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Attachment and Resilience: The Mediating Effect of Coping

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Attachment and Resilience: The Mediating Effect of Coping

A Thesis

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Requirements for the Degree of

Master of Science

By

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Abstract

This study explores the relationship between attachment security, coping strategies, and resilience among university students, focusing on the mediating role of problem-focused coping. We hypothesized that higher attachment security would be associated with greater resilience, that problem-focused coping would positively predict resilience, and that problem-focused coping would mediate the relationship between attachment security and resilience. A sample of 177 students completed measures of attachment security, coping strategies, and resilience. Mediation analysis revealed that higher attachment security significantly predicted resilience and problem-focused coping, while problem-focused coping also significantly predicted resilience. The indirect effect of attachment security on resilience through problem-focused coping was significant, indicating partial mediation. Interestingly, emotion-focused and avoidant coping also significantly predicted resilience, suggesting a complex interplay of coping strategies. These findings highlight the roles of different coping mechanisms in the context of attachment and resilience.

Keywords: attachment security, problem focused coping, resilience

Attachment and Resilience: The Mediating Effect of Coping Strategies

While stress levels in university students has been an ongoing discussion for years, the interaction of attachment styles and coping strategies might play an important role in understanding the contributing factors to higher stress levels and low psychological resilience, i.e., the ability to bounce back from adverse life experiences (Kaniasty et al., 2014).

Attachment is the biopsychological process where an infant develops a relationship with its caregiver. Depending on the responses of the caregiver to the child's emotional needs, the child forms either a secure attachment or an insecure attachment (anxious or avoidant), which plays a major role in their adult relationships. According to Bowlby (1979), children who develop a secure attachment view their caregivers as a safe base to explore the world and a comforting source when they are upset. Those with anxious attachment expect their caregivers to be inconsistent in offering comfort during distress. Meanwhile, children with avoidant attachment do not see their caregivers as a source of comfort whatsoever. These attachment styles formed during infancy and early childhood, translate into adult relationships as the source of comfort shifts from the parent/caregiver to a romantic partner.

Adult Attachment

According to Brumbaugh & Fraley (2006), there is abundant research that shows the global transfer of attachment from childhood to adult relationships, i.e., people apply the same attachment model to their partners, regardless of how similar they are to the person's caregiver. But there is also enough evidence to show that people apply the same attachment style towards partners who are more similar to their caregivers, showing specific transfer of attachment (Brumbaugh & Fraley, 2006). This specific transfer of attachment is supported by the notion that people are attracted to familiarity: people often choose partners that are similar to their caregiver,

in order to maintain familiarity. This behavior affects the way people experience love and relationships as adults. It further contributes to why people with secure attachment report their relationships being “happy, friendly and trusting” and feeling “able to accept and support their partner unconditionally”. On the other hand, people with anxious attachment report love being characterized by “obsession, desire for reciprocation and union, and emotional ups and downs, along with extreme sexual attraction and jealousy” and those with avoidant attachment report “fear of intimacy, emotional ups and downs, and jealousy (in the absence of sexual attraction)” (Hazan & Shaver, 1987).

As such, secure attachment is characterized by openness when it comes to sharing feelings and thoughts with others, as well as a willingness to accept assistance from others and to feel comfortable when others depend on them (Cassidy, 1994). According to Hazan & Shaver (1987), individuals with secure attachment find it relatively easy to get close to others and often do not worry about being abandoned. Cassidy (1994) states that individuals who have an anxious attachment crave connection but also worry about whether other romantic partners and close friends would satisfy their emotional needs. Hazan & Shaver (1987) explain that these individuals are reluctant to get as close to others as they would like because of the fear of abandonment and believe that their partner will not reciprocate their level of commitment or closeness. Lastly individuals with avoidant attachment tend to keep a distance between themselves and others in order to feel independent and avoid feeling vulnerable (Cassidy, 1994). According to Hazan & Shaver (1987), avoidant individuals feel uncomfortable being close to others, have difficulty trusting and depending on others and often find that their partners want them to be more intimate than they feel comfortable being.

Thus, secure attachment fosters the development of strong social support networks, not just through romantic partners but also through friends and close others. Securely attached individuals are more likely to seek and receive social support, which is a critical resource for resilience. Social support provides emotional comfort, practical assistance, and a sense of belonging, all of which buffer against stress and promote recovery (Mikulincer & Shaver, 2019, p. 235).

