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Can I Have it All?: Does Attachment Style Dictate Relationship Security?

Senior Project Submitted to The Division of Science, Mathematics, and Computing of Bard College

By

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Annandale-On-Hudson, New York

May 2023

I want to dedicate this project to myself and all the insecurely (especially anxiously) attached individuals. We are deserving of love, security, and safety despite our flaws, fears, and insecurities. I hope this project makes you feel seen, understood, and reminds you that you do not need to be perfect in order to be loved.

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Abstract

Studies have shown that individuals with insecure attachment styles are less likely to feel satisfied or secure in their relationships. Research has shown that security priming can be used to increase one's attachment security towards relationships. In the present study 40 students (ages 18-23) from Bard College were recruited in order to investigate whether a short-term priming intervention can make people feel more securely attached in their relationships. Participants first completed the ECR-RS questionnaire in order to get their attachment style. Then, participants completed the first half (Time 1) of the ECR-R questionnaire in order to determine how secure they feel in a specific relationship prior to priming. Participants were then separated into a control and experimental group. Those in the experimental group were primed by writing about a relationship that is important to them for eight minutes. Participants in the control group wrote about their week for eight minutes. Afterwards, participants completed the second half of the ECR-R. Results indicated that there is no significant difference in scores when comparing the security scores between the experimental and control group at Time 2.

Keywords: Attachment Theory, Adult Attachment, Relationships, Security Priming

Until He Calls by Jessalyn Henriquez Polanco:

Your Call Has Been Forwarded To An Automatic Voice Message System: 617-

He said he would call at some point today, it's 12:00pm. I've been up since 10:00 and now it's 12:00, but maybe he's still asleep? I want time to stop ticking because the more I watch the clock, the more I feel the covers closing in. I scroll to keep myself afloat; a series of tweets posted by people I'll never meet, their thoughts replace mine and I breathe. This should hold me over until he decides to wake up, meditate, do his morning routine, and call me. I don't want to come off as desperate, so I put my phone on Do Not Disturb. I hate responding too fast. Who am I kidding? I want his name to come across my screen and check my phone every five minutes until it does.

It's 3:00 PM. He has to be awake by now. Why hasn't he called? Did he forget about me? How could he forget? We literally spoke until 2:00 AM last night. Maybe he's waiting for me to call him? No, he always complains about not being able to initiate anything in our relationship so I let him have this. Maybe he's thinking about what to say? Ugh, why can't he just call! I need to find another distraction, a better distraction. I begin to clean my room: organizing every drawer, color-coding my closet, and removing every dustbunny I can see. It's 6:00 PM and still nothing. Fuck it, I'm calling him.

Your Call Has Been Forwarded To An Automatic Voice Message System: 617-

My head hurts. My stomach is inside out. I'm shaking. I'm pacing. Why hasn't he called? Why doesn't he care about me? Why hasn't he called? I need someone. I grab my phone and call my friends: What did I do wrong? What's happening? Why am I feeling this way?. The covers are closing in again. I'm crying. It's hot. What's wrong with me? Why doesn't he love me? What did I do? What do I have to do? Why is he so evil?

Your Call Has Been Forwarded To An Automatic Voice Message System: 617-

I pick up a glass of water and throw it across the room, it hits my wall and immediately shatters into a hundred pieces. The floor is dirty now. I feel like glass now. Broken. Uncared for. Worthless. *DING* I look at my phone and see a message from him, "i'll call in a bit." he says. And suddenly, everything is okay, the world is okay, I am okay. So I wait for however many hours "a bit" is, until he calls.

This scenario is an example of the thoughts of an individual with an anxious attachment. In this specific example, the individual's attachment system is highly activated. The attachment system is a system in the brain that helps us create close connections with others, protects us from potential threats and helps us regulate negative emotions. The attachment system can be explained by attachment theory which is a theory based on the notion that human beings are predisposed to desire closeness with others. British Psychologist John Bowlby argued that this desire was embedded in our brains because (evolutionary speaking) individuals who were close to others had people to protect them. Therefore they had a higher likelihood of surviving than individuals who did not have anyone close to them. Thus, the attachment system in our brains was formulated.

When one's attachment system gets triggered, like in the previous example, (usually by the individual feeling that they are being abandoned or threatened) individuals tend to participate in actions in order to protect themselves. These actions are also known as "protest behaviors" Another example of a protest behavior is when a caregiver places an infant down and walks away. Immediately the infant begins to scream and cry. The infant only stops once they are reunited with the caregiver. In this situation the protest behavior is screaming and crying. This is the only way the infant knows how to make their caregiver come back to make them feel safe

again. This manifests differently in adult attachment. As for the previous example, a person with an anxious attachment was spamming a partner's phone until they got some kind of response in order for their attachment system to calm down and for them to feel safe in the relationship again. Protest behaviors are different for each attachment style because each attachment style reacts differently to their attachment system getting triggered.

Attachment Theory explains and explores the different behavioral patterns that occur in human relationships. The following literature provides the historical context about the theory as well as how the theory has evolved over time.

Literature Review

Attachment theory and attachment styles are associated with how we as humans interact with our own emotions as well as other people. It is known that human beings are social creatures. The relationships we cultivate are vital for our survival and wellbeing (Holt-Lunstad, 2018). There are many factors that play into having healthy relationships, one of which is understanding how one functions in relationships. I believe when people are conscious and well informed about their attachment style it allows for them to know their needs and values in relationships. Knowing our needs, values, and shortcomings allows us to better connect and understand one another. Communicating those needs, values and shortcomings allows people to care for others in a way that is appropriate for them. In order to understand how to do this, we need a greater understanding of how attachment styles come to be, how each attachment style manifests itself in relationships.

Early Attachment & Strange Situation

Attachment theory focuses on the relationship between an infant and their caregiver (Bowlby, 1969). The behavioral theory of attachment suggested that an infant would become attached to the caregiver that provides them with food, suggesting that attachment is a learned behavior. Early research suggested that infant monkeys preferred terry cloth dolls as surrogates despite wire dolls providing food, suggesting that behavior learning relating to food is not the complete picture—that infants need contact comfort (Harlow, 1958).

