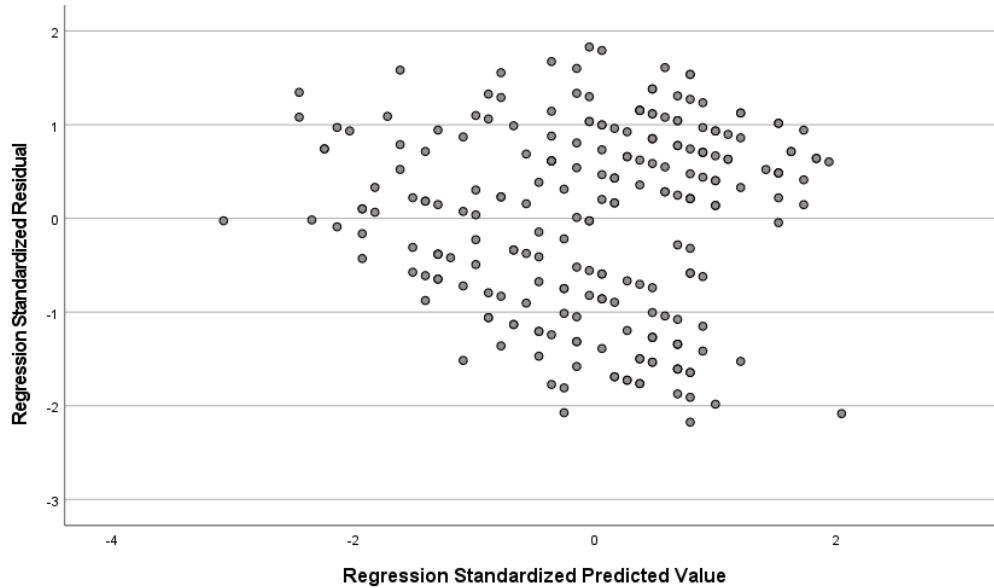


Figure 3

Residuals Scatterplot for Regression With Secure Attachment Predicting Depression



The results of the linear regression were not statistically significant, $F(1, 616) = 0.74$, $p = .39$, $R^2 = .001$, indicating that there was not a significant predictive relationship between secure attachment and depression scores. Approximately 0.1% of the variance in depression could be explained by secure attachment scores. The null hypothesis (H_0) for research question one was not rejected. Table 3 summarizes the results of the linear regression model.

Table 3

Results for Linear Regression with Secure Attachment Predicting Depression

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Secure attachment	0.02	0.02	.04	0.86	.39

Note. Results: $F(1, 616) = 0.74$, $p = .39$, $R^2 = .001$

RQ2: Does co-rumination with friends moderate the relationship between secure attachments and depression?

H₀2: Co-rumination does not moderate the relationship between secure attachments and depression.

H_a2: Co-rumination is expected to moderate the relation between secure attachments and depression such that the relationship between secure attachments and depression is stronger for youth who are relatively high on co-rumination.

To address RQ2, a hierarchical linear regression was conducted to examine whether co-rumination moderates the relationship between secure attachment and depression. In the first step of the model, secure attachment and co-rumination were entered as predictors. In the second step of the model, the interaction between secure attachment and co-rumination was entered.

Prior to analysis, the assumption of normality and homoscedasticity were evaluated with scatterplots. The data in the normal P-P scatterplot followed the normality trend line, with minor deviations (see Figure 3). Therefore, the assumption of normality was supported. The assumption of homoscedasticity was evaluated with a residuals scatterplot. There was random spread in the residuals scatterplot, providing support for the homoscedasticity assumption (see Figure 4).

Figure 4

*Normal P-P Scatterplot for Regression With Secure Attachment, Co-Rumination, And
Secure Attachment*Co-Rumination Predicting Depression*