Attachment security is closely linked to emotional regulation, which involves the ability to manage and respond to emotional experiences in adaptive ways. It was found that “securely attached individuals tend to exhibit greater psychological well-being, including lower levels of anxiety and depression, and higher levels of life satisfaction and self-esteem” (Mikulincer & Shaver, 2019, p. 115). Feeney and Kirkpatrick (1996) showed that secure attachment has a generalized anxiety reducing tendency by measuring physiological arousal during a stressful task in the absence and presence of a partner. The results showed that anxious and avoidant individuals had increased levels of physiological arousal as compared to secure individuals while completing the task in the absence of their partners; but more interestingly, anxious and avoidant individuals continued to show increased anxiety, even in the presence of their partners (Feeney and Kirkpatrick, 1996). This further emphasizes the argument that individuals with insecure attachment believe that they cannot depend on their partner or friends for emotional support and demonstrates how secure attachment is positively correlated with emotional well-being.

Attachment security is also a protective factor against the development of various forms of psychopathology. Basal et al. (2020) discuss how secure attachment contributes to higher emotional well-being and better mental health, while on the other hand, insecure attachment is correlated with various mental disorders like depression and anxiety showing a strong link

between attachment styles and resilience. Thus, it is crucial to study the various contributors and factors involved in this relationship to develop strategies to promote higher psychological resilience.

With regards to students, attachment security is associated with better cognitive development and academic performance. According to Sroufe et al (2005, p. 234), securely attached children are more likely to explore their environment and engage in learning activities, leading to enhanced cognitive skills and academic achievements. Thus, students who have higher attachment security, perform better than those with lower attachment security.

Attachment and Resilience

Studies on Psychological Resilience in Cancer Patients found that participants with a secure attachment had significantly higher Resilience scores and responded better to their treatments as compared to participants with anxious and avoidant attachment styles (Basal et al., 2020). Kaniasty et al. (2014), discuss the impacts of attachment and resilience on stress in their book, emphasizing the positive correlation between secure attachment and resilience as well as their effect on the use of proactive coping strategies. They discuss how having a secure attachment leads to lower stress levels and higher resilience due to the use of problem-focused coping as compared to people with insecure attachment. This argument is also supported by Mikulincer & Shaver (2019, p. 135) as they state that "secure attachment fosters resilience by promoting effective emotion regulation and the development of a coherent self-concept".

Effective emotion regulation allows individuals to remain composed and functional during stressful situations, reducing the risk of emotional overwhelm and fostering a sense of control. This capacity to manage emotions constructively, significantly boosts resilience. Additionally, a coherent self-concept provides a stable internal foundation that enhances one's

ability to cope with adversity. It fosters self-confidence, self-efficacy, and a positive outlook, all of which are crucial for resilience. When faced with challenges, these individuals are more likely to draw on their inner strengths and seek support from others, promoting adaptive coping and recovery (Mikulincer & Shaver, 2019, p. 135).

Coping Strategies

One of the factors that plays a role in the relationship between attachment security and resilience is coping, which is defined as “an effort used to minimize distress associated with negative life experiences” (Buchanan, 2022). The different types of coping strategies are defined as: Problem-focused, comprising “active coping, use of informational support, planning, and positive reframing”, and Emotion-focused, which involves “venting, use of emotional support, humor, acceptance, self-blame, and religion” (Kural and Kovacs, 2021, Buchanan, 2022). Buchanan (2022) identifies a third type of coping known as Avoidant coping, which consists of “self-distraction, denial, substance use, and behavioral disengagement”. This study will use problem-focused coping to evaluate a possible mediation effect of coping on the relationship between attachment security and resilience.

Attachment and Coping

Komorowska-Pudło (2016) conducted a literature review of various studies examining the relationship between attachment styles and preferred coping strategies. Through her paper, she demonstrates that securely attached individuals adopt proactive problem-solving techniques and seek support from their loved ones when confronted with challenging circumstances. (Komorowska-Pudło, 2016, p. 577). Similarly, Mikulincer and Shaver (2003), in their research on Post Traumatic Stress Disorder found that people with a secure attachment style approach challenges constructively and seek out help when in need of emotional and practical support.