British psychologist John Bowlby studied how human infant's relationship with their caregiver influences their cognitive, emotional and social development. Out of this research came Attachment Theory, which suggests that infants are born with the psychobiological inclination to create attachments to their caregivers (Bowlby, 1958/2018). Bowlby found that based on how sensitive and responsive a mother is to her child's needs over the first years of life, infants develop a working model of what to expect her availability would be in times of need (1958). He argued that this working model is ingrained into the individual's mind and later on in life will be projected onto other relationships. This working model is what we now call an attachment style.

In order to study attachment theory further, researchers led by Mary Ainsworth devised the "Strange Situation" paradigm in order to observe infant-mother separations and reunions (1978). The effects of the relationship the child has with their caregiver manifests as a working model or "attachment style". Ainsworth used the experiment to determine the nature of attachment behaviors and categorize a child's attachment style. In this experiment, Ainsworth believed the child's reaction to the reunion to their mother was the best indicator of their attachment.

The Strange Situation investigated the attachments of 106 infants around the age of one (Ainsworth et al., 1978). The experiment was conducted in a laboratory setting that resembled a home with furniture and toys for the infant to play with. The room that was used included a one way glass/mirror in order for the experimenter to observe the interactions. The procedure went as follows (See Figure 1): the mother and infant were first introduced to the experimenting room. Once the infant was settled, the infant would explore and play with the toys while the mother watched. After a couple of minutes, the stranger would come in and be silent, then interact with the mother, and then with the mother and the infant. After a couple more minutes, the mother of the infant would leave the room, leaving the infant alone with the stranger. The stranger's behavior would be geared toward the infant. Afterwards, the mother would return and greet and or comfort the baby upon her return. The stranger would leave the room. A couple of minutes later, the infant mother would leave the room once again. This time the infant would be left completely alone in the room. After a couple of minutes, the stranger would return to the room and gear toward the infant. Once again, the mother would enter the room and greet/comfort the infant while the stranger left. Each new interaction with the stranger or the caregiver was coded (See figure 2) by researchers in order to categorize the infants into respective groups that reflected the patterns that the infants would make.

Episode	Persons Present	Duration	Description
1	Mother, Infant, Observer	30 seconds	Observer introduces mother and baby to experimental room, then leaves.
2	Mother, Infant	3 minutes	Mother is nonparticipant while baby explores. If necessary, play is stimulated after 2 min.
3	Stranger, Mother, Infant	3 minutes	Stranger enters, Min. 1: stranger silent; Min. 2: stranger talks with mother; Min 3: stranger approaches baby. After 3 min., mother leaves.
4	Stranger, Infant	3 min or less	First separation episode. Stranger's behavior is geared to that of baby.
5	Mother, Infant	3 min or more	First reunion episode. Mother greets and comforts baby, then tries to settle baby into play. Mother then leaves, waves byebye.
6	Infant	3 min or less	Second separation episode.
7	Stranger, Infant	3 min or less	Continuation of second separation. Stranger enters and gears behavior to that of baby.
8	Mother, Infant	3 minutes	Second reunion episode. Mother enters, greets baby. Stranger leaves.

Figure 1: Flow Chart of Strange Situation Procedure (Mcleod, 2023)

In this study, the infant behaviors were categorized into three categories, Secure, Avoidant, and Resistant (Ainsworth et al., 1978). A Secure attachment style suggests that one is able to seek support and comfort and form healthy relationships with others and feel safe in those relationships. Infants that were distressed when the mother left, avoidant to the stranger when the mother was not present, but friendly when the mother was present as well as happy when the mother returned, were coded as "Secure Attachment Style." Ainsworth suggests that healthy relationships can develop because the child's caregiver was consistent in meeting the child's emotional and physical needs.

An Avoidant or Resistant attachment style suggests that an individual has trouble forming healthy/secure relationships with others. Infants that showed no signs of distress when the mother left, continued to play regularly with the stranger present regardless of whether or not the mother was there and showed little to no interest that the mother returned were coded as "Avoidant Attachment Style." Infants who were in intense distress when the mother left, didn't

interact with the stranger and approached the mother when she returned with resistance (i.e pushing her away) were coded as the "Anxious Attachment Style." Ainsworth suggests that this is because their caregiver was not consistent in meeting the infant's emotional needs. In other words, caregivers of infants with insecure attachment styles are not consistently sensitive towards their infants needs and emotions. It is likely that the caregiver swung back and forth unpredictably between emotionally abandoning the infant and being emotionally intrusive. Later, researchers added a fourth categorization which is the Disorganized-Disoriented attachment style (Main & Solomon, 1990). The names for attachment styles can vary, the other names for these attachment styles are: Preoccupied/Anxious, Dismissive, and Disorganized/fearful respectively). Throughout this paper I will be using the names anxious, avoidant, and fearful.

The anxious attachment style suggests that one struggles to feel safe in relationships, they have a strong fear of abandonment and can make this individual feel very anxious when creating or participating in relationships. These individuals tend to seek/crave closeness with others, however their fears can make it difficult for them to act in healthy ways when they do not feel safe in a relationship. As previously stated, Ainsworth argues this is because the child's caregiver was inconsistent when it came to meeting the child's emotional needs. The inconsistency creates a working model that causes the individual to develop anxiety and insecurity when it comes to other attachments/relationships. As a result they become overly sensitive to potential cues of abandonment and rejection.

