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Effects of Imagined Financial Difficulties on State Adult Attachment Systems

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EFFECTS OF IMAGINED FINANCIAL DIFFICULTIES ON STATE ADULT ATTACHMENT SYSTEMS

by

LOREN JONES

(Under the Direction of Amy Hackney)

ABSTRACT

According to Bowlby's definition of attachment theory, insecure attachment systems negatively regulate individuals' behaviors, thoughts, and feelings (Mikulincer & Shaver, 2007). As individuals age, negative views of others and the self can grow, inevitably hindering relationships with others and self-esteem. Empirical research suggests a strong positive relationship between low socioeconomic status (SES) and developing an insecure attachment style among children (Sherry et al., 2013; van IJzendoorn & Bakermans-Kranenburg, 2010). With many similarities between child and adult attachment models, there is a gap in the literature examining the impact of lower SES on adult attachments. Although socioeconomic status's effects on general health were previously researched in various contexts involving attachment systems, there is a gap in studies specifically looking at the impact of lower socioeconomic status on adult attachment. The current study randomly assigned 52 undergraduate participants (62% women, 55% white, and 42% black/bi-racial) to imagine one of two operationalizations of imagined financial difficulties, lower socioeconomic status or unexpected job loss, or a control condition of imagined job security. Participants then completed assessments of state attachment levels of security, anxiety, and avoidance. Results showed a statistically significant increase in state levels of attachment avoidance (p = .02, 95% *CI*: .163, 2.11) in addition to a statistically significant decrease in state levels of secure attachment (p = .02, 95% *CI*: -1.99, -.132) when participants imagined a job loss

compared to the control group. The evidence implies that state avoidance increases after an unexpected loss of employment and could result in an individual experiencing negative emotional and behavioral changes toward loved ones.

INDEX WORDS: Attachment theory, Adulthood, Low socioeconomic status, Insecure attachment styles, Subjective socioeconomic status, State adult attachment

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CHAPTER 1
INTRODUCTION

Imagine the stress and fear experienced by someone whose house gets broken into; there are several different ways that people may psychologically respond to such an external stressor. For example, some people may desire physical comfort and reassurance of safety and, once received, feel secure in knowing that this stressful event will pass. Others may want physical comfort and reassurance of security, but even if accepted, they may long for increased comfort and continue to feel threatened. Others may distance themselves from their emotions and avoid attempts of comfort from others. These differences in reactions to threats of safety may relate to the individual's levels of attachment security, anxiety, or avoidance. Securely attached people find it easy to get close to others and are comfortable giving and receiving support from others. People who are insecurely attached, specifically anxiously attached, find others are reluctant to get as close as they desire and often feel that their attempts to get close to others are rejected. Avoidantly attached people feel uncomfortable being close to and depending on others in times of need (Mikulincer & Shaver, 2007).

Between 35% to 40% of the adult population in the United States identify as anxiously or avoidantly attached (Hazan & Shaver, 2004; Simpson & Rholes, 2012). Countries in East Asia and Africa additionally have an "over-representation" (van IJzendoorn & Barkermans, 2010) of insecure attachment systems, showing how crucial identifying psychological and situational factors could be for research on adult insecure attachment systems. The literature on developing insecure attachment systems in children has consistently demonstrated that children raised in low socioeconomic status environments are more likely to develop an insecure attachment system (Odom et al., 2012; Sherry et al., 2013). Compared to the extensive literature documenting the relationship between poverty and the development of an insecure attachment system in childhood,

research assessing the relation between adult attachment and socioeconomic status is sparse, with adult research typically limited to examining how socioeconomic status relates to parenting quality. Poverty, the lack of resources required for basic needs, often creates adverse effects on parental sensitivity, meaning warmth and responsiveness often suffer, presenting a significant risk of developing an insecure attachment (Sherry et al., 2013).

Importantly, Fraley et al. (2020) recently found that major life events, such as involuntary job loss, can lead to an enduring increase in adult attachment anxiety. Additionally, Fraley et al. (2020) identified the need for further study of causal relationships between involuntary job loss and adult attachment anxiety, as their longitudinal naturalistic study could not observe a direct causal relation between job loss and increases in attachment anxiety. Due to the limitations in the current literature in understanding the relationship between financial difficulties (e.g., low socioeconomic status; involuntary job loss) and adult attachment systems, the present study aimed to assess the direct causal impact of imagining different operationalizations of financial problems on levels of state adult attachment dimensions.

Attachment Theory

Attachment theory, initially posed by Bowlby (1984), is the evolutionary idea of a person's biological need for support from a close other in times of distress. Bowlby was primarily known as a psychoanalyst before theorizing attachment theory. The idea of attachment came from many psychological perspectives, such as behaviorist learning theories and psychoanalytical theories of secure bases through emotional bonds for self-preservation (Silverman, 1991). This close other, an attachment figure, allows a person to secure basic needs and increases the likelihood of survival (Mikulincer & Shaver, 2007; Sherry et al., 2013). While some basic needs may include water, food, or shelter, these needs can also apply to emotional support, such as physical comfort or

reassurance, depending on the context of the distressing situation (Mikulincer & Shaver, 2007; Sherry et al., 2013). Another form of support is the mental representation of an attachment figure; for example, if one fears the response of their attachment figure in times of distress, this can increase feelings of stress rather than provide comfort to the individual upon initial appraisal of the threatening situation (Mikulincer & Shaver, 2007). Some researchers believe attachment may also be related to reproductive strategies, where adults present attractive or dismissive behaviors as a form of mate selectivity (Park et al., 2010).

Although attachment research initially focused on the maternal bond, recognized attachment figures have broadened to other close caregivers such as father figures, siblings, friends, and romantic partners (Armsden & Greenberg, 1987; Fearon & Roisman, 2017; Mikulincer & Shaver, 2007; Sherry et al., 2013). Studies have shown attachment styles can also be figure specific, meaning an individual can have different attachments with different people, given the difference in interactional experiences (Fearon & Roisman, 2017; Mikulincer & Shaver, 2007; Sherry et al., 2013). Individuals' behaviors toward attachment figures can differ with each attachment relationship but tend to gravitate to those frequently shown with specific attachment systems.

Attachment behaviors can vary; however, the overarching goal of proximity-seeking strategies remains constant in the hopes of catching the attention of an attachment figure for protection, support, or to achieve closeness (Girme et al., 2021; Mikulincer & Shaver, 2007; Sherry et al., 2013). Specifically looking at infant attachment, for example, proximity-seeking behaviors might be crying to signal a need for food or comfort (Mikulincer & Shaver, 2007). A successful response from an attachment figure may include feeding or holding the child until they are soothed, helping to promote a secure attachment. If an attachment figure consistently fails to calm or

provide for the needs of the distressed child, this failure to respond may lead to mistrust in the child (Mikulincer & Shaver, 2007; Odom et al., 2012; Sherry et al., 2013). While attachment theory assumes every infant starts with a secure attachment, frequent negative relational experiences can decrease attachment security due to perceptions of rejection (Fraley et al., 2020). Over time, the child learns to be self-reliant or changes their strategies to prevent inconsistency in support. Adaptations, or attachment socialization, according to Fraley et al. (2020), essentially shape future assumptions or expectations of response behaviors from others in addition to self-perceptions, commonly referred to as internal working models (Hazan & Shaver, 1987; Mikulincer & Shaver, 2007). The working models for those with a secure attachment style are presumed to be a positive and trusting view of the self and others. Working models for insecure attachments often combine negative and positive perceptions (Hazan & Shaver, 2004; Mikulincer & Shaver, 2007).

Mary Ainsworth and Mary Main, who were students of Bowlby, defined dimensions of insecure attachment styles as anxious, avoidant, and disorganized; however, there is controversy over classifications of what a disorganized attachment entails (Fearon & Roisman, 2017; Mikulincer & Shaver, 2007). Given the mixed results of disorganized attachment studies, this study will not further explore this dimension. The remaining insecure attachment styles are also somewhat inconsistent with terminology (e.g., anxious-ambivalent, avoidant-dismissive, anxious-avoidant, and anxious-preoccupied styles). However, the theoretical working models remain the same in their structure and classifications. Working models of anxious attachment consist of negative views of the self but positive views of others. Avoidant models consist of positive views of the self and negative views of others, with the potential for negative views of both self and others in more extreme cases (Fearon & Roisman, 2017; Fraley et al., 2020; Mikulincer & Shaver, 2007). Lastly, having favorable views of the self and others, as represented by the attachment

security internal working model, suggests an individual who generally trusts others and willingly relies on them, in addition to the self, when needing conflict resolution (Mikulincer & Shaver, 2007).

One might develop a negative view of themselves if an attachment figure is inconsistent due to personal behavioral flaws (Mikulincer & Shaver, 2007). For example, an attachment figure may blame the individual in need for misinterpreting their support or shame them for needing help. Like negative views of the self, one might develop negative perceptions of others if an attachment figure is inconsistent due to neglect or absence (Mikulincer & Shaver, 2007). Attachment figures can encourage these opposing views (e.g., mistrust in the self versus mistrust in others) in substantially differing ways; attachment figures have their own attachment needs, introducing frequent opportunities to focus on being self-reliant rather than responding to the requests of others (Mikulincer & Shaver, 2007; Sherry et al., 2013). An attachment figure could struggle with mental illness, grief from a recent loss of a close other, or a conflict introducing constant stress. An attachment figure's struggles may not lead to dismissal; however, the figure's interpersonal distress could distract from potential proximity-seeking behaviors displayed by close others (Sherry et al., 2013). With distraction as cognitive interference, the attachment figure may also misunderstand what supportive responses adequately satisfy the presented needs (Mikulincer & Shaver, 2007; Sherry et al., 2013).