Later, they also found that “individuals with secure attachment are more likely to use problem-focused coping strategies because they trust their ability to influence their environment and manage stress” (Mikulincer & Shaver, 2019, p. 215). They view themselves as competent and capable of handling challenges and this trust in their capabilities makes them more likely to believe they can effectively address and solve problems, which leads to them using problem-focused coping strategies.

In a study about nurses, Franczak (2012) emphasized the link between insecure attachment and engaging in harmful and ineffective activities under challenging circumstances. Komorowska-Pudło (2016) states that people with anxious attachment style are “hypersensitive towards the problems encountered” (p. 577), “have increased susceptibility to stress” (p. 576) and “positively correlated with denial and both behavioral and mental withdrawal” (p. 577) among other characteristics that form emotion-focused coping strategies.

People with avoidant attachment styles develop defense mechanisms like denial (Komorowska-Pudło, 2016, p. 576) and tend to use alcohol, drugs, and other stimulants to avoid feeling vulnerable under stressful circumstances (Komorowska-Pudło, 2016, p. 577) which contribute to their inability to cope with stress in a healthy manner, lowering their resilience levels. However, some studies show that avoidant individuals report higher resilience than anticipated and suggested that since they choose not to cope, they do not report the effects of stress which causes them to report higher resilience scores.

Problem-focused coping and Resilience

According to Folkman & Moskowitz (2004, p. 760), effective coping strategies are crucial in managing stress and enhancing resilience, particularly in challenging academic and social environments which highlights the relevance of problem-focused coping for students.

Academic settings often have various stressors, including exams, deadlines, and social dynamics. Folkman & Moskowitz (2004, p. 754) explain that problem-focused coping is associated with better psychological outcomes because it involves taking active steps to remove stressors, thus reducing their impact. This proactive nature of problem-focused coping encourages individuals to directly address the sources of stress, leading to more effective stress management and better psychological outcomes. Students who adopt problem-focused coping strategies are likely to take constructive actions, such as seeking help, planning, and time management, which can alleviate stress and improve their resilience.

The goal of this study was to continue to understand the effects of attachment security on resilience as well as examine the mediation effect of coping strategies on attachment and resilience, specifically in university students. This study used a survey to measure self-reported attachment styles, preferred coping strategies and resilience in undergraduate freshmen, following which a mediation analysis was performed to test the following hypotheses.

Hypothesis I. Students with higher attachment security have higher resilience scores compared to those with lower attachment security.

Hypothesis II. Students with higher problem-focused coping scores have higher resilience scores.

Hypothesis III. Students with higher attachment security use problem-focused coping strategies, which makes them more resilient as compared to students with low attachment security.

Findings from the current study aim to highlight the importance of developing healthy coping mechanisms to be able to effectively cope with stress and boost resilience.

Method

Participants

205 undergraduate students from a large, Midwestern university participated in this online study. However, 28 students failed the attention check questions in the survey and were eliminated from the data analysis. The final sample size consisted of 177 participants (aged 18-24 years old, $M_{age} = 19.45$, $SD_{age} = 1.34$, 70.6% cisgender women, 26.0% cisgender men, 2.8% nonbinary, and 0.6% other). Participant race was as follows: 42.9% White or Caucasian, 23.2% Hispanic or Latino, 11.9% Asian, 9.6% Black or African American, 9.6% multiracial, and 2.8% other. Participants reported their relationship status as follows: single (61.0%), in a committed relationship (29.9%), or in a casual relationship (8.5%) and married (0.6%).

Subjects were recruited via the university subject-pool system. This study did not require any specific demographics, except that the participants be undergraduate students, which was confirmed by the subject-pool system through a pre-screening survey, to ensure they were eligible to participate in the study. In accordance with IRB requirements, all participants received information on the study procedure and provided informed consent prior to participating. Following the completion of all tasks, participants were debriefed and compensated accordingly. Previous study samples have ranged from 179 (Kural and Kovacs, 2021) to 384 (Basal et al., 2020) to show significant effects between attachment styles and resilience, which makes 177 participants a smaller than desired sample size to produce a significant effect.

Procedure

Participants signed up to participate in this study via the Intro-Psych Online Subject Pool-Sona System, where they read a brief description of the study procedure and completed a pre-screening survey to confirm eligibility. The study was presented as research on students'

experiences in close relationships and their experiences with stress. After they signed up, they were presented with the study survey comprising in randomized order, the attachment style scale (RAAS), coping strategies scale (Brief COPE), resilience scale (CD-RISC) and demographic questions.