The avoidant attachment style suggests that one has difficulty developing secure, trusting close relationships, they have a fear of intimacy. They tend to be very emotionally distant and self reliant. Ainsworth argues that this is because a child's caregiver did not cater or meet the child's emotional needs. It is possible that the parent was consistently unresponsive, rejecting or

emotionally unavailable. The child had to learn to be independent because they did not feel that emotional reliance on others is safe. Lastly, the fearful avoidant attachment style is a combination of the anxious attachment and avoidant attachment, it suggests that one has the desire for closeness (similar to anxious attachment), but is also afraid of it (similar to avoidant attachment). This is because the child's caregiver not only did not meet the child's emotional needs, but researchers state that it is possible that the caregiver inflicted fear and (physical and or emotional) abuse on the infant. Studies have shown that infant attachment lays the foundation for emotional regulation across the individual's lifespan (Grime, et al, 2021).

	and the same of th		idviodidi	categories	,
Intensity	Proximity and contact seeking	Contact maintaining	Proximity and interaction avoiding	Proximity and interaction resisting	Searching
1					
2		¥			
3					¥
4	V V				
5					V
6	· ·				

Figure 2: Demo of Ainsworth's Scoring System (McLeod, 2023)

Prior to Bowlby and Ainsworth, there were theorists like Sigmund Freud that believed that mother-child relationships had the ability to shape a child's personality and development, however, it was because of the child's need for physician satisfaction. This is different from Bowlby because Bowlby argued that infants were born with the innate need to create an attachment with a caregiver for survival and wellbeing. This connection was not solely driven by physical needs, but also by the need for protection, emotional security and comfort.

John Bowlby and Mary Ainsworth's work changed the way attachment theory was discussed because their research provided a framework that helps us understand how early childhood experiences can shape the emotional and social development of a human being. They have provided us with the fundamental information for developmental psychology. Although these pioneers contributed so much to the field, there were many critiques about their contributions. An example of a critique is that the "model attachment is based on behaviors that occur during momentary separations (stressful situations) rather than during non stressful situations. A broader understanding of attachment requires observation of how the mother and infant interact and what they provide for each other during natural, non stressful situations" (Field, 1996, p. 543) I would argue that this critique fails to acknowledge that John Bowlby's theory is based on the premise that attachment exists in because of an infants need for protection in order to survive, therefore it makes sense that attachment behavior is measured specifically during stressful situations because it is the only time in which the infant would sought after protection. Whether or not the infant looks for the parent in this situation reveals the attachment.

Another example of a critique is that attachment theory oversimplifies human behavior and relationships (Grossmann & Grossmann, 1991). Critics say this is because it focuses on caregiver and infant relationships, and overlooks the complexities of adult relationships. I would argue that attachment theory provides researchers with a practical framework for understanding human behavior and relationships. There is an ample amount of research that supports this theory and has shown criterion related validity for outcomes such as relationship satisfaction, and self esteem (Mikulincer & Shaver, 2007). In addition, Attachment Theory does recognize the contribution of biological and environmental factors that play into shaping attachment patterns. It

is because of human biology and evolutionary factors that we understand that infants are born with the inclination to create an attachment to their caregiver in order to survive.

Many critics of Attachment theory have also argued that Attachment theory overemphasizes the importance of infancy and early childhood experiences and does not acknowledge how later experiences can also affect attachment patterns. I would argue that attachment theory does emphasize the importance of early childhood experiences because those experiences provide us with the fundamental information about an individual's attachment pattern. However, Attachment Theory also acknowledges the impact of relationships throughout an individual's lifespan. (Shaver et al., 2016) It is justified for the theory to highlight the experiences in early childhood since these early experiences are what lay the foundation for the attachment patterns.

Adult Attachment in Relationships

While Ainsworth, Bowlby and other early researchers of attachment theory primarily tested on the relationship between infants and their mother, more recent studies focus on attachment between adults in their romantic relationships. It is important to note that Bowlby did suggest that an infant's attachment style would affect their future intimate relationships.

Therefore, the key components of attachment theory are the foundation for adult attachment as well. Many later researchers were interested in understanding adult attachment and the relationship between one's attachment system and psychological constructs such as personality traits. Furthermore, as an adult their attachment style affects their close intimate relationships.

In the late 20th century, researchers began creating instruments in order to gauge attachment styles for adults. In 1987, psychologists Cindy Hazan and Phillip R. Shaver were

interested in exploring the possibility that romantic love is an attachment process. Prior to this study there was little to no longitudinal empirical research that pursued Bowlby's theory of the continuity of attachment style in an individual's life. Thus, they devised a self report questionnaire (the "love quiz") that classified adults into Ainsworth's three different attachment styles (Insecure-Resistant, Insecure-Avoidant and Secure). Hazan and Shaver did this by translating the descriptions that Ainsworth had for each of the attachment styles in a manner that fits the context of romantic love. This questionnaire was published in a local newspaper, there were 1,200 replies within the first week of the questionnaire being published and analyzed. Results indicated that there is continuity between an individual's attachment style from when they were a child and to when they were adult's in romantic relationships (Hazan & Shaver, 1987). Similarly to how infants with the three different attachment styles experience relationships with caretakers differently, adult individuals experience their romantic relationships differently compared to one another.

In 1998, Kelly Brennan, Catherine Clark and Phillip Shaver created the Experience in Close Relationship (ECR) questionnaire that classified adults into four attachment styles. This revised version of the "love quiz" includes the disorganized/disoriented attachment style which was not included in the previous questionnaire. This is because Ainsworth's Strange Situation experiment only categorized infants into three different attachment styles. These questionnaires are based on the descriptions of each attachment style in the strange situation test. This questionnaire classifies attachment styles by asking the participants questions about their feelings towards their partner (or potential partners). The ECR results are based on two main factors which are attachment avoidance and attachment anxiety (see figure 3). Attachment avoidance can be defined as the level to which you are uncomfortable with closeness and intimacy.

Attachment anxiety can be defined as the level of fear or apprehension of being abandoned or left by those you are in intimate relationships with.