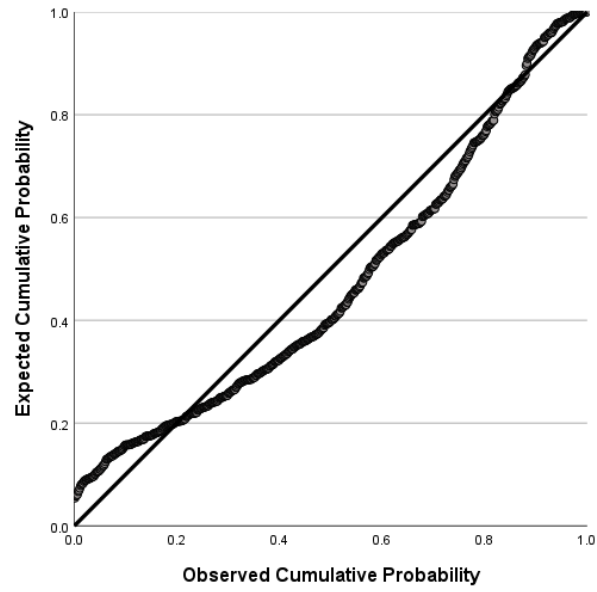
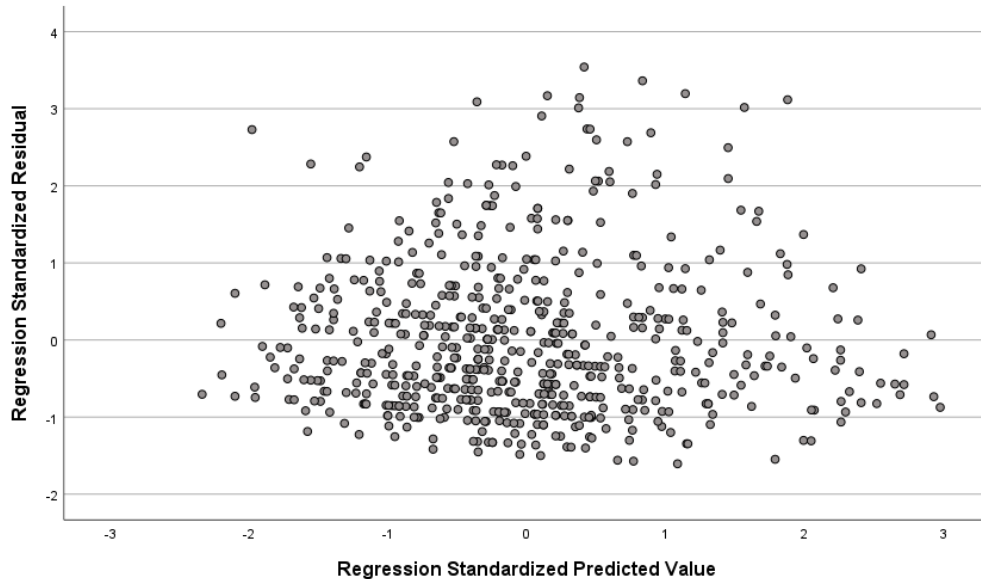


Figure 5

*Residuals Scatterplot for Regression With Secure Attachment, Co-Rumination, And Secure Attachment*Co-Rumination Predicting Depression*



The results of the first step of the hierarchical linear regression model were statistically significant, $F(2, 615) = 3.17, p = .04, R^2 = .01$, indicating that there was a collective significant predictive relationship between secure attachment and co-rumination on depression scores. Approximately 1.0% of the variance in depression could be explained by the predictors. Upon further examination of the predictors, co-rumination ($B = 0.04, \beta = 0.10, t = 2.37, p = .02$) was a significant predictor of depression, indicating that with every one-unit increase in co-rumination scores, depression scores increased by approximately 0.04 units. Secure attachment ($B = 0.01, \beta = 0.01, t = 0.32, p = .75$) was not a significant predictor.

When the interaction was added on the second step of the hierarchical linear regression model, the full model (with the two main effects and the interaction) was no longer statistically significant, $F(3, 614) = 2.37, p = .07, R^2 = .01$, indicating that there was not a significant predictive relationship of secure attachment, co-rumination, and secure attachment by co-rumination interaction on depression scores. Approximately 1.1% of the variance in depression could be explained by the predictors and interaction term. In addition, the change between steps one and two of the hierarchical regression model was not statistically significant, $F_{\text{change}} = 0.76, p = .38$, indicating that the model did not significantly improve following the inclusion of the interaction term. Accordingly, the interaction term between secure attachment and co-rumination ($B = 0.02, \beta = 0.22, t = 0.87, p = .39$) also was not statistically significant in the model. Therefore, there was not sufficient evidence that co-rumination moderates the relationship between secure attachment and depression. The null hypothesis (Ho2) for research question two was not rejected. Table 3 summarizes the results of the hierarchical linear regression model.

Table 4

*Results for Hierarchical Linear Regression with Secure Attachment, Co-Rumination, and Secure Attachment*Co-Rumination Predicting Depression*

Variable	<i>B</i>	<i>SE</i>	β	<i>t</i>	<i>p</i>
Step 1					
Secure attachment	0.01	0.02	.01	0.32	.75
Co-rumination	0.04	0.02	.10	2.37	.02
Step 2					
Secure attachment	-0.05	0.07	-.11	-0.75	.46
Co-rumination	-0.03	0.08	-.06	-0.32	.75
Secure attachment*Co-rumination	0.02	0.02	.22	0.87	.39

Note. Results: Step 1 – $F(1, 616) = 3.17, p = .04, R^2 = .01$; Step 2 – $F(3, 614) = 2.37, p = .07, R^2 = .01$

Summary

The purpose of this study was to examine the relationship between secure attachment styles and depression, as well as co-rumination as a potential moderator of the relationship between a secure attachment style and depression. In this chapter, the findings of the data analyses were presented. Descriptive statistics were used to summarize the trends in the demographics and variables of interest.