Measures

Attachment Styles. The attachment style measure consisted of the 18 item Revised Adult Attachment Scale (RAAS) (Collins, 1996) measuring three adult attachment styles- “Secure”, “Anxious” and “Avoidant”. Items were scored on a 5-point Likert-type scale, where 1= Not at all characteristic of me, and 5= Very characteristic of me. Participants rated how they feel in close relationships, e.g., “I am comfortable depending on others”, “I find that people are never there when you need them”. See Appendix A for more details on the Revised Adult Attachment Scale.

Collins (2008) discusses the properties of the three subscales in the RAAS, namely, ‘Close’, ‘Depend’, and ‘Anxiety’. The ‘Close’ subscale measures the degree to which a person is comfortable being close and intimate in their relationships with other people. The ‘Depend’ subscale measures a person’s belief that he/she can depend on others to be there for them in times of need. The ‘Anxiety’ subscale measures how much and how often a person is worried that he/she will be rejected or unloved. Reverse scoring will be required for 7 items, following which the respective subscale means will be calculated (Collins, 2008). When reverse scored appropriately, high scores on the ‘Close’ and ‘Depend’ subscale indicate a Secure attachment style. Higher scores indicate a higher extent of attachment security, and lower scores indicate a lower level of attachment security.

In previous research on a modified version of the scale, “Confirmatory Factor Analysis (CFA) showed a good fit with three factor structure, ‘Close’, ‘Depend’ and ‘Anxiety’, with $\chi^2(128) = 1323.125$, CFI = 0.92; RMSEA = 0.06. Factor loadings ranged between 0.471 and 0.950. The Cronbach’s alpha values for RAAS subscales were 0.82 for Close, 0.78 for Depend and 0.85 for Anxiety” (Troisi et al., 2022, p. 609). The studies published were regarding adapted versions of the scale into different languages to study populations in different countries, but the original scale has very similar structural validity to all its translations.

Coping Strategies. The coping strategy measure consisted of the 28 item Brief COPE (Buchanan, 2022), measuring different strategies used to cope with a hardship in life. Items were scored on a 5-point Likert scale ranging from 1= I haven’t been doing this at all, to 5= I do this all the time. Participants were asked to answer statements about how they cope with stress. Statements are categorized into 3 subscales which assess the extent to which and how often the participant uses a specific coping strategy- problem-focused, emotion-focused, and avoidant coping, (e.g., “I’ve been taking action to try to make the situation better”, “I’ve been blaming myself for things that happened”) (Buchanan, 2022). The Brief COPE is originally scored on a 4-point Likert scale but was modified to a 5-point scale to capture more variability and match the scale of response for the other variables. See Appendix B for more details on the Brief COPE scale.

This scale contains three subscales, each measuring one of three coping strategies- Problem-focused, Emotion-focused, and Avoidant coping. Average scores from each subscale were calculated, and the average scores from the Problem-focused coping items were used as the mediator variable. High scores indicate the use of problem-focused coping, and low scores indicate use of other coping strategies (emotion-focused or avoidant coping). The Confirmatory

Factor Analysis (CFA) of the original Brief COPE with 28 items suggested “an acceptable model fit with RMSEA of 0.07 and GFI of 0.92 and Cronbach's alpha was 0.86” (Matsumoto et al., 2020, p. 377).

Resilience. The resilience measure consisted of the 25 item Connor-Davidson Resilience Scale (Davidson & Connor, 2003). Participants were asked to indicate their responses to statements about their resilience level. Items are statements which that highlight, within the past month, events or emotions that show how resilient the participant may have been (e.g., “I am able to adapt when changes occur”). Participants answer each item using a 5-point Likert Scale ranging from 0 (not true at all) to 4 (true nearly all of the time) (Davidson & Connor, 2003). See Appendix C for more details on the Connor-Davidson Resilience Scale.

Resilience Scores were averaged to one final score. Higher resilience is indicated by higher CD-RISC scores (Davidson & Connor, 2003). An Exploratory Factor Analysis (EFA) was performed in previous literature, showing a five-factor structure for the CD-RISC. A Confirmatory Factor Analysis (CFA) exhibited a good overall fit and, when compared to, a model with five factors from the original scale, was shown to be a superior fit. The constructors suggest that only a sum total score of the CD-RISC scale items should be computed to provide the most accurate results (Davidson & Connor, 2003).