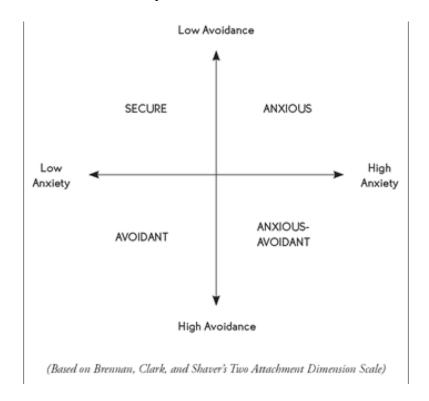


Figure 3: Graph of the two axis that determine attachment style

While researchers were creating questionnaires in order to assess adult attachment styles, other researchers used said questionnaires to find the relationship between one's attachment style and their feelings toward their intimate relationships. There are two examples of studies that studied these relationships: In 1990, Jeffry A. Simpson, a professor of psychology at the University of Minnesota, investigated the impact of the attachment styles on participants' romantic relationships. Simpson did this by recruiting 144 men and 144 women of which 92% reported they were in a romantic relationship for over one month. The procedure consisted of participants reporting to a room in groups of 5 to 15. They were asked to complete a survey that asked them about their romantic relationship. After this, participants were handed a survey with number-coded packets so that each group could be identified later for data analysis. This survey

consisted of 13 statements from Hazan & Shaver's self report questionnaire in which participants were asked to rate how much they agreed or disagreed with each statement. This is how their attachment style was assigned. After completing this portion of the survey participants answered questions about interdependence, commitment, trust, satisfaction and frequency of emotion in their romantic relationship. Participants with the secure attachment style rated their relationships with higher levels of satisfaction, trust and commitment compared to individuals with the insecure attachments (anxious and avoidant). Individuals with insecure attachments rated higher levels of negative emotions than positive emotions. These findings indicate that individuals with secure attachments tend to feel more positively toward their partners and their intimate relationships compared to individuals with insecure or avoidant attachments.

While Simpson's study assesses frequency of positive and negative emotions, levels of trust, and level of commitment, Fletcher and Hammond focus on relationship satisfaction and fewer couples. In 1990, social psychologists Garth Fletcher and Jean R. Hammond studied 51 intimate adult heterosexual relationships for four months in order to find the connection between attachment style and relationship satisfaction. They did this by using Ainsworth's three attachment styles (secure, anxious and avoidant) and their ratings of relationship satisfaction as well as relationship descriptions. Participants were given 30 minutes to complete a description of their current romantic relationship. Multiple questionnaires were given to the participants to assess their attachment style, attachment histories, relationship happiness and love attitudes. In this study, they found that individuals with insecure attachments (anxious and avoidant) reported lower levels of satisfaction in their relationship as well as less positive descriptions of the relationship compared to individuals with secure attachments who rated their relationship satisfaction as higher and with more positive descriptions of their relationship. These findings

suggest that individuals with secure attachment styles are more likely to feel satisfied within their close intimate relationships. These findings also suggest that individuals with insecure attachments may experience more feelings of dissatisfaction in their close intimate relationships compared to individuals with secure attachments.

These studies provide insight on one of the many ways adult attachment can be measured as well as how attachment styles can be related to one's feelings toward their intimate relationships. Through the Experience Closer Relationship questionnaire researchers are able to get a better perspective on what adults can potentially feel when it comes to intimacy and closeness. The statements in the questionnaire allow researchers to know what may go through an individual's mind and see how it will affect their relationships. Examples of these statements are: "I prefer not to show others how I feel deep down" and "I often worry that others don't care about me as much as I care about them." This methodology is very different from how infant attachment styles are measured because infants are unable to self-report, we can only assume that the manner in which an infant reacts to something is how they feel towards said thing.

The studies by Simpson, Fletcher and Hammond provide possible methodology that can be used to understand the relationship between attachment styles and feeling towards relationships. These studies leave me wondering what can be done to change the levels of satisfaction or commitment a person with an insecure attachment is currently experiencing. The research has shown that individuals with secure attachments tend to feel more positively and be more satisfied in their relationships, but what can be done by individuals with insecure attachments to increase these ratings? More specifically, what can be done in order to increase an individual's sense of security in a relationship? In addition to this, can an individual with an insecure attachment style have a secure attachment to someone? Can an individual with a secure

attachment style experience an insecure attachment to someone else? Researchers have found that security priming is a method of priming that can be used to increase an individual's feeling of security in a relationship.

Attachment Security Priming

Attachment security priming is an experimental technique used to increase an individual's sense of security in relationships. To feel secure in a relationship is to feel love, comfort and safety in said relationship. Researchers have found that attachment security priming can be effective in increasing one's sense of security in a relationship. There are many different security priming experiments that have been conducted in order to test this, some of which used subliminal interventions and supraliminal interventions. One study involved participants looking at security-related words (Rowe & Carnelley, 2003). Another study exposed participants to pictures representing attachment security such as a mother hugging a child (Mikulincer et al., 2001). Another study has participants read a vignette describing an interpersonal script of attachment security (Mikulincer et al., 2001)

Researchers Rowe and Carnelly investigated whether repeated security priming changes the way in which participants view themselves, their relationships and attachment (2003, 2007). Participants took part in 5 experimental sessions. In Time 1, participants completed baseline measures answering questions about their feelings toward their relationship and themselves. Participants were primed during times two, three, and four (with either control prime or experimental prime) and were asked how they felt in that moment. During time five (two days later) participants completed dependent measures from Time 1 with no priming. Researchers used the ECR questionnaire to assess adult attachment. They adapted the ECR to focus on close relationships rather than romantic ones. Positive and negative relationship expectations were

assessed using the 12 items used in their 2003 study (Rowe & Carnelly, 2003). During times 1 and 5 participants were asked how they generally felt in the relationship, while 2-4 assessed how they felt in the current moment.

During priming in time 1 participants indicated the names of 10 people they considered close to them. Then researchers provided the participants with descriptions of the four attachment styles and asked participants to indicate which relationship description described how they felt in each relationship. Participants rated each relationship from 1 (not representative) to 5 (very representative) to indicate how representative the description was for each relationship. Researchers primed security in two ways. For Prime A, they selected two significant relationships with whom the participant felt secure (they determined this based on participants rating the description as very representative of their relationship). At Times 2 and 4, participants were asked to write about one of these selected individuals for 10 minutes.