Consistent failure to adequately provide security creates a sense of insecurity, or mistrust, between the individual and that attachment figure (Aron et al., 1991; Mikulincer & Shaver, 2007; Odom et al., 2012; Sherry et al., 2013). Over time, dimensions of these insecurities serve as an automatic behavioral mechanism to adapt to and make up for needs the attachment figure could not provide (Girme et al., 2021; Mikulincer & Shaver, 2007; Odom et al., 2012). For instance, one

might develop an anxious attachment if their attachment figure is inconsistent in their supportive responses, resulting in an unfulfilled need for reassurance and fear of rejection (Mikulincer & Shaver, 2007; Sherry et al., 2013). Alternatively, one might develop an avoidant attachment if their attachment figure is frequently absent or dismissive of supportive needs resulting in an unfulfilled need to feel wanted and a fear of getting close to others (Mikulincer & Shaver, 2007; Sherry et al., 2013).

Secondary Attachment Strategies

With their automatic activation in times of distress, attachment systems motivate an individual to continue searching for security when the initial proximity-seeking behavior gets perceived as rejected or unsatisfied (Mikulincer & Shaver, 2007). To adapt attachment strategies, if the individual consistently perceives previous proximity-seeking attempts as unsuccessful, the insecure attachment system adopts secondary methods (Girme et al., 2021; Mikulincer & Shaver, 2007; Odom et al., 2012). Secondary strategies often attempt to self-regulate negative emotions; however, commonly used secondary strategies, such as hyperactivation or deactivation, can potentially be destructive responses to distressing situations (Girme et al., 2021; Mikulincer & Shaver, 2007; Vondra et al., 1999; West et al., 2022). For instance, those with an anxious attachment hyperactivate their reaction to distressing situations by intensifying their proximity-seeking behaviors or protesting, as they demand the figure to support the individual (Girme et al., 2021; Mikulincer & Shaver, 2007). On the other hand, avoidantly attached individuals deactivate their reaction to distressing situations by suppressing negative emotions or signs of vulnerability to turn off the attachment system (Girme et al., 2021; Mikulincer & Shaver, 2007). Deactivation processes can sometimes magnify the initial problem the individual faces, making things more

distressing for those with avoidant attachment as they face conflicts alone (Mikulincer & Shaver, 2007).

Romantic Attachment

Adult attachment systems frequently focus on romantic attachment behaviors due to the relevance of finding a partner for reproductive purposes in later life, in addition to a need for emotional intimacy. Attachment insecurity can lessen with time if an individual has alternative securely attached relationships. Working models of attachment systems can differ depending on the context of the relationship (Fraley et al., 2011 & 2020). For instance, people often have a different attachment system for their romantic partner than they would for their parents or siblings, given the difference in levels of intimacy. Levels of attachment security may act as an initial baseline for romantic attachments. Active systems with one attachment figure dynamic (e.g., parental or sibling relationships) likely have little impact on the security experienced in a romantic relationship dynamic.

Over time, experiences of relationships build or maintain working models and, if romantic attachments are consistently negative experiences, regardless of other secure non-romantic relationships, attachment insecurity dimensions can increase (Fraley et al., 2011). In a study on parenting behaviors' relation to attachment insecurity, partner dissatisfaction played a significant role in the frequency of stress experienced by low-income mothers (Vondra et al., 1999). Bowen and Gillath (2020) pointed out that adults with attachment insecurity often pick mates of opposing insecure attachment systems due to behavior correspondence with negative evaluations of what is self-deserved. For instance, pairings of those with attachment anxiety with someone with attachment avoidance were significantly common (Bowen & Gillath, 2020). McClure et al. (2012) suggest this may be due to the intention of secondary strategies hyperactivating or deactivating

system responses; in other words, hyperactivation acts as a reassurance of situational insecurities and frustrations whereas deactivation acts as resistance from dependency. Attachment avoidance often centers on the lack of trust in a partner's goodwill, leading to potential distancing from a partner for achieving closeness or showing vulnerability as an aversion to intimacy (Mikulincer et al., 2010). The higher the level of attachment insecurity, the fewer individuals rely on their primary proximity-seeking behaviors before switching to secondary strategies.

Socioeconomic Status (S.E.S.)

Socioeconomic status, sometimes referred to as a social class, is a method of classification when identifying social groups specifically in the context of material wealth and hierarchical social status (Kraus & Keltner, 2009; Kraus et al., 2009; Kraus et al., 2010; Piff et al., 2010; Stellar et al., 2012). Although mainly consisting of objective characteristics, there are subjective characteristics within the socioeconomic status, such as status within a community or how well-liked someone is (Anderson et al., 2012). While material wealth examples may include income, housing, food, or clothes, social status can also comprise an individual's level of education, community involvement, or employment status (Kraus & Keltner, 2009; Kraus et al., 2009; Navarro-Carrillo et al., 2020). Given the high validity of socioeconomic status when predicting levels of life satisfaction and overall well-being (Navarro-Carrillo et al., 2020), multiple vital factors make up socioeconomic measures, such as financial security or access to social support.

To be considered of higher socioeconomic status, individuals likely have ample access to resources such as money, educational opportunities, job opportunities, or influential social circles (Kraus et al., 2009; Kraus & Keltner, 2009). Individuals of higher status are often associated with having more access to resources and top-tier social ranking but tend to have lower ethical standards involved in decision-making, given that goals may be more self-serving (Gino & Pierce, 2009; Piff

et al., 2012). Higher class likely comes with a more heightened sense of control, consequently lessening the likelihood of attributing success to contextual explanations; in other words, higher socioeconomic individuals are more likely to attribute their success to their abilities (Kraus et al., 2009). Upper-class individuals are also less likely to experience adverse life events due to the abundance of resources available to absolve potential obstacles (Stellar et al., 2012).

Lower socioeconomic status individuals have financial instability, lower-level jobs, minimal education, and a lack of social opportunities (Piff et al., 2010). With a frequent threat to basic needs, people of low socioeconomic status are more likely to experience adverse life events, often requiring dependence on others (Stellar et al., 2012). Those of lower SES have better empathetic accuracy than those of a higher status, meaning individuals of low socioeconomic status individuals are more accurate at judging others' emotional responses in day-to-day interactions (Kraus et al., 2010). Empathetic accuracy is necessary for those of lower SES, given their frequent interactions with others and reliance on them for resources (Kraus et al., 2010). Resource scarcity can also introduce a lower sense of control to individuals of lower SES due to the continuous presentation of obstacles that introduce negative emotions and high levels of stress (Kraus et al., 2009; Stellar et al., 2014). Regardless of this scarcity, lower SES individuals often exhibit more generosity, donating more significant proportions of their resources to others in need than their wealthier counterparts (Piff et al., 2010).

Lower SES individuals tend to trust others more, given their belief in equality, compassion, and concern for others (Piff et al., 2010). In part, upper-class individuals tend to have increased value of privacy and independence, suggesting that while trust is valuable, it is not easily given (Piff et al., 2012). Kraus and Keltner (2009) suggest that since individuals of higher socioeconomic status need fewer resources from others, they are more likely to disengage from relationships

compared to lower SES individuals. For instance, in one experiment, those assigned to possess more money were more likely to expect others to be self-sufficient, work alone, and participate in solo activities than those assigned less money (Vohs et al., 2006), supporting the idea that higher-status individuals are less helpful to others.

Subjective Socioeconomic Status

Studies show people are accurate at perceptions of socioeconomic status, picking up signals of an individual's status from types of clothing, body language, or verbal cues (Kraus & Keltner, 2009; Kraus & Mendes, 2014). The process of social comparison can further present perceptions of socioeconomic ranking due to the prominence of physical or material signals of other members (Kraus & Mendes, 2014; Suls et al., 2002). The use of particular vocabulary (i.e., slang) and nonverbal signs (i.e., facial expressions, posture, or clothing) often associates with different levels of status functioning as signals (Kraus et al., 2009; Kraus & Mendez, 2014). Signals can influence behavior in social interactions; for example, those of higher status often feel superiority over their lower SES counterparts, a practice termed "downward comparison" by Suls et al. (2002). Downward comparisons can further show in behaviors, and interactions with those of lower SES can communicate this (Piff et al., 2010). Feelings of economic inequality can be considerably affluential when the perceived wealth gap has a greater magnitude between levels (Sanchez-Rodrguez et al., 2019).

The subjectivity of social structures thrives on comparison; for as social beings, it is fundamental to consider what others are doing to decrease ambiguity or evaluate performance for self-enhancement purposes (Ryff et al., 1995; Suls et al., 2002). One's evaluations of their socioeconomic status or well-being can be highly influenced by comparison when looking towards others of similar class within local groups (Anderson et al., 2012; Kraus & Mendes, 2014; Suls et

al., 2002). However, negatively focused evaluations can create feelings of inferiority in contrastive comparisons (Suls et al., 2002). For example, assessment of the self compared to evaluations of a dissimilar other can create implications of disadvantage or need for self-mutation (Suls et al., 2002). In a community with a broad spectrum of status levels, individuals may be more likely to perceive their socioeconomic status as less due to vulnerabilities being more prominent and emotionally involved (Stellar et al., 2014). Frequent signs of social class can often impact how individuals treat one another during an interaction, with the influence of negative associations from social comparisons (Kraus et al., 2010).