Preprocessing

Three attention check questions were integrated into the survey for each of the three scales and data was excluded from analysis if the participant failed any of the attention checks. The attention check question was “Please rate 5 for this question” and if participant did not rate their answer as 5, their data was excluded from analysis. 205 students attempted the survey, however 28 failed the attention check questions and were eliminated from analysis, leaving the

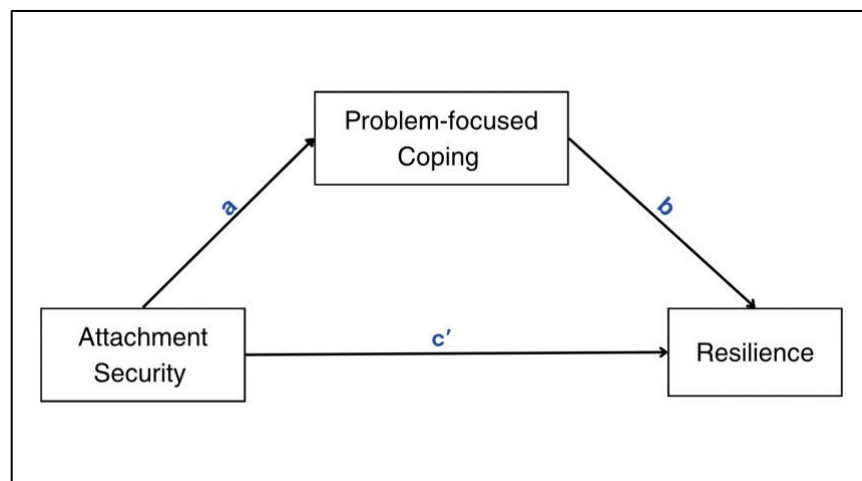
final sample size at 177 participants. The order in which different scales appear to each participant was also randomized.

Analysis

A mediation analysis was performed via simple linear regression using PROCESS macro in SPSS to examine the direct effect of attachment security on resilience and indirect effect of problem-focused coping on the relationship between attachment security and resilience. The mediation analyses was set up such that the independent variable was attachment security, problem-focused coping served as a mediator and the dependent variable was resilience. See Figure 1 for the path model and associations for the mediation analysis. Though the focus of this study was problem-focused coping, the relationships between attachment security, emotion-focused and avoidant coping and resilience were also analyzed and are further explained in the discussion of the results.

Figure 1

Path Model and Associations of Attachment Security, Problem-focused Coping and Resilience



Results

Higher attachment security was predicted to be significantly and positively related to Resilience. The mediation effect of problem-focused coping on secure attachment and resilience was predicted to be a significant, strong, positive effect. It was predicted that individuals with high attachment security use problem-focused coping strategies, which makes them more resilient as compared to people with low attachment security.

A mediation analysis was conducted to determine the extent to which problem-focused coping mediates the relationship between attachment security and resilience. Higher attachment security was found to significantly predict resilience [$B = .24, p < .01$], which is consistent with hypothesis I. Additionally, problem focused coping was found to significantly predict resilience [$B = .2095, p < .01$], which is consistent with hypothesis II.

Attachment security was found to significantly predict problem focused coping [$B = -.18, p < .05$], where low attachment security significantly predicted use of problem focused coping. The indirect effect of attachment security on resilience through problem focused coping was significant [Effect = $-.04$, 95% C.I. ($-.07, -.01$)]. This implies that attachment security influences resilience both directly and indirectly through problem-focused coping. Problem-focused coping alters the direction of the relationship between attachment security and resilience and suppresses the direct effect, thereby producing a suppression effect.

Exploratory analysis revealed that emotion-focused coping and avoidant coping significantly predicted resilience [$B = .24, p < .01$], [$B = .19, p < .01$]. Furthermore, attachment security was found to significantly predict avoidant coping [$B = -.27, p < .01$], where low attachment security significantly predicted greater use of avoidant coping. The indirect effect of attachment security on resilience through avoidant coping was significant [Effect = $-.04$, 95%

C.I. (-.09, -.01)]. Since attachment security influences resilience both directly and indirectly through avoidant coping, the results indicate that avoidant coping partially mediates the relationship between attachment security and resilience.