For Prime B, they used Mikulincer and Shaver's (2001) secure base priming method. At Time 3 Participants read as follows:

Imagine yourself in a problematic situation that you cannot solve on your own. Imagine that you are surrounded by people who are sensitive and responsive to your distress, want to help you only because they love you, and set aside other activities in order to assist you. Please write about an experience you have had that is similar to the one described in the scenario for 10 minutes.

Participants in the control prime were asked to write about coursework or their route to their university for 10 minutes. Researchers found that participants primed with a secure-style prime showed a significant increase in their views of self worth and improved expectations of relationships than those primed with an insecure or neutral prime.

Knowing this information has led me to wonder how adults with insecure attachments cultivate healthy and secure relationships? Can individuals with an insecure attachment style

have secure relationships with others? Can a short-term priming intervention make people feel more securely attached in their relationships? (Hypothesis 1) I predict that participants that experience the security priming intervention will score overall lower on anxiety and avoidance at time 2 than individuals who do not experience the security priming intervention. (Hypothesis 2) There will be no relationship between attachment style and security level.

Methods

Participants

For this study, 40 (ages 18-23 Mean of 19.8, Median of 19.5, and sd=1.39) undergraduate participants were recruited from Bard College. Posters with QR codes were posted on campus. The posters (See Appendix A) invited Bard students to participate in a study about relationships. If a student was interested, they would scan the QR code to schedule an appointment time in order to participate in the study. Participants were compensated \$5 cash for their participation.

Of the 40 participants, 9 (22.5%) were Male, 28 (70%) were Female, and 3 (7.5%) were Nonbinary. 35 (87.5%) of the participants were People of Color, 4 (10%) participants reported not identifying as a Person of Color, and 1 (2.5%)participant reported not being sure whether or not they are a Person of Color. 17 (42.5%) participants reported being in a romantic relationship. 23 participants (57.5%) reported not being in a romantic relationship.

Measures

Participants took the Experiences in Close Relationships-Relationship Structures (ECR-RS) questionnaire (See Appendix B). This questionnaire provided the researcher with the participant's attachment style. Allowing me to later measure whether individuals with insecure

attachments had an increase in their sense of security. The ECR-RS uses the same nine items (statements) to assess attachment avoidance and security targeting four relationships (Mother figure, Father figure, Best Friend, and Romantic Partner). In this survey, participants were presented with statements about their feelings toward intimacy and close relationships. At the top of each page participants were asked to "Please answer the following questions about (Mother figure, Father figure, Best Friend or Romantic Partner)" and below would be the statements. Participants rated (on a scale of 1- strongly disagree to 7-strongly agree) how much they agree or relate to the statement. Examples of statements are "It helps to turn to this person in times of need" and "I do not often worry about being abandoned." Below each statement was a slider for participants to select the number that corresponded with their response (See Appendix B).

Participants also completed the Experiences in Close Relationships Revised (ECR-R) questionnaire (See Appendix C and D). For this study, this questionnaire was used to assess participants' security level in a relationship. This questionnaire provides insight on how comfortable or uncomfortable people are being close to others as well as how secure people are depending on others. The ECR-R has 36 questions which were split in half for participants to take the first half before priming and after priming. I added the items "they make me feel safe" and "they make me feel loved" to the questionnaire.

Procedure

First participants completed the informed consent form. Once participants agree to participate, they will complete the Experiences in Close Relationships Relationship Structures questionnaire (ECR-RS) (Fraley et al., 2006). After completing the ECR-RS, participants were asked to think of a significant relationship in their life and take the first half of another

questionnaire, the Experiences in Close Relationships Revised (ECR-R) (Fraley et al., 2006) questionnaire. Similarly to the ECR-RS participants rated how much they agree or disagree with statements about their feeling toward a specific relationship. After completing the first half of the ECR-R, participants called me into the room and I presented them with all the prompts. The way in which I presented the prompts was by first shuffling them, then laying them out and allowing the participant to choose.

In order for the participants and I to be blind to which conditions they would be placed in prior to the study I printed out sheets of paper with the experimental prime prompt and the neutral prime prompt. I cut up the slips of paper to separate each prompt and individually numbered them from one to thirty at the top right of the paper. I then folded all the slips in half so that no one can see what the prompt or the number is unless it is opened. All of the experimental prompts had an even number and the neutral group had odd numbers. In order for me to differentiate the two groups, prior to completing the prompt, participants were asked to type the number they had on their paper into the space provided. Since the participants were alone in the room when entering the number I never saw who was placed in which group. Participants picked a slip of paper that stated one of the following primes:

Experimental

"Thinking of the same relationship, reflect on a time that this person and relationship made you feel loved, safe and supported. Write about this for 8 minutes."

Neutral/ Control

"Reflect on your week. Write about the things that you were able to get done, or the things that you wish you had gotten done. Write about this for 8 minutes."

Participants were told that they had eight minutes to write what the prompt asked. They were provided with pencils, pens, and paper. I waited until the participant told me they were ready to start writing before I began the 8 minute timer and left the room. After completing the prime, participants completed the second half of the ECR-R questionnaire. After the completion of the questionnaire, the study ended. Participants were told they could throw away or keep their writing. They were then debriefed, compensated, and thanked for their participation in the study.