With the ever-present social comparison process, even those with higher status can feel less than others, just as those of a lower SES may. Potential issues with finances, material resources, or positive socialization experiences create opportunities for negative emotions and a lack of motivation (Sherry et al., 2013). Although help from others can buffer negative emotions, these buffers can fall short when stressors frequently occur, simultaneously and intensely as they often do for those of lower socioeconomic status (Fraley et al., 2020; Sherry et al., 2013; Piff et al., 2010). According to Klehe et al. (2012), involuntary job loss is one of the most stressful experiences a person can go through due to the increased frequency of poor mental and physical health, substance abuse, and risky behaviors.

Poverty and Child Attachment Studies

Low socioeconomic status can significantly impact parenting behaviors that often lead to increased development of insecure attachment among children. According to Vondra et al. (1999), parents of lower socioeconomic status have higher rates of stress and mental health issues; mothers, in particular, have difficulty controlling anger and moving past depressive symptoms while providing care. Frequent aversive mental states consequently showed higher perceptions of

child difficulty and instances of child maltreatment (Sherry et al., 2013; Vondra et al., 1999). Park (2016) found that poverty strongly correlates with interpersonal violence, specifically economic abuse, where one partner uses financial dependence against the other as entrapment, specifically in the case of adult romantic relationships. Interpersonal violence is highly associated with anxious attachment due to the intensity of emotion and extreme proximity-seeking behaviors exhibited by both partners (Park, 2016).

While maternal dissatisfaction with relationship partners was reportedly a causal factor of mood instability, specific details of intimate partner issues were not clarified (Vondra et al., 1999). Likely due to the necessity of increased income for most parents, over half of U.S. children receive nonparental care, with a majority coming from a lower socioeconomic status (Odom et al., 2012). These alternative care programs typically provide lower-quality care in impoverished areas due to a lack of resources, which may consequently impact attachment systems (Odom et al., 2012). Although there is a lack of evidence for direct links between socioeconomic status and insecure attachment, Sherry et al. (2013) suggest poverty introduces opportunities for substance abuse, neglect, maltreatment, mental illness, and incarceration, which have higher impacts on attachment insecurity. With more stress comes a higher likelihood of decreased communication and limited time for interaction between parent and child, restricting available resources of stimulation and emotional support to minimal hours of the day (Sherry et al., 2013).

A parent's internal working model of attachment in times of stress often contributes to sensitivity and responsiveness behaviors shown to the child in their time of need (Odom et al., 2012). It is essential to note the role of financial stress often experienced in poverty; a study by Bakermans-Krannenberg et al. (2004) reported a significant positive correlation between lower incomes and low maternal sensitivity. Economic hardship also predicted higher risk-taking

behaviors, such as risky sexual behavior, substance use, or self-endangering behaviors, particularly among adolescents with insecure attachment styles (Delker et al., 2018). In most cases, those of lower socioeconomic status have trouble with financial security (Evans, 2004; Kraus et al., 2009). Sochos and Latchford (2016) looked at links between financial aversion and attachment insecurity, confirming a significant positive association between attachment anxiety and insecurity with financial management. Although financial aversion does not directly link with economic security, there is a higher prevalence among those of lower socioeconomic status, presenting a potential link between attachment and status (Sochos & Latchford, 2016).

Fraley et al. (2011) conducted a study attempting to compare Trait and State measures of attachment systems to determine which measure best represents variations in attachment experiences. According to Fraley et al. (2020), attachment patterns are responsive to environmental changes in enduring and non-enduring ways. Specifically, their findings implied that attachment events could impact attachment patterns but only endure if in line with a pre-existing baseline system. To directly observe attachment changes before returning to baseline levels, researchers recommend using state attachment measures to confidently assess attachment changes even if an event is non-enduring. Other studies have also used state attachment measures when introducing manipulations, such as Jakubiak and Feeney (2016).

When experimenting first on the effect of imagined touch from a partner or friend, then looking at the effect of real touch from a loved one in comparison to the no-touch control condition on state secure attachment levels, findings resulted in statistically significant increases of state security when participants interacted with a touch condition compared to the no-touch conditions (Jakubiak & Feeney, 2016). Additionally, Jakubiak and Feeney (2016) reported that trait avoidant attachment moderated touch conditions' effect on state attachment security due to the avoidant

individuals' indifference toward touch. Given that poverty is primarily seen as an environmental risk factor for changes in attachment systems, but the impact of poverty can present in various experiences, this study is primarily focused on these individual differences before an individual essentially returns to their baseline attachment.

Overview of the Current Study

Past research has consistently shown an empirical link between being raised in a lower socioeconomic status household and the development of an insecure attachment system in children (Sherry et al., 2013), but little research has investigated whether lower socioeconomic status adults are higher in attachment insecurity levels. Theoretically, adults of lower socioeconomic status may be more likely to be anxiously attached due to their need to trust others and rely on others for resources (Piff et al., 2010). In a naturalistic longitudinal design, Fraley et al. (2020) observed enduring increases in state romantic attachment anxiety following the ending of a job. However, participants who reported losing or quitting their job were not distinguished, making it impossible to assess whether the increase in attachment anxiety was related to the financial difficulties associated with a voluntary change in employment, the involuntary loss of an employer relationship, or another related factor. Given the exploration of impacts requires an assumption of causation, in addition to the time and funding constraints for the study, a state attachment measure was chosen to assess the immediate effects of the assigned manipulation on attachment systems rather than a longitudinal study needed to assess changes in trait attachment over time. The current study randomly assigned participants to imagine either a lower socioeconomic status or an involuntary job loss to assess the direct relationship between two types of financial difficulties and state attachment levels. Participants also completed a measure of trait romantic attachment to

assess any moderating effects of trait attachment on the relation between imagined financial difficulties and state attachment.

Primary Hypothesis

Hypothesis 1: It was predicted that participants who imagined a lower SES or an involuntary job loss would report higher levels of state attachment anxiety compared to participants randomly assigned to the control condition.

Secondary Hypotheses

Hypothesis 2: We explored whether participants who imagined an involuntary job loss reported higher levels of state attachment anxiety than participants randomly assigned to imagine having a lower SES.

Hypothesis 3: We explored whether participants who imagined a lower SES or imagined an involuntary job loss would report different levels of state security or state avoidance compared to participants randomly assigned to the control condition.

Hypothesis 4: We explored whether trait romantic attachment anxiety moderated the relation between financial difficulties and state levels of attachment.

Hypothesis 5: We explored whether objective SES related to trait romantic attachment levels.

CHAPTER 2
METHOD

Participants

The G-Power 3.1 software used to conduct a power analysis estimated a total sample size of 156 participants needed to retain 95% power with the required testing parameters for a univariate, one-way analysis of variance (ANOVA) when detecting fixed effects. Participants were undergraduate students at Georgia Southern University enrolled in various psychology or sociology courses provided by the College of Behavioral and Social Sciences. Undergraduate students registered through the Georgia Southern SONA research sign-up system for the psychology department under the study name "Perceptions of Societal Experiences" to reduce demand characteristics. Participants also signed up through a scheduling software, Doodle Poll, designed to collect participant names and emails to confirm the timeslot if their course did not apply to SONA credit. As compensation for their participation, individuals received 2.5 credits through SONA towards assignment requirements or were offered extra credit from instructors of various courses. The initial date to stop data collection was February 16th to meet thesis deadlines; however, data collection will continue through the spring 2023 semester to try and reach the suggested number of participants needed for adequate power. Participants who stopped responding, made the same response for the entire survey (e.g., every response to scaled questions was Neutral/Unsure), or guessed the hypothesis too closely were excluded from analyses. Of the original 56 collected participant responses, one participant was excluded for selecting "Neutral" or writing "I don't know" for the entire survey, and three participants were excluded for not completing the survey materials, resulting in a sample size of 52 participants for the current data analysis.

Demographics

Participants ranged in age from 18 to 53, with a median age of 20 (*SD* = 8.65). The sample consisted primarily of women (*N* = 33, 62.3%) and identified as White (*N* = 29, 54.7%), or Black/Bi-racial (*N* = 41.5%). Of the participants, 50.9% (*N* =27) reported a current, committed relationship, and 41.5% (*N* = 22) were single. Participants also reported job status; although most were employed for a wage (*N* = 31, 58.5%), many also reported being unemployed (*N* = 18, 34%).

Research Design

This study utilized a univariate, one-way ANOVA to explore the effect of the independent variable of imagined financial difficulties (3 levels: subjective low SES vs. involuntary job loss vs. control; between-subjects) on the dependent variable of state adult attachment levels (state security, state anxiety, and state avoidance). To help control the Type I error rate, we used the Bonferroni correction procedure on follow-up post-hoc tests.