To address the research questions, a series of linear regressions were conducted. The results of the linear regression were not statistically significant between secure attachment and depression scores. The null hypothesis (H_{01}) for RQ1 was not rejected. The results of the hierarchical linear regression model indicated that there was not sufficient evidence that co-rumination moderates the relationship between secure attachment and depression. The null hypothesis (H_{02}) for RQ2 was not rejected.

In the next chapter, I will examine the findings in connection to the previous literature. I will also discuss the Limitations of the research and recommendations for future studies.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this study was to examine the relationship between secure attachment styles and depression as well as co-rumination as a potential moderator of the relationship between a secure attachment style and depression. To answer the research questions, I used a nonexperimental design to examine the relationships between adolescents' secure attachment styles and their reports of depression and whether co-rumination moderates these relationships. I used a series of linear regressions to test the relationship between adolescent secure attachment styles and depression and whether co-rumination moderates that relationship.

Findings from this study indicated no significant relationship between secure attachment and depression. When considered as simultaneous predictors, co-rumination was a significant predictor of depression, while secure attachment was not a significant predictor of depression. In addition, co-rumination did not significantly moderate the relationship between secure attachment and depression.

Interpretation of Findings

The first research question was used to examine the relationship between secure attachment style and depression. Adolescence is a crucial period of development marked by significant cognitive, social, and behavioral changes that can lead to the development of depression (Rawatlal et al., 2015). According to attachment theory, internal working models are based on experiences from birth. Adolescents are able to draw on internal working models, which are mental representations of themselves, others, and

relationships based on past experiences. These internal working models influence how adolescents perceive and navigate interpersonal relationships. Positive internal working models can facilitate healthy relationships, while negative or distorted models can contribute to difficulties in forming and maintaining connections with others, increasing the risk of depression. Based on the attachment theory, when caregivers are responsive to their infant's needs, they will perceive the caregiver as a safe haven and be more willing to explore the environment (Bowlby, 1977; Spruit et al., 2020). Secure attachments typically are associated with positive well-being (Malik et al., 2021).

In the current study, however, there was not a significant relationship between secure attachment styles and depression in adolescents. According to the data, the null hypothesis could not be rejected. The second research question was used to examine whether co-rumination with friends moderated the relationship between secure attachment and depression. Again, the null hypothesis was not rejected, which indicated that there was not sufficient evidence that co-rumination moderated the relationship between secure attachment and depression in this study.

These results were unexpected, because meta-analyses indicate a moderate association between attachment and depressive symptoms (see Spruit et al., 2020). At the same time, not all studies have found a significant association (Spruit et al., 2020). One possible explanation of the null results in the current study involves the assessment of attachment. In this study, I only considered the degree to which adolescents are securely attached. Adolescents who score low on this scale would be considered insecurely attached. However, subtypes of insecurely attached adolescents were not considered.

Insecurely attached youth typically are classified into two subtypes of insecure attachments. As described in Chapter 2, one type is avoidant and occurs when caregivers respond to infant needs with anger or annoyance (Costello, 2017). The other is ambivalent and occurs when the child is unsure of how the caregiver will respond to their needs (Costello, 2017). There is previous research indicating that particular subtypes of insecure attachment are associated with depressive symptoms (Mohammadkhani et al., 2017). Failing to assess subtypes of insecure attachment may be a reason why a significant relationship between secure attachment styles and depression was not found. In contrast, the main effect of co-rumination was a significant predictor of depression. This finding is consistent with previous research that has found that adolescent friends who co-ruminate have a higher risk for internalizing symptoms (e.g., Rose et al., 2007; Stone et al., 2010). This finding also fits with response styles theory, which is based on the idea that how people respond to depressive symptoms determines the length and severity of symptoms (Nolen-Hoeksema, 1991).

Limitations of the Study

The study had several limitations, which should be taken into account when interpreting its findings. The reliance on previously collected data imposes limitations. One limitation is that it was not possible to add additional constructs or measures or to revise measures.