In order to calculate an attachment style using the ECR-RS there needed to be a way of differentiating which score means what. The version of the ECR-RS and the ECR-R that I used did not include a cut off score. I contacted the creator of these versions and he stated that "There are no cut-offs; we treat the scores in a continuous fashion." (Fraley, 2023) Thus, I decided that once a participant scored over a "4" in anxiety or avoidance, they would be considered "high" in the respective category. If a participant scored lower than a "4" they would be considered "low" in the respective category. If participants scored below a 4 in anxiety and over a 4 in avoidance, this participant's attachment style would be considered "AVOIDANT" If a participant scores above a 4 on anxiety and below a 4 on avoidance, they'd be assigned as "ANXIOUS" If a participant scores below a 4 on both anxiety and avoidance they would be assessed as "SECURE" If a participant scores above a 4 on both anxiety and avoidance (close score) they would be assessed as "FEARFUL"

Results

A repeated measures T-Test showed that for the entire group (n=40) people had lower anxiety scores at Time 2 (ECR-R Part 2) than in Time 1 (ECR-R Part 1), t(39)=3.15, p=.003. As well as lower avoidance scores in Time 2 than in Time 1 t(39)=2.04, p=.048. When comparing

the control group with the experimental group scores, an Independent Sample t-test showed that control and experimental groups did not differ at Time on either avoidance t(38)=-0.141,p=0.889 or anxiety t(38)=0.889, p=.379 scores, and also did not differ from each other at Time 2 for either avoidance t(38)=.723, p=.474 or anxiety t(38)=1.060, p=.296. (See Figure 4)

CONTROL VS EXPERIMENTAL

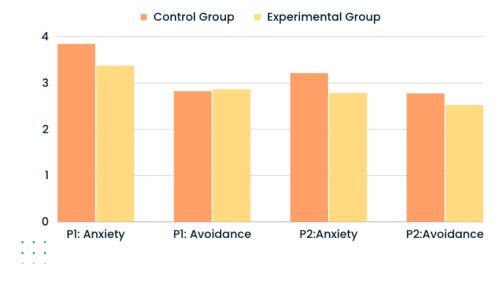


Figure 4: Comparison of Mean Anxiety and Avoidance Scores at Time 1 and Time 2

A One-Way Anova test showed that when looking at the participant's attachment style toward their parents (Insecure or Secure) avoidance scores were statistically different at both Time 1 F(1, 29.6)=6.97, p=.013 and Time 2 F(1,31.3)=11.83, p=.002. However, the two groups' anxiety scores during Time 1 F(1,27.4)=1.15, p=0.292 and Time 2 F(1,30.0)=2.61, p=0.116 were not statically different from one another. A One-Way Anova test showed that when looking at the participant's attachment style toward their Best Friend/Romantic Partner (Insecure or Secure) both anxiety and avoidance scores were statistically insignificant at both Time 1 (anxiety: F(1,2.16)=0.606, p=0.512)(avoidance: F(1,3.25)=.187, p=0.693) and Time 2 (anxiety: F(1,2.43)=4.877, p=0.135) (avoidance: F(1,3.28)=1.922, p=0.252) Lastly, a

One-Way Anova test showed that when looking at the participants Global attachment style (average of Mother, Father, Best Friend and Romantic Partner avoidance score and anxiety score) there is no statistically significant difference between anxiety and avoidance scores in Time 1($anxiety p=.512 \ avoidance \ p=.693$) or Time 2 ($anxiety \ p=.135 \ avoidance \ p=.252$).

A 2x2 ANOVA was performed to test for possible interactions between parent attachment style (insecure vs secure) and group assignment (control vs experimental) in terms of P2 anxiety F(1, 36) = 2.577, p = 0.117) and P2 avoidance F(1, 36) = 1.763, p = 0.193). Neither interaction was significant. Another 2x2 ANOVA was performed to test for possible interactions between best friend attachment style (insecure vs secure) and group assignment (control vs experimental) in terms of P2 anxiety F(1, 36) = 1.08, p = 0.306) and P2 avoidance F(1, 36) = .109, p = 0..744. Again, neither interaction was significant.

Discussion

The first hypothesis predicted that participants that experience the security priming intervention will score overall more securely attached than individuals who do not experience the security priming intervention. The data does not support this hypothesis as there are no significant differences between the anxiety and avoidance scores from Time 1 to Time 2 in either group.

Even though there was no significant difference between the experimental group avoidance/anxiety scores and the control group avoidance/anxiety scores, Results showed that overall (n=40), avoidance and anxiety scores went down from Time 1 to Time 2. Although half the participants did not receive the experimental prime, all participants had to think about how they feel towards the relationships they have in their lives. It is possible that thinking about one's

relationships for at least twenty minutes could have resulted in participants, overall, feeling less insecure toward their relationships.

The second hypothesis predicted that there would be no relationship between attachment style and security level. Due to lack of variation in attachment styles, I was unable to run tests for all attachment styles. Therefore, I grouped the individuals who scored as an insecure attachment together and put them into the "Insecure Attachment Style" category and those with secure attachments remained in the "Secure Attachment Style" category. Of the 40 participants, 14 (35%) have an insecure attachment style toward their parents, but have secure attachment styles with their best friends and romantic partners. 3 (7.5%) participants have insecure attachments to their parents as well as an insecure attachment to their best friend and romantic partner. 23 (57.5%) participants have a secure attachment with their parents and with their best friend and romantic partner. This data supports the idea that one does not have to have a secure attachment style in order to have a secure attachment to someone. (See Figures 5 and 6)

Secure to Insecure 0% Secure to Secure to Insecure 1/5.5% Insecure to Insecure 1/5.5% Insecure to Insecure 2/5.5% Insecure to Secure 2/5.5% Insecure to Insecure 2/5.5%

Figure 5: Pie Chart Comparing Parent Attachment Style to Best Friend and Romantic Partner Attachment Style

NUMBER OF PEOPLE INSECURE VS SECURE PER RELATIONSHIP



Figure 6: Bar Graph showing How many people have an Insecure vs Secure attachment with their parents and friends / romantic partners

It is important to note that in order to calculate the global attachment style I took the average of each individual's anxiety and avoidance score per relationship/section (mother, father, best friend, and romantic relationship) and divided them by four. When calculating the global attachment styles, the majority of the participants were coded as having a "Secure Attachment Style." I didn't think this was accurate so I investigated more by calculating attachment styles solely based on the parent avoidance and anxiety score. I did this by adding the mother and father anxiety score then dividing it by two, I repeated this process to calculate the avoidance score. Based on these scores, I calculated a parental attachment style which had much more variety in attachment style than the global attachment styles. Many participants have insecure attachments to their parents. This was not reflected in the global attachment style because the majority of participants scored very low on anxiety and avoidance towards their best friend and romantic relationship. Therefore the secure scores for their best friend and romantic relationship increased the security in the global attachment style.