Materials

All components of the study's manipulations and measurements were contained within the Qualtrics survey system. The data obtained from the survey were not connected to any identifiable information provided by the participants. Although an individual was assigned a timeslot through the SONA or Doodle Poll systems, any data collected remained confidential and was de-identified before analysis. Any identification information was collected strictly for incentive compensation before deletion. The survey software provided by Qualtrics predetermines the random assignment for each level of the independent variable in addition to the question order of scaled measures; participant conditions remained unknown to the researchers prior to analysis to prevent researcher bias.

The *Experiences in Close Relationships-Revised* (ECR-R; Fraley et al., 2011) was used to assess trait romantic attachment levels. Sibley et al. (2005) found this measure of trait romantic

attachment to have high convergent and discriminant validity. The ECR-R consists of 36 items; 18 items measure attachment avoidance (e.g., I prefer not to show a partner how I feel deep down), and 18 items measure attachment anxiety (e.g., I am afraid that I will lose my partner's love). Participants responded to each item with a seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7). Internal reliabilities for avoidance and anxiety sub-scales were good (Cronbach's alphas = 0.88 and 0.92).

The *MacArthur Subjective Socioeconomic Scale* (MacArthur SSS; Piff et al., 2010) was used to manipulate perceptions of socioeconomic status. MacArthur's SSS consists of a ten-point Likert scale, represented in Figure 1, with the bottom of the ladder (1) referring to poverty and lower SES in the United States and the top of the ladder (10) referring to the highest status (Piff et al., 2010). Kraus and Keltner (2009) found this manipulation of subjective socioeconomic status to have high convergent and discriminant validity.

The *Involuntary Job Loss* hypothetical experience was used to manipulate perceptions of sudden financial instability. In a naturalistic longitudinal study, Fraley et al. (2020) reported enduring increases in global and romantic attachment anxiety when an individual lost or quit a job. To the best of our knowledge, this is the first research project to study the effects of an imagined involuntary job loss. We created the hypothetical job loss scenario using keywords such as termination, let go, difficulties, and shock throughout the statement to simulate the characteristics of an involuntary job loss. See Appendix A for a copy of the Involuntary Job Loss manipulation.

The *Job Stability* hypothetical experience was used to manipulate perceptions of financial security. Given the unknown construct validity of the Involuntary Job Loss scenario to manipulate perceived financial difficulties and feelings of job insecurity, this manipulation was constructed to serve as a control group. To the best of our knowledge, prior research has not studied the effects

of imagined job security; we created the imagined job stability scenario using keywords such as doing well, rare difficulties, thankful, and stable throughout the statement to simulate the characteristics of job stability. See Appendix B for a copy of the Job Stability manipulation.

The *State Adult Attachment Measure* (SAAM; Gillath et al., 2009) assessed state attachment levels. Jakubiak and Feeney (2016) found this measure of state attachment to have high convergent and discriminate validity. The SAAM consists of 21 questions: seven items measuring attachment security (e.g., "If something went wrong right now, I feel like I could depend on someone"), seven items measuring attachment anxiety (e.g., "I feel a strong need to be unconditionally loved right now"), and seven items measuring attachment avoidance (e.g., "I feel alone and yet don't feel like getting close to others"). Participants responded to a seven-point Likert scale ranging from strongly disagree (1) to strongly agree (7). Internal reliabilities for security, avoidance, and anxiety sub-scales were good (Cronbach's alphas = 0.93, 0.82, and 0.87).

The *Objective Socioeconomic Scale* (OSS; Piff et al., 2010) was used to assess objective measures of socioeconomic status. Kraus and Keltner (2009) found this measure of objective socioeconomic status to have high convergent and discriminant validity. Participants rated their annual family income within eight categories referencing their socioeconomic status (e.g., option 3: $25,001- $35,000). Participants additionally identified their parents' education level (e.g., option 2: Some High School), given the association with educational status and socioeconomic status. Many traditional college students frequently rely on parental figures for emotional and financial support; therefore, assessment of parental education status likely further explains the participant's socioeconomic status. OSS consists of standardized estimations of annual family income (i.e., a list of incomes ranging from <$15,000 to > $250,000) and a standardized, average parental education history (i.e., options ranging from Some Grade School to Graduate Degree).

Each given option was attached to a coding number on a scale of one to ten for the standardized income variable and a scale of one to nine for the standardized education variable. Calculating an OSS score per participant consisted of taking the average of the parental education scores reported by a participant and adding this average to the reported income score. See Appendix D for a copy of the OSS.

Participants also completed a measure of their demographic information, including their age, race/ethnic identity, gender, job status, and romantic relationship status.

Procedure

Participants from SONA interested in completing the study entered a lab in Brannen Hall; all data were collected in the same laboratory room for each participant. The lab room consists of four desktop computer stations; however, only one participant was allowed per session to reduce potential confounds from participants interacting. Participants who responded to a Doodle Poll interested in completing the study entered a study room in the Henderson Library; all study rooms consisted of one desktop computer and a meeting table. Again, only one participant was allowed per session to reduce environmental confounds. Each computer was sanitized before use for COVID-19/disease prevention, and participants completed the consent form (see Appendix G) before presenting any study procedures or instructions. Once consent was given and the researcher finished their instruction to proceed, participants were presented with the ECR-R items in random order. Participants were then randomly assigned to a low socioeconomic condition: an interaction with a high-status other as represented by MacArthur's SSS, an involuntary job loss and associated financial difficulties, or a control condition.

Condition – Specific Instructions

Those randomly assigned to the high-status interaction condition viewed the ladder in Figure 1 and envisioned the ladder as a scale representing the status of people in the United States. Next, presented with the high-status ladder (Figure 2), participants imagined and described a hypothetical situation with someone of higher status as indicated, focusing on the potential differences between one another. Participants then ranked their socioeconomic status on the ladder with the condition described in mind. A pilot test of this manipulation (Jones & Hackney, 2022, unpublished data) confirmed the construct validity of MacArthur's SSS high-status interaction instructions affecting perceived social and economic status levels. Specifically, participants who were randomly assigned to imagine interacting with a high SES individual rated themselves as a lower SES (N = 13; M = 5.08, SD = 1.75) compared to people randomly assigned to imagine interacting with a low SES individual (N = 11; M = 6.36, SD = 1.69), $F(2, 35) = 1.56$, $p = .22$. Although the differences in perceptions of socioeconomic status were not statistically significant, the low sample size likely contributed to a Type II error. Notably, the group means of each condition were similar to those observed in prior research using the MacArthur SSS to induce socioeconomic status (Kraus et al., 2010; Piff et al., 2010), suggesting that this operationalization would successfully manipulate perceptions of lower socioeconomic status in our participants. Participants' written responses were coded for themes of attachment, depressed mood, or indifference for later analysis.

Figure 1

Figure 2

Those assigned with the involuntary job loss condition were presented with a brief description of a hypothetical scenario. Participants imagined getting fired from a job and were told their job termination was due to insufficient quality of work performance; additionally, all employee benefits would lapse after two weeks of termination. With unpaid expenses and difficulty finding work due to reasons for leaving past employment, participants were asked to briefly describe potential difficulties or stressors they may experience in the provided scenario. Participants' written responses were then coded for themes of attachment, depressed mood, or indifference for later analysis. Those assigned to the control condition (Job Stability) were tasked

with imagining they had a job that allowed them to pay their bills and that they were financially stable; they were then asked to write a brief description of what they imagined. Participants' written responses were also coded for themes of attachment, depressed mood, or indifference for later analysis.

After manipulating the independent variable, participants proceeded to the SAAM instructions. Participants viewed 21 items, with three item ratings displayed randomly per page to retain attention before moving on. A 'previous page' button was not provided for participants to prevent individuals from potentially changing answers once they had moved forward. Finally, participants identified their objective socioeconomic status before completing a standard demographics questionnaire. When calculating Objective SES scores, participants' ratings of parental education were averaged, then added to their rating of income for an operationalized OSS score. Finally, participants were asked what perceptions they had about the study to assess if they could detect the study's hypothesis from the procedure (See Figure 3).

Roughly 30 minutes were allotted for each participant to complete all the testing materials, with a debriefing statement (Appendix H) and confirmation of survey submission from the researcher before participants left the lab area. After each session's conclusion, the researcher took five minutes to wipe down the station, record session notes, and reward participants with the 2.5 SONA credits offered for the study. If the participant signed up through the Doodle Poll for extra credit, their name was sent to the associated instructor for their reward. All data was stored in the Qualtrics system until the end of the collection, then exported to IBM-SPSS for analysis by the primary researcher.