In addition, the data were collected between 2007 and 2009, which may not reflect current circumstances or trends. To ascertain the continued relevance and generalizability of the findings, it would be necessary to collect updated data. In addition

to possible cohort effects, the findings also should not be overgeneralized to other populations, such as older or younger youth or adolescents in other geographical locations. Extrapolating the results to demographics not represented in the original study could lead to erroneous conclusions.

Recommendations

One direction of future research efforts may be to address limitation of this study. Studies could focus on addressing subtypes of insecure attachment, including avoidant and ambivalent attachment styles. Future research also needs to be conducted with a more diverse sample of participants, as well as younger and older youth, to evaluate the generalizability of the findings.

In conjunction with evaluating whether the findings apply to the current time, replication research could include factors that are more relevant to today's adolescents. One area to consider is social media usage among adolescents. One study found that adolescents frequent use of social media increased co-rumination, which resulted in more depression and anxiety symptoms (Ohannessian et al., 2021). Social media gives adolescents more access to their friends, allowing them more time to co-ruminate. Future studies could examine whether these factors interact with attachment style in predicting depressive symptoms. It may be beneficial to examine these issues with younger children as well. If these factors are associated with depressive symptoms in a younger age group, this information potentially could be used to address these predictors at a younger age.

Implications

In the present study, I examined the relationship between secure attachment style and depression in adolescents and whether co-rumination moderated the relationship between secure attachment styles and depression. The results indicated that there was no significant relationship between secure attachment style and depression in adolescents. In addition, co-rumination did not moderate the relationship between secure attachment and depression. As a result, the current results do not provide the expected implications related to attachment and depressive symptoms.

However, co-rumination was found to be a predictor of depression. Consistent with other research indicating an association between co-rumination and depressive symptoms in adolescence, the findings suggest that it may be beneficial to teach adolescents problem-solving strategies to decrease co-rumination among friends. Providing adolescents with effective problem-solving skills can empower them to navigate challenges more constructively. By teaching adolescents how to approach problems systematically, identify solutions, and weigh potential outcomes, they may be less inclined to engage in excessive, repetitive discussions focused solely on negative emotions. This approach can be used to break the cycle of co-rumination and reduce the risk of depression. At the same time, the importance of close friendships in adolescence should not be ignored. Supportive, balanced friendships, in the absence of co-rumination, promote positive adjustment. Encouraging adolescents to cultivate relationships characterized by mutual support, constructive problem-solving, and shared positive experiences can lead to their having more resilient social networks.

The findings regarding co-rumination also have implications for parents. Parents play a crucial role in adolescent development, including in their social and emotional well-being. Teaching parent's positive ways to interact with their children and encouraging their child's problem-solving skills may be beneficial in reducing co-rumination with friends. Educating parents on positive communication techniques and active listening skills also can enhance their ability to support their children. Encouraging parents to foster their child's autonomy and problem-solving abilities may also promote healthier coping mechanisms and reduce reliance on co-ruminative behaviors.

Finally, the education system can be leveraged as well. Educators also can promote effective problem-solving in youth, which may decrease co-rumination. Incorporating this information into school curriculum and counseling programs could help provide them with the support they need to navigate the challenges of adolescence. Implementing these strategies may reduce the prevalence of co-rumination among adolescents and associated mental health outcomes such as depression. Effective interventions at both the individual and interpersonal levels can promote resilience, adaptive coping, and positive social support networks during this critical stage of development.

Conclusions

Rising rates of depressive symptoms in adolescents raise significant concerns. In this study, I examined the relationship between secure attachment styles and depression and whether co-rumination moderates that relationship. Although the findings related to attachment were not significant, the results indicated that co-rumination was related to

adolescent depression as suggested by previous research. Educating adolescents about the potential adverse effects of co-rumination and teaching them appropriate problem-solving strategies should help them develop healthier coping mechanisms. Moreover, fostering these skills during adolescence can have long-term benefits, as individuals who learn effective coping strategies during their formative years are more likely to carry these skills into adulthood. By prompting emotional well-being in adolescents, we can contribute to developing resilient and capable problem-solving adults.

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Appendix



Completion Date 21-Nov-2023
Expiration Date N/A
Record ID 59768616

This is to certify that:

Kimberly Murray

Has completed the following CITI Program course:

Not valid for renewal of
certification through CME.

Student's
(Curriculum Group)
Doctoral Student Researchers
(Course Learner Group)
1 - Basic Course
(Stage)

Under requirements set by:

Walden University

CITI
Collaborative Institutional Training Initiative

101 NE 3rd Avenue, Suite 320
Fort Lauderdale, FL 33301 US
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Verify at www.citiprogram.org/verify/?w8414d305-76db-4168-abaa-668ecad9cec-59768616