Although I used instruments that held each attachment relationship (mother, father, best friend and romantic significant other) to the same level of importance, there is research that states that there is a hierarchy when it comes to these relationships. According to Hazan and Shaver (1994): "Multiple attachments are hypothesized to be hierarchically arranged. At the top of this hierarchy is the primary attachment figure. For good or ill, this figure is usually the infant's mother." Ainsworth and Bowlby's work was centered around an infant's relationship to their mother; it makes sense for the mother to be at the top of the hierarchy. For this reason I found the parent attachment style to be the most accurate attachment style that I have calculated. In addition to this, it is the section that included the most variety in attachment styles. It aligns with research that states that over fifty percent of the US population has a secure attachment style (Sechi, 2020).

Most participants (36 out of 40) decreased in avoidance or anxiety score after writing for eight minutes (both control and experimental group). More specifically, 19 out of 20 participants in the experimental group had a decrease in either anxiety or avoidance score after completing the 8 minutes of writing. There were four (3 control, 1 experimental) participants who scored higher on anxiety and avoidance after the prime. In addition, 16 out of the 40 participants scored lower avoidance and anxiety scores after writing about their prompt for eight minutes.

Limitations

There were several limitations in the present study. One example is, I used the ECR-RS (Fraley et al., 2006) in order to calculate my participant's global attachment styles. However, I made the mistake of not including statement 8 "I am afraid this person may abandon me" in the questionnaire, therefore my instrument was not exactly the same as the original which could lead to data that is less valid. Although this statement is not the only "anxious" statement in the

questionnaire, the point of including this question is to know if an individual fears being abandoned which is a key characteristic for the anxious attachment. I am not sure what effect not including this statement had on my results, however, because I understand how much fear of abandonment plays into an attachment style, specifically the anxious attachment, it is possible that this statement is the most direct way in knowing whether a person has an anxious attachment style or attachment to someone.

In addition to this, I used the 2006 version of the questionnaire that did not include a section asking participants about their feelings toward close relationships in general. The version of the ECR-RS that included the section about feelings toward close relationships was created in 2014 which I did not know about until after data collection was completed. This section would've been beneficial to include because it explicitly asks participants about how they feel toward close relationships in general. This gives us an even clearer idea of their attachment style than just assessing participant's attachment style through questions about their relatives and close relationships. I believe this way is even more direct therefore can really provide a researcher with the context needed to assess the attachment style.

Another limitation is the amount of privacy I provided my participants during the study. I provided my participants with complete privacy (I exited the room the moment they began to write) during their time writing. Therefore, I do not know if there were some participants who did not take the entire eight minutes to write about their prompt. Eight minutes can feel like a lot of time, especially when doing something you aren't used to like writing about a person or your week. It is possible for participants to have finished writing prior to the 8 minutes and or to have gotten bored and stopped writing. One participant made it clear that they did not use the entire eight minutes. However, no other participant shared this information with me. It is possible that

participants who were in the experimental group and wrote for the entire eight minutes felt the effects of priming more or for longer than participants in the experimental group who did not take the entire eight minutes. Unfortunately, there is no way of knowing. Something that could have been done differently is I could have been in the room to make sure the participants wrote the whole time. For their privacy, I could have sat far away so I wouldn't be close to their computer screen or paper.

In addition to this, there is one participant who got a couple more seconds of time to write because I accidentally paused the timer during their priming/writing time. Due to me not realizing when I paused the timer, I was unsure when I had to end the timer. Therefore, it is very likely that this participant got at least thirty more seconds of writing than the rest of the participants.

Another limitation in this study is the manner in which participants had to select their responses. As mentioned previously, participants used sliders to select their answer choices. The default answer choice was "Strongly Disagree" at the far left of the scale. One participant informed me that they did not click on strongly disagree in order to activate or submit that response (because they assumed the resting position would record their intended answer), so there are three questions for which no data were recorded but their intended answer is "Strongly Disagree." If a person's answer to one of the statements was "strongly disagree", the slider was already there and it makes sense for them to think that they did not have to move it.

This made me wonder if other participants made the same mistake. I also wondered if that is why there are a number of responses that were left blank (104 ECR-RS, 143 ECR-R). This negatively affects my data because I do not know whether people meant to skip the question or if they did not know they had to click on "strongly disagree" in order to activate/submit the

response. This definitely could have affected the calculations for which attachment style they were assigned leading to less accurate data. Something that I could have done differently is making the answer choices multiple choice or making the default response the neutral option "Neither Agree or Disagree."

As mentioned previously, I had to make up my own cut offs for the ECR-RS in order to calculate attachment styles. This is because the version of the ECR-RS and the ECR-R that I used did not include a cut off. There were participants who scored close to a 4 (ex: 3.71 on anxiety), but not exactly a "4" and so they were still coded as secure because the number is less than 4 which is considered a secure score. This is a limitation because there is no research to support the way I decided to assess these attachment styles, therefore it is possible that the attachment styles I assigned to people are inaccurate.

Another limitation is my sample population. Most of the participants that were recruited were people of color (n=35). In addition to this, only nine participants were male. Therefore, this data could not be generalized to the greater population or to the male population. It is important to note that although this data is not representative of the population, it does highlight the experiences of underrepresented and marginalized groups like women, more specifically, women of color.

Future Directions

This study used a short term priming technique to see if it could increase participant's security level in a relationship. Participants completed the study within 20 minutes on one day. In a future study, It would be interesting to see if the same technique would work over a long period of time. Participants can take the ECR-R once then write for eight minutes everyday for a month, three months, or six months then take the ECR-R again to see if there would be a difference in

relationship security. Another thing that could be done in the current study and done in future studies is ask participants to come in a week later, a month later, and three months later to see how long the effects of security priming happened. This way we know how long the effects of security priming last.