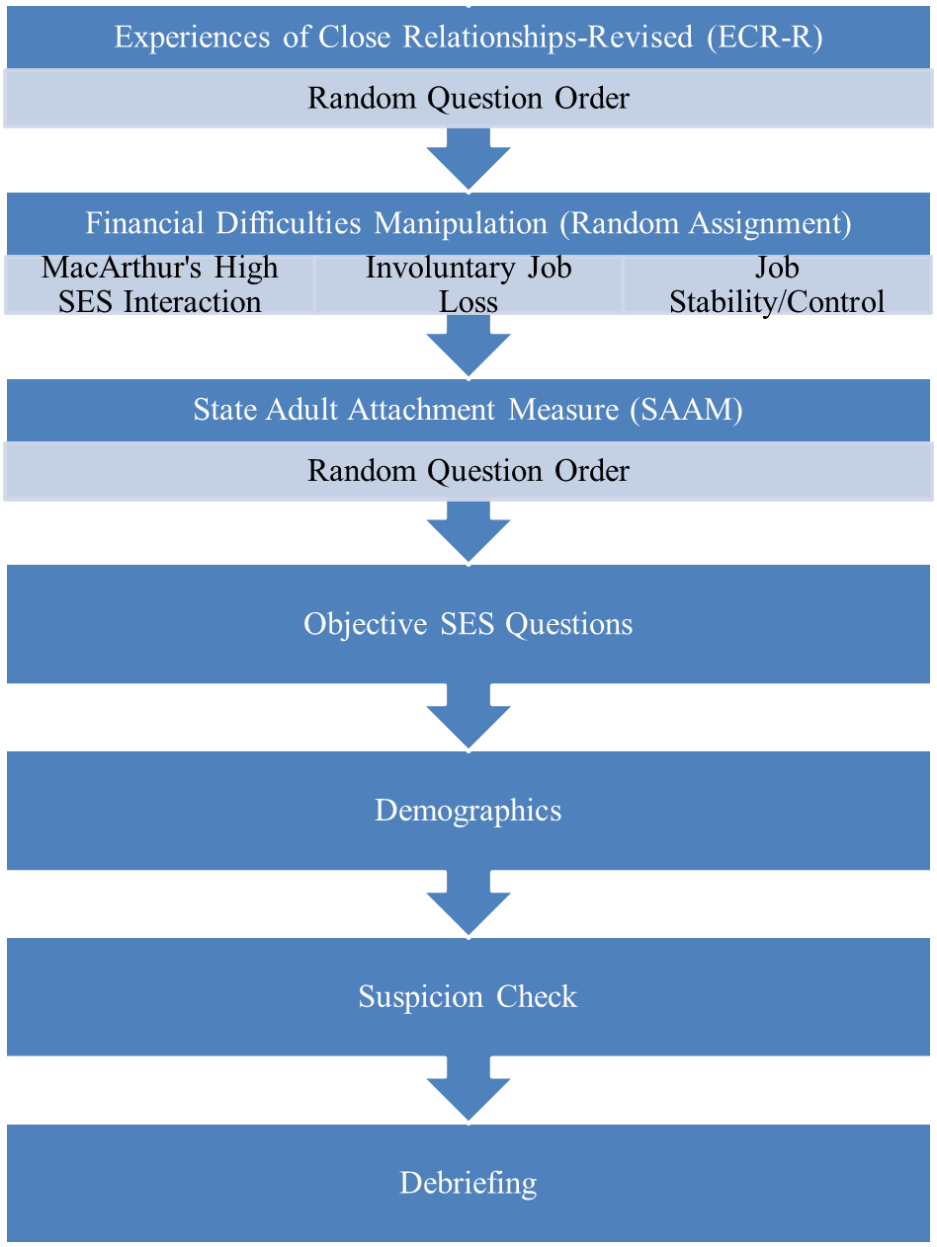

Figure 3

Preliminary Analyses

Once all data were collected and exported to the IBM-Statistical Package for Social Sciences (SPSS) data analytic software, data were organized into groups by manipulation condition and coded. Research assistants coded all written responses after confirmation of inter-rater reliability. Written responses were categorized by condition before coding. The primary

researcher initially met with research assistants to review coding themes (security, anxiety, avoidance) and practiced various responses together to ensure rating reliability before receiving randomly assigned responses to code individually. Coded responses were used to help better understand participants' subjective interpretations of the independent variable.

The primary data assessment was an ANOVA to test whether the independent variable affected state levels of attachment anxiety, avoidance, and security independently. The independent variable was imagined financial difficulties; specifically, there were three conditions: low-status manipulation with MacArthur's Subjective Socioeconomic Status, a hypothetical experience of involuntary job loss and financial difficulty, and the job stability control group. The dependent variable was the State Adult Attachment Measure, split into three subscales (i.e., secure, anxious, and avoidant) to verify the degree of impact for each state attachment scale.

Secondary exploratory analyses were not conducted to assess whether trait attachment anxiety moderated the effect of financial difficulties on state attachment anxiety, state attachment avoidance, or state security due to the currently limited sample size and the increased likelihood of Type I errors. Exploratory data analysis was conducted to test whether objective socioeconomic status was related to trait attachment levels.

CHAPTER 3

RESULTS

State Attachment Anxiety

The primary hypothesis was that participants who imagined a lower SES or imagined an involuntary job loss would report higher levels of state attachment anxiety compared to participants randomly assigned to the job security control condition. A one-way univariate analysis of variance (ANOVA) was conducted to compare the effect of the manipulation conditions on state levels of attachment anxiety. Results concluded there was an overall statistically significant effect of the manipulation on state attachment anxiety, $F(2,49) = 2.93$, $p = .06$, $\eta^2_p = .11$, $1\text{-}b = .55$. To test the difference between group means, a Bonferroni Post-hoc multiple comparisons test was conducted to control the Type I error rate. Post-hoc results showed no statistically significant difference between the subjectively low SES manipulation ($N = 17$; $M = 3.76$; $SE = .34$) and the job security control condition ($N = 17$; $M = 4.74$; $SE = .34$) on state attachment anxiety ($p = .15$; *CI*: -2.17, .22) nor a statistically significant difference between the involuntary job loss condition ($N = 19$; $M = 4.90$; $SE = .32$) and the job security control condition on state attachment anxiety ($p = 1.00$; *CI*: -1.00, 1.33). These results were inconsistent with the hypothesis that state attachment anxiety would increase after imagined financial difficulties compared to the control condition.

We also explored whether participants who imagined an involuntary job loss would report higher levels of state attachment anxiety compared to participants who were randomly assigned to imagine having a lower SES. Post-hoc results showed no statistically significant difference between the involuntary job loss and the lower SES groups ($p = .06$; *CI*: -.03, 2.30). These results suggest that state attachment anxiety does not significantly differ after imagining a subjectively low SES compared to imagining an involuntary job loss.

State Attachment Avoidance

We hypothesized that the subjectively low SES condition or the Involuntary Job Loss condition would significantly affect state levels of attachment avoidance compared to the job security control condition. A one-way univariate analysis of variance (ANOVA) was conducted to compare the effect of the experimental conditions on the state levels of attachment avoidance. Results concluded there was an overall statistically significant effect of the manipulation on state attachment avoidance, $F(2,49) = 4.15$, $p = .02$, $\eta^2_p = .145$, $1\text{-}b = .71$. To calculate the significant difference of group means, a Bonferroni Post-hoc multiple comparisons test was conducted to compare the effect of the subjectively low SES manipulation ($N = 16$; $M = 3.19$; $SE = .30$) on state levels of attachment avoidance ($p = .27$; *CI*: -.31, 1.75) and the control condition ($N = 17$; $M = 2.48$; $SE = .29$) on state levels of attachment avoidance ($p = .27$; *CI*: -1.75, .31). Results concluded there was no statistically significant difference between the High SES manipulation and the control condition on state attachment avoidance ($SE = .42$, $p = .270$). These results do not support the hypothesis that the subjectively low SES condition lowers state attachment avoidance compared to the control condition.

To calculate the significant difference of group means, a Bonferroni Post-hoc multiple comparisons test was conducted to compare the effect of the Involuntary Job Loss ($N = 19$; $M = 3.62$; $SE = .27$) on the state levels of attachment avoidance ($p = .02$; *CI*: .15, 2.12) and the control condition ($N = 17$; $M = 2.48$; $SE = .29$) on the state levels of attachment avoidance ($p = .02$; *CI*: -2.12, -.15). Results concluded there was a statistically significant difference between the Involuntary Job Loss manipulation and the control condition on state attachment avoidance ($SE = .40$, $p = .02$, *CI*: .15, 2.12). These results support the hypothesis that state attachment avoidance increases after imagining the Involuntary Job Loss condition compared to the control condition.

State Attachment Security

We had an exploratory hypothesis that the subjectively low SES condition or the Involuntary Job Loss condition would make a significant difference in state levels of attachment security compared to the control condition. To calculate the difference of group means, a one-way univariate analysis of variance (ANOVA) was conducted to compare the effect of the experimental conditions on the state levels of attachment security. Results concluded there was an overall statistically significant effect of the manipulation on state attachment security, $F(2,49) = 7.526$, $p = .001$, $\eta^2_p = .235$, $1\text{-}b = .93$. To calculate the significant difference of group means, a Bonferroni Post-hoc multiple comparisons test was conducted to compare the effect of the subjectively low SES manipulation ($N = 16$; $M = 6.06$; $SE = .28$) on the state levels of attachment security ($p = 1.0$; *CI*: -.63, 1.32) and the control condition ($N = 17$; $M = 5.71$; $SE = .27$) on the state levels of attachment security ($p = 1.0$; *CI*: -1.32, .63). Results concluded there was no statistically significant difference between the subjectively low SES manipulation and the control condition on state attachment security (SE = .39, $p = 1.0$). These results provide evidence that state attachment security does not significantly increase after interaction with subjectively low SES manipulation compared to the control condition.

To calculate the significant difference of group means, a Bonferroni Post-hoc multiple comparisons test was conducted to compare the effect of the Involuntary Job Loss ($N = 19$; $M = 4.65$; $SE = .26$) on the state levels of attachment security ($p = .02$; *CI*: -2, -.13) and the control condition ($N = 17$; $M = 5.71$; $SE = .27$) on the state levels of attachment security ($p = .02$; *CI*: .13, 2). Results concluded there was a statistically significant difference between the Involuntary Job Loss manipulation and the control condition on state attachment security ($SE = .38$, $p = .02$, *CI*: -2, -.13). These results provide evidence that state attachment security had a significant decrease after interaction with Involuntary Job Loss compared to the control condition.

Trait Attachment Moderation

We had an exploratory hypothesis that trait attachment anxiety may moderate the differences in means between manipulation conditions and state attachment levels of security, anxiety, or avoidance. However, given the nature of exploration and the lack of power to test the interaction effects, this hypothesis was not further tested in the current study to reduce the likelihood of a Type I error.

Objective Socioeconomic Status

We had an exploratory hypothesis that objective SES may be related to trait attachment anxiety and avoidance. Using a Spearman's Correlation Coefficient to test for a relationship between variables, Objective SES was not related to trait attachment anxiety, $r(50) = .003$, $p = .98$. Results of a Spearman's Correlation Coefficient analysis also showed that Objective SES was not related to trait attachment avoidance, $r(50) = -.04$, $p = .8$. Another Spearman's Correlation Coefficient analysis was conducted to determine the strength and direction of the relationship between family income and trait attachment insecurity. Results showed no statistically significant relationship between family income and trait-anxious attachment, $r(50) = -.07$, $p = .62$. Results of a Spearman's Correlation Coefficient analysis also showed that family income was not related to trait attachment avoidance, $r(50) = -.12$, $p = .41$.

CHAPTER 4
DISCUSSION

Attachment theory suggests individuals with insecure attachment systems, such as avoidant and anxious attachments, are more likely to experience negative emotions and issues with mistrust in others and/or the self than those with secure attachment styles (Girme et al., 2021). With the prevalence of lower socioeconomic status (SES) and the frequent difficulties introduced as a result, many individuals often experience feelings of insecurity due to the continuous distress experienced in day-to-day life (Kraus et al., 2009). Recent research explored many different aspects of this topic, specifically starting with children in lower SES households, finding significant impacts on their social development and attachment systems (Sherry et al., 2013). Gillath et al. (2009) also expanded on attachment measurements, such as the State Adult Attachment Measure (SAAM), to better understand current moment impacts of attachment-related events on adults with prior trait attachment predispositions.

Little research explores the relationship between lower SES and adult attachment; however, in a naturalistic longitudinal study, Fraley et al. (2020) found enduring increases in trait anxiety after people lost or quit their job. The reasons for losing a job or quitting a job were not provided, suggesting that more research is needed to understand the relationship between job loss and attachment anxiety. Given the importance of state attachment levels of an individual on proximity-seeking and emotional regulation behaviors, distinguishing what type of financial difficulty affects attachment could help intervention procedures better target sources of distress for treatment. While exploring this gap in job loss operationalizations the current study specifically tested the impact of an involuntary job loss scenario compared to a previously used manipulation of a subjectively low SES and a job security control condition. Participants were randomly

assigned to one of the three conditions before completing the SAAM to detect current levels of attachment systems.

Hypothesis 1

State Anxiety

Results from the data analyses essentially retained the null hypothesis of no statistically significant differences in state attachment anxiety levels when introduced to lower socioeconomic status conditions. On initial analysis, there was statistical significance found between groups; however, a Bonferroni post-hoc analysis revealed there was no statistically significant difference between conditions on the participants' levels of state attachment anxiety. The Bonferroni test is a conservative test that controls for a Type I error but may do so at the expense of power to detect an effect when present. Given the low sample size of the current analyses, the question of whether state anxiety is affected by imagined financial difficulties needs further study.

Written responses from participants were coded by themes of attachment to further understand the impact of the manipulations on participants. Coders were given keywords, such as worried, fearful, nervous, and stressed, when looking for themes of anxiety among written responses to the three conditions. Of the 52 responses coded, a combined 26.9% of participants (N = 14) responded with themes of anxiety (17.3% from Job Loss, 5.8% from Job Stability/control, and 3.8% from subjectively low SES). Many of these responses were worries about the inability to support loved ones, limited resources for enjoyment and basic needs, and insecurity in one's work performance. Examples of a written response per condition with themes of anxiety were as follows: Subjectively Low SES (e.g., "I do not come from a well-off background, so I feel like these people who would look down on me."), Involuntary Job Loss (e.g., "My first thought will be, how can I do better? I need to know where my faults are so I don't have any problems such as

‘low quality of work.’ Am I getting to work on time? When I'm at work, am I completing tasks in a timely manner? I would be worried about income and feel nervous getting back out there looking for a job. As living and housing expenses build up, I would use that as a driving force to do better. Remembering this feeling will make me want to have a better quality of work.”), and Job Stability/Control (e.g., “I would feel as if I am slowly being let off despite the nice compliment in my work ethic.”). These results support that there were individual differences present in the reactions to imagined financial difficulties and job security, and that the interpretation of seemingly negative (financial difficulties) and positive (job security) life events depend upon the perceiver.

Hypothesis 3

State Avoidance

Results showed that an involuntary job loss had a significant impact on state levels of avoidant attachment. Levels of state avoidance statistically significantly increased after imagining an involuntary job loss, suggesting individuals may feel higher levels of mistrust following the termination of a job. This means a direct causal relationship was established between sudden financial instability and state-avoidant attachment. With the interpretation that individuals essentially avoid close others following unexpected termination, this requires further research on whether avoidance results from potential underlying mechanisms such as embarrassment or insecurity of worth. Written responses from participants were coded by themes of avoidance to further understand the impact of the manipulations on participants. Coders were given keywords, such as “staying away” from things, disconnected, and reserved, when looking for themes of avoidance among written responses to the three conditions.

Of the 52 responses coded, a combined 17.3% of participants (N = 9) responded with themes of avoidance (9.6% from subjectively low SES, 5.8% from Job Loss, and 1.9% from Job Stability/control). Many of these responses were feelings of mistrust/anger or that those from a lower SES are misunderstood, have nothing in common with others, or have negative outlooks on the world. Examples of a written response per condition with themes of avoidance were as follows: Subjectively Low SES (e.g., "The conversation would be very disconnected, as the two of us live in two vastly different spheres of society."), Involuntary Job Loss (e.g., "I believe that I would cut back from activities that are not needed, such as drinking, partying, and travel. I believe my routine would change because I don't have a job to go to every day, and I would become fed up with some of the stuff life throws at me. Specifically, just other people seeming to have such a big impact on your life."), and Job Stability/Control (e.g., "After hearing that information from my boss, I think I would try to work more on my physical health to be emotionally and mentally healthy. I also think I would start to see who my true friends were if anyone was a little bit two-sided towards me."). These results support individual differences in the reactions to imagined financial difficulties and job security, and that the interpretation of seemingly negative (financial difficulties) and positive (job security) life events depend upon the perceiver.

State Security

Results also showed that an involuntary job loss significantly impacted state levels of attachment security compared to the control condition. Levels of state security statistically significantly decreased after interaction with the involuntary job loss manipulation, suggesting individuals may feel lower levels of security following the termination of a job. This means a direct causal relationship was established between sudden financial instability and state attachment insecurity. With the interpretation that individuals have an increase of negative affect following

unexpected termination, this requires further research on whether insecurity results from potential underlying mechanisms such as hopelessness or lacking control. Given these characteristics are often associated with depression, themes of depression were also coded by research assistants.

Written responses from participants were coded by themes of depression to further understand the negative impact of the manipulations on participants. Coders were given keywords, such as unmotivated and sad, when looking for themes of depression among written responses to the three conditions. Of the 52 responses coded, 3.8% of participants (N = 2) responded with themes of depression from the job loss manipulation only. An example of a written response per the Involuntary Job Loss condition with themes of depression was as follows: "This situation would make me feel very doubtful of myself and angry. Possibly even a little depressed from the situation and stress from being unemployed, financial struggles, and the stress of finding a job and interviewing. The thought of being turned down for a new job after being terminated in that manner would be devastating." These results support that there were individual differences present in the reactions to imagined financial difficulties, and that the interpretation of seemingly negative (financial difficulties) and positive (job security) life events depend upon the perceiver.

Written responses from participants were also coded by themes of security to further understand the impact of the manipulations on participants. Coders were given keywords, such as friendly and positive, when looking for themes of security among written responses to the three conditions. Of the 52 responses coded, a combined 48.1% of participants (N = 25) responded with themes of security (25% from Job Stability/control, 9.6% from Job Loss, and 13.5% from subjectively low SES). Many of these responses were feelings of pride, happiness, gratitude, and curiosity. Examples of a written response per condition with themes of security were as follows: Subjectively Low SES (e.g., "I think this interaction would be interesting. I can learn a lot from

someone already established."), Involuntary Job Loss (e.g., "I would feel a sense of frustration at first, considering I have to go back to square one in attempts to regain a job. But again, I would remind myself that everything happens for a reason and that there is no need to stress it because, with some faith in God, he will present a new opportunity."), and Job Stability/Control (e.g., "It would boost confidence. My boss telling me that would solidify my hard work and make me want to work harder. It would minimize any previous doubt or anxiousness I may have had before knowing/hearing this."). These results support that there were individual differences present in the reactions to imagined financial difficulties and job security, and that the interpretation of seemingly negative (financial difficulties) and positive (job security) life events depend upon the perceiver. It could also be assumed the Job Stability/control condition was successful, given themes of attachment security were the most common for the condition's responses.