The current study focused on participants in their late teens/early twenties, most of the participants being nineteen years old. In a future study, It would be interesting to look into older populations, more specifically people ages 25 and 80. I am curious about how much age plays a factor in how we think about our relationships, especially as one gets older. I wonder what the impact of the brain being fully developed has on how people view their relationships. As well as if the happiness U Curve could have an effect on how older people view their relationships. Would elderly people rate lower on avoidance and anxiety? Future studies can test this as well as how one's attachment style can change throughout the course of their life.

Conclusion

In conclusion, the aim of this study was to know whether a short term priming intervention can increase one's security in a relationship. This smaller question was used to answer a much bigger question which is, can an individual with an insecure attachment style experience a secure attachment to someone? Even though there is no statistical difference when comparing the scores of the experimental and control groups, it is clear that one's attachment style to their parents does not determine what kind of relationships one will have with their friends or romantic partners. It is possible for an individual to have an insecure attachment style toward their parents and still experience a secure attachment with others.

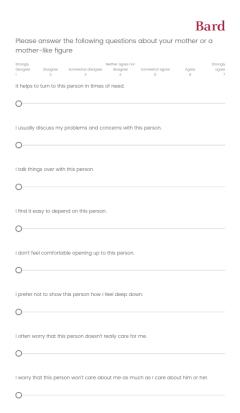
Attachment Theory has provided us with ample information about how human beings navigate relationships. It has taught us how our early childhood experiences influence our lives and how these experiences shape our beliefs and expectations toward the relationships we hold closest to us. Understanding attachment theory, more specifically your own attachment style, can help you understand your thinking and behavioral patterns which can help you improve your relationships with others. It is possible that upon learning about one's own attachment style they may become discouraged learning they have an insecure attachment style. This is plausible due to the overwhelming amount of research stating how difficult it can be for individuals with an insecure attachment style to feel satisfied and secure in their relationships. I want this study to provide a different and hopeful perspective. An insecure attachment style is not a death sentence for a healthy relationship. With self awareness, self reflection and personal growth, you can in fact have it all.

Appendix

Appendix A: Flier



Appendix B: ECR-RS



Appendix C: ECR-R Part 1/Time 1

	Bard		
Think about a significant relationship in your life (it to be romantic), Please answer the following quest relationship in mind.	does not need	I rarely worny about them leaving me.	☐ Not Applicable
Strongly Neither Agree or disagree Disagree Somewhat disagree Disagree Somewhat Agree 1 2 3 4 5	Strongly Agree Agree 6 7	I prefer not to show them how I feel deep down.	☐ Not Applicable
ı'm afraid that I will lose their love.	☐ Not Applicable	0	
0		I feel comfortable sharing my private thoughts and feelings with them.	□ Not Applicable
often worry that they will not want to stay with me.	☐ Not Applicable	0	
0		I find it difficult to allow myself to depend on them.	☐ Not Applicable
often worry that they don't really love me.	☐ Not Applicable	0	
0		I am very comfortable being close to them.	☐ Not Applicable
I worry that they won't care about me as much as I care about then	n. Not Applicable	0	
0		I don't feel comfortable opening up to them.	Not Applicable
I often wish that their feelings for me were as strong as my feelings for them	□ Not Applicable	I prefer not to be too close to them.	☐ Not Applicable
I worry a lot about my relationships.	□ Not Applicable	I get uncomfortable when they want to be very close.	☐ Not Applicable
O When my partner is out of sight, I worry that he or she might becom interested in someone else.	e Not	I find it relatively easy to get close to them.	☐ Not Applicable
0		They really understand me and my needs.	☐ Not Applicable
When I show my feelings for them, I'm afraid they will not feel the same about me.	□ Not Applicable	0	
0		They make me feel safe.	Not Applicable
		0	

Appendix D: ECR-R Part 2/Time 2

Bard

	Bard		
Please answer the following questions about the re thought about.	lationship you		
zrangly Neither agree nor Sizagree Disagree Samewhat disagree disagree Samewhat agree 2 3 4 5	Agree agree 6 7		
hey make me doubt myself.	☐ Not Applicable		
do not often worry about being abandoned.	☐ Not Applicable		
find that they don't want to get as close as I would like.	☐ Not Applicable		
ornetimes they change their feelings about me for no apparent eason.	☐ Not Applicable	I tell them just about everything.	☐ Not Appl
		0	
fy desire to be very close sometimes scares people away.	☐ Not Applicable	I talk things over with them.	□ Not App
		0	
m afraid that once they get to know me, they won't like who I really m.	☐ Not Applicable	I am nervous when they get too close to me.	□ Not App
		0	
: makes me mad that I don't get the affection and support I need rom them.	☐ Not Applicable	I feel comfortable depending on them.	□ Not Appl
)		0	
worry that I won't measure up to other people.	☐ Not Applicable	I find it easy to depend on them.	☐ Not App
		0	
hey only seem to notice me when i'm angry.	☐ Not Applicable	It's easy for me to be affectionate with them.	□ Not App
		0	
's not difficult for me to get close to them.	□ Not Applicable	They really understand me and my needs.	□ Not App
		0	
usually discuss my problems and concerns with them.	□ Not Applicable	They make me feel loved.	☐ Not App
)		O	— пот арр
t helps to turn to them in times of need.	☐ Not Applicable		
t helps to turn to them in times of need.			

Appendix E: IRB APPROVAL

Bard College

Institutional Review Board

Date: 12/08/2022

To: Jessalyn Henriquez-Planco Cc: Justin Dainer-Best; Nazir Nazari From: Ziad M. Abu-Rish, IRB Chair Re: Thoughts on Relationships

DECISION: APPROVAL

Dear Jessalyn Henriquez-Planco:

The Bard Institutional Review Board reviewed your revised proposal and has approved it through October 31, 2023. Your case number is 2022DEC8-HEN.

Please notify the IRB if your methodology changes or unexpected events arise.

We wish you the best of luck with your research.

Sincerely,

Ziad M. Abu-Rish, Ph.D.

IRB Chair

Associate Professor of Human Rights and Middle Eastern Studies

Bard College

zaburish@bard.edu

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