Hypothesis 5

There was no statistically significant relationship between objective SES and trait measures of attachment insecurity. No statistical significance was found when income alone was analyzed, rather than the objective SES score, with trait attachment insecurity. This finding could likely be due to poor construct validity of objective SES and income, as the calculations are purely an average of estimations. Participants also reported an estimate of the portion of their income they likely have available on hand, but these responses were not used in the analyses. Of the options available, most participant responses reported less than 10% of their income was available (21.2%; $N = 11$, $SD = 2.61$). Income and objective SES could likely be factors with minimal impact on trait attachment due to their frequent fluctuations or the disconnection between objective SES and the participants' estimated education or income. For example, having a degree does not guarantee an individual is seen as intelligent, just as a degree does not guarantee a high-paying job. Regardless,

non-significance will likely result from the limited sample size and would benefit from replication with a higher-powered sample size.

Our other hypothesis involving trait attachment was not assessed due to the lack of power needed for the depth required in moderation detection. In the case of replication, reaching the proper sample size would allow for the proposed testing required to potentially detect a moderation of trait attachment on state attachment levels. Finding whether this relationship exists is essential for furthering research on impactful environmental risk factors of adult attachment systems.

Applications of Current Findings

With the statistically significant findings of increased attachment avoidance when involuntarily unemployed, several interventions come to the forefront. Some real-world implications could translate to specific scripts and resources for those being let go from a job, such as sending a previous employee home with the ability to continue growing from the experience through various basic support applications. Support resources could range from job recommendations to transition counseling to combat negative attachment insecurity effects. Attachment theory states those with avoidant attachment often have significant mistrust in themselves and/or others (Mikulincer & Shaver, 2007); if avoidance is increased through involuntary job loss, adults likely lose trust in their ability to perform in various aspects of their life, or adults may lose trust in others around them. In particular, interpersonal attachments will suffer with the hindrance of communication and support; if there are previous complications still present in a person's relationship, avoidant behaviors can exacerbate those conflicts.

Findings also reported decreases in attachment security when involuntarily unemployed, supporting the assumption that insecure attachment behaviors may become more prominent and need attention. Clinical aspects of attachment interventions often recommended for children and

their families have the potential to be equally effective in the circumstances of adult attachment support. Focusing on specific factors of insecure attachment could be highly beneficial in clinical therapy settings to those impacted by sudden financial instability to target the assumed decrease in secure attachment. Whether these attachment-focused interventions are more effective in an individual or group/family context is likely dependent on the specific impacts on attachment behaviors.

Additionally, participants occasionally reported anxiety after being praised for a great work ethic posing the question of what exact language might have triggered insecurity. With this finding, it could be beneficial to construct and test different supportive scripts from supervisors that promote positive self-reflection and guaranteed reassurance of job stability. Many corporations participate in regular employee evaluations, likely causing similar responses from those evaluated. If properly constructed, these evaluations have incredible potential to promote employee stability and growth rather than fluctuations in perceived feedback.

Limitations

This study was conducted at Georgia Southern University, meaning 62.5% of the student population falls between 18 and 21, less than 6% are residents outside the state of Georgia, and 59.9% of students identify as white (Stockwell, 2022). Consequently, the study's sample consists of primarily young white females and is not necessarily generalizable to those of more diverse backgrounds. Additionally, the participant pool is limited to undergraduate entry-level psychology courses, an optional elective for undergraduate majors outside of the psychology department. While some participants may be new to psychological theories, others may have prior knowledge of attachment theory through social or developmental psychology courses. Given the nature of the

survey materials, it is possible participants noticed themes of attachment theory and, therefore, introduced biases to their responses.

With any experiment, there are possible confounds that arise throughout procedural processes. For example, manipulation conditions of lower socioeconomic status will never truly simulate the lived experience of those who identify as lower SES. Residing in lower socioeconomic status introduces multiple opportunities for harm or emotional distress in many different ways; it would be impossible to operationalize the lower socioeconomic experience of an average individual. While involuntary job loss was one instance of operationalization, real-life lower SES individuals often have intersections of multiple experiences rather than just one.

Other limitations to the study include the duration of time allowed to collect data, as it directly impacts the sample size and, in turn, the provided power of the analysis. Data collection was to be stopped by a specific date; therefore, the minimal amount of participant data was likely unable to retain enough power for analysis with minimal error. Furthermore, participants' written responses were coded according to words generally associated with attachment themes, but this coding could potentially have a better definition of qualifiers. Coders were randomly assigned to statements, but the statements were only coded by one individual rather than more than one. Although there was training, coding still has the potential to be inconsistent with procedures for interrater reliability.

Directions for Future Research

While only one hypothesis was supported in this study, it is important to provide further empirical evidence for the impact of financial distress on adult state attachment behaviors. Given the results of the study, further exploration of the methodology with a larger sample size will prove useful. In particular, state attachment anxiety was not statistically significant following the

Bonferroni correction but showed the potential to retain the first and second hypotheses if further explored. With the interpretation from the supported hypothesis that individuals essentially avoid close others following unexpected termination, further research on what explicit avoidant attachment behaviors are present following job loss could provide insight into specific mechanisms associated with the increase of insecurity. Additionally, the methodology used for the job stability/instability manipulations have never been previously tested and likely needs further research into the best language for construct validity.

Attachment theory continues to expand into research throughout other cultures and would prove useful to explore similar themes of adult attachment and lower socioeconomic status. Given the extreme impact of poverty on daily life, growth opportunities, and emotional distress, continuing research in similar directions among countries impacted by high levels of poverty. Lower socioeconomic populations could benefit from these findings due to the implications of results on large-scale preventative measures and interventions, specifically from an attachment perspective. Whether these strategies are constructed with the purpose of changes to organizational leadership or governmental reform, exploring the impacts of lower socioeconomic status on attachment behaviors among adults could have monumental impacts.

Overall, this study needs further replication and exploration to understand the attachment insecurity that may be produced by financial difficulties. Spreading interest and knowledge on financial-specific environmental factors involved in the development or maintenance of insecure attachment is the next step toward anything productive or beneficial for strategies of application.

Conclusions

With the prevalence of lower socioeconomic status and its relationship with impairments in daily living, the current study aimed to explore the effect of financial difficulties on adult

attachment systems. Our methodology targeted unexpected financial instability through an involuntary job loss manipulation, as well as measuring both state and trait levels of attachment for thorough system detection. Trait attachment was not appropriate for short-term measurements of attachment systems; therefore, state attachment was measured to observe the direct impacts of financial difficulties on attachment levels. The study primarily rejected the initial hypotheses; however, analyses showed promise for the effects of lower socioeconomic status on adult attachment systems. Participants reported statistically significant state avoidant attachment when introduced to involuntary job loss, meaning sudden financial instability could impact the frequency of an individual's avoidant behaviors toward close others. Participants also reported statistically significant decreases in state secure attachment when introduced to the job loss condition, meaning individuals are likely to feel insecure towards close others following the termination of a job. As mentioned, further exploration is needed on the impact of lower socioeconomic status on adult attachment systems, whether trait or state measures are used, and would likely be extremely beneficial towards adult attachment maintenance and intervention research.

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APPENDIX A

Involuntary Job Loss

Imagine yourself in this scenario:

You have been happily employed for one year. One day, your direct supervisor pulls you aside at work to inform you that you are being terminated from your job, effective immediately. Your boss explains that times are tough, and you are being let go due to your lower quality of work performance. You are shocked that this is your last day with your work family.

Employee benefits will remain available until two weeks from the date of termination. With "reason for leaving previous employment" required on job applications, acquiring a new job is difficult. Housing expenses (i.e., rent, maintenance, and utilities) and living expenses (i.e., food, transportation, and clothing) are beginning to build up as time unemployed passes.

Thinking about the situation that you are in, write a description of what further difficulties or feelings you believe may present themselves in this position. Specifically, focus on potential changes in your behaviors, routines, or perceptions of your surroundings."

APPENDIX B

Job Stability Control

Imagine yourself in this scenario:

You have been happily employed for one year. One day, your direct supervisor pulls you aside at work to inform you that you are doing well at your job. Your boss explains that times are tough, and your quality of work performance is helping to keep your work environment stable. You are thankful to be surrounded by your work family, and think of all the different benefits of working at the company.

Housing expenses (i.e., rent, maintenance, and utilities) and living expenses (i.e., food, transportation, and clothing) are consistent; however, with your job stability, you rarely run into any financial difficulties.

Thinking about the situation that you are in, write a description of what feelings or changes you believe may present themselves in this position. Specifically, focus on any potential changes in your behaviors, routines, or perceptions of your surroundings.

APPENDIX C

Objective Socioeconomic Status

Please answer the following questions about your family background. Your responses will never be linked to your identity. Remember that you may leave blank any question that you do not feel comfortable answering.

1. Please rate your family or household income (whichever better applies) based on the following options:
    a. < $15,000
    b. $15,001–$25,000
    c. $25,001–$35,000
    d. $35,001–$50,000
    e. $50,001–$75,000
    f. $75,001–$100,000
    g. $100,001–$150,000
    h. $150,001–$200,000
    i. $200,001–$250,000
    j. > $250,000
2. Please rate how much of this income is readily available in times of need based on the following options:
    a. < 10%
    b. 11%–20%
    c. 21%–30%
    d. 31%–40%
    e. 41%–50%

f. 51%–60%

g. 61%–70%

h. 71%–80%

i. 81%–90%

j. 91%–100%

3. What is the highest level of education completed by your mother (or parent/guardian #1)?

    a. Some Grade School

    b. Some High School

    c. High School/GED

    d. Some College

    e. College Degree

    f. Graduate Degree

4. What is the highest level of education completed by your father (or parent/guardian #2)?

    a. Some Grade School

    b. Some High School

    c. High School/GED

    d. Some College

    e. College Degree

    f. Graduate Degree

    g. N/A – No second parent or guardian

APPENDIX D

Demographic Questionnaire

Please answer the following questions about your demographic background. Your responses will never be linked to your identity. Remember that you may leave blank any question you feel uncomfortable answering."

1. What is your current age (in years)?
2. What is your academic classification? (Please select one)
    a. Freshman
    b. Sophomore
    c. Junior
    d. Senior
    e. Other (please specify)
3. Which of the following best describes your current romantic relationship status? (Please select one)
    a. In a committed romantic relationship
    b. In a casual, non-committed romantic relationship
    c. Not in a romantic relationship
    d. Other (please describe)
4. Which of the following best describes your current employment status? (Please select one)
    a. Employed for Wage
    b. Self-Employed
    c. Out of Work but Looking
    d. Out of Work but **Not** Looking
    e. Military/ROTC
    f. Retired
    g. Unable to Work
    h. Other (please describe):

5. Which of the following best describes your racial/ethnic identity? (Please select one)
    a. African American or Black
    b. American Indian or Alaskan Native
    c. Asian or Pacific Islander
    d. White
    e. Multiracial (please specify)
    f. A race/ethnicity not listed (please specify)
6. Are you of Hispanic, Latino, or Spanish origin?
    a. No, not of Hispanic, Latino, or Spanish origin
    b. Yes, Mexican, Mexican American, Chicano
    c. Yes, Puerto Rican
    d. Yes, Cuban
    e. Yes, another Hispanic, Latino, or Spanish origin
7. Which of the following best describes your gender identity? (Please select one)
    a. Male
    b. Female
    c. Non-binary/Gender Fluid
    d. Transgender (please specify)
    e. Other gender identity (please specify)

APPENDIX E

Suspicion Check Question

In a sentence or two, what do you think is the purpose of this study?

APPENDIX F

IRB Approval

GEORGIA SOUTHERN UNIVERSITY
RESEARCH INTEGRITY

Institutional Review Board (IRB)
PO Box 8005 • STATESBORO, GA 30460
Phone: 912-478-5465
Fax: 912-478-0719
IRB@GeorgiaSouthern.edu

To: Jones, Loren

From: Georgia Southern Institutional Review Board

Amendment Approval Date: November 11, 2022

Current Expiration Date: Exempt

Original Approval Date: July 19, 2022

Subject: Status of **Modification Request** for Approval to Utilize Human Subjects in Research
Amendment #: **2**
Originally Approved By: **Exempt**

After a review of your Extension Request for the following research project, it appears that (1) the research subjects are at minimal risk, (2) appropriate safeguards are planned, and (3) the research activities involve only procedures which are allowable

Protocol #: **H23010**
Title: **Perceptions of Societal Experiences**
Maximum Number of Subjects: **175**

Therefore, as authorized in the Federal Policy for the Protection of Human Subjects, I am pleased to notify you that the Institutional Review Board has approved your extension and modification.

Modification Description:

I) Participants will complete a trait measure of relationship attachment, the ECR-R
2) The operationalization of the independent variable levels was changed. Participants will be randomly assigned to either imagine a lower socioeconomic status via the MacArthur Subjective Socioeconomic Status condition or by imagining an involuntaryjob loss or will be assigned to a control group that imagines a stable job.
3) Additional questions are included to better measure objective socioeconomic status levels
4) Additional questions about romantic relationship and job status were added to the demographics
5) The racial identity demographic question removed the option of Caucasian
6) Correction of the time required to complete the study and the number of survey materials involved on the Consent form.
7) Addition of local mental health services offered on a sliding scale as a resource for those seeking support on the Debriefing statement.
8) Addition of suspicion check question for participants to describe their perceived hypothesis ofthe study.

Please provide the IRB with any information concerning any significant adverse event, whether or not it is believed to be related to the study, within five working days of the event. In addition, if a change or modification of the approved methodology becomes necessary, you must notify the IRB Coordinator prior to initiating any such changes or modifications. At that time, an amended application for IRB approval may be submitted. Upon completion of your data collection, you are required to complete a Research Study Termination form to notify the IRB Coordinator, so your file may be closed.

APPENDIX I

Informed Consent

Perceptions of Societal Experiences

This study is being conducted by Loren Jones, an M.S. Experimental Psychology student under the supervision of Dr. Amy Hackney, Professor of Psychology.

The purpose of this study is to conduct a survey on perspectives of societal experiences. Participation in this research will include the completion of four short surveys and a basic demographics questionnaire. Data will be collected anonymously, such that no identifying information will be associated with the collected data. Completing the survey questions should take no more than 30 minutes, and you will receive 2.5 SONA credits for your participation.

There are no anticipated risks greater than risks associated with daily life experiences mentioned within the study. Possible risks include slight discomfort due to the content of some of the questions. If at any time you feel uncomfortable with continuing the study, you may withdraw your consent.

The anticipated benefits from this study include future social awareness and will allow you to potentially learn about the research process. The benefits to society include knowledge of perceptions of societal experiences.

Precautions will be taken in accordance with current Georgia Southern policies to reduce the risk of the spread of communicable diseases (including COVID-19). However, consenting to participate in this research indicates your acknowledgment of the risk of disease transmission. You also acknowledge your requirement to notify the researchers if you are symptomatic prior to or at the time of participation. Contact information and appointment information may be held by the researcher and provided to health officials for the purpose of contact tracing in the event the research team is notified of positive exposure to COVID-19. We encourage participants to wear a mask or face covering while participating in the research. The CDC has provided a COVID Data Tracker that records COVID cases and can provide a current transmission risk assessment by state and county.

Your name will never be connected to your responses on the questionnaires; instead, a timeslot will be used for identification purposes. Information that would make it possible to identify you or any other participant will never be included in any report or analysis. For this project, all information will be kept anonymous in a password-protected file on the computers of Loren Jones and Dr. Amy Hackney. Data will be stored for at least seven years. All data analysis will be conducted by Loren Jones under Dr. Hackney's supervision. No identifiable information about any participants will be kept for future use. Deidentified or coded data from this study may be placed in a publicly available repository for study validation and further research. You will not be identified by name in the data set or any reports using information obtained from this study, and your confidentiality as a participant in this study will remain secure. Subsequent uses of records and data will be subject to standard data use policies that protect individuals and institutions' anonymity.

Participants have the right to ask questions and have those questions answered. If you have questions about this study, please contact the researcher named above or the researcher's faculty advisor, whose contact information is located at the end of the informed consent. For questions concerning your rights as a research participant, contact Georgia Southern University Institutional Review Board at 912-478-5465 or irb@georgiasouthern.edu.

The validity of the results from the study could be affected if the purpose of the study is fully divulged to you prior to your participation; please understand that the entire purpose of the study cannot be explained to you at this time. You will have an opportunity to receive a complete explanation of the study's purpose following the end of data collection.
All participation in this study is voluntary. Upon completion of this study, you will be provided 2.5 SONA credits. Verified attendance of and participation in the in-person survey is required for compensation; however, you may still choose to end your participation in the study at any time and still receive compensation for attendance. You may end your participation by telling the experimenter, and you may decline to answer questions you do not want to answer.
You must be 18 years of age or older to consent to participate in this research study.

You may ask for a copy of this consent form to keep for your records.

This project has been reviewed and approved by the GS Institutional Review Board under tracking number H23010.

Title of Project: Perceptions of Societal Experiences

Principal Investigator: Loren Jones, lj02498@georgiasouthern.edu

Faculty Supervisor: Dr. Amy Hackney, ahackney@georgiasouthern.edu

Please select an option below to indicate whether you agree to participate in this research:

Select One

APPENDIX J

Debriefing Statement

We thank you for completing the questionnaires for this study. The study you just participated in was conducted for partial completion of a master's thesis, meaning that your responses are helping answer a vital research question. You were randomly asked to imagine a type of social situation and to answer questions about your relationship attitudes. Since we are still collecting data from other participants right now, we cannot tell you our hypotheses as that might affect the responses of future participants.

Would you like to be included on an email list to learn more about our study after completing data collection?

Select One

I want to remind you that all of your answers in the study will remain confidential and are not identifiable. SONA systems will email you within forty-eight hours to confirm completion and notify you of credits received.

Thank you for participating in this research. If answering these questions has evoked negative feelings and you feel you need to discuss these feelings, please contact one or more of the following:
Georgia Southern Counseling Center: 912-478-5541
National Suicide Prevention Hotline: 1-800-273-8255
Brave Tomorrow Counseling and Consulting: 912-225-3769
Georgia Southern Psychology Clinic: 912-478-1685

If you have any questions or concerns, please let the experimenter know. Thank you again for your participation.