Discussion

The findings of this study highlight the significant role of attachment security in fostering resilience among students, supporting Hypothesis I. Higher attachment security positively predicted resilience, reflecting previous research that highlights the importance of secure attachment in promoting adaptive functioning and psychological well-being (Mikulincer & Shaver, 2019). This suggests that students who perceive their attachment figures (including parents, romantic partners or close friends) as reliable and supportive are more likely to develop strong coping mechanisms and are resilient in the face of adversity.

Hypothesis II was also supported, with problem-focused coping strategies emerging as a significant predictor of resilience. This aligns with existing literature indicating that “individuals who actively address stressors and seek practical solutions tend to exhibit higher levels of resilience” (Folkman & Moskowitz, 2004). The ability to engage in problem-focused coping allows students to manage stress more effectively, thus improving their overall resilience.

Interestingly, Hypothesis III was only partially supported. While attachment security was found to significantly predict the use of problem-focused coping strategies, the direction of the relationship was inverse, contrasting our initial expectation. Low attachment security directly predicted low resilience (direct effect). When mediated by problem-focused coping, low attachment security predicted high resilience (indirect effect). Specifically, lower attachment security was associated with higher use of problem-focused coping strategies. This unexpected finding suggests that students with lower attachment security may use more proactive coping

mechanisms as a strategy to reduce their perceived vulnerabilities and lack of support from attachment figures. The significant indirect effect of attachment security on resilience through problem-focused coping indicates a partial mediation, highlighting the complex interactions between attachment, coping strategies, and resilience.

The partial mediation effect suggests that while problem-focused coping partially explains the relationship between attachment security and resilience, other factors might also contribute to this relationship. It is possible that students with secure attachments have access to additional internal and external resources, such as emotional regulation skills, social support networks, and campus mental health initiatives (e.g., UCAPS) which also increases their resilience. These findings contribute to understanding how attachment security and coping strategies interact to influence resilience in students.

It was also interesting to find that emotion-focused coping and avoidant coping significantly predicted resilience. According to Compas et al (2001, p. 94), the effectiveness of coping strategies can be highly context dependent. In certain situations, emotion-focused or avoidant coping might be more appropriate or effective than problem-focused coping. For example, when dealing with uncontrollable stressors, these strategies can help individuals manage their emotional responses and maintain a psychological balance. Emotion-focused coping strategies, such as seeking emotional support, venting, or practicing relaxation techniques, can provide immediate relief from stress and emotional distress. This short-term relief can be crucial in maintaining mental well-being and preventing burnout, allowing individuals to regroup and eventually address stressors more effectively (Folkman & Moskowitz, 2004, p. 754).

Avoidant coping strategies, while often seen as maladaptive in the long term, can sometimes provide a necessary psychological break. By temporarily distancing themselves from stressors, individuals might gain the break needed to recover and recharge, which can increase their resilience (Holahan et al., 1996, p. 30). Additionally, individuals might use a combination of coping strategies. The collective effect of using both problem-focused and emotion-focused or avoidant coping can enhance overall resilience. While problem-focused coping addresses the stressor directly, emotion-focused and avoidant coping can manage the emotional effects, leading to a more balanced and effective coping response (Lazarus & Folkman, 1984, p. 163).

Furthermore, the indirect effect of attachment security on resilience through avoidant coping was significant, where individuals with low attachment security use avoidant coping strategies, which increases their resilience. Since attachment security significantly predicted resilience and avoidant coping was also found to significantly predict resilience, the results indicate that avoidant coping partially mediates the relationship between attachment security and resilience. These findings highlight the nuanced relationships between various coping strategies and resilience, wherein individuals low in attachment security may use problem focused or avoidant coping strategies to boost their resilience.

On the other hand, individuals with high attachment security have higher resilience irrespective of the coping strategies they use. These individuals also have better emotional regulation and can depend on their support network to help them through adverse situations (Mikulincer & Shaver, 2019, p. 135). According to Mikulincer & Shaver (2019, p. 287), "people with secure attachment are generally more flexible and adaptive in their coping strategies, potentially using avoidance as a temporary and strategic response". They may be able to use avoidance as a temporary strategy and revert to more adaptive coping strategies when necessary.

Limitations

A few limitations should be considered when interpreting the results of this study. The sample consisted primarily of students, which may limit the generalizability of the results to other populations. DePaul University is a mid-sized Midwestern University with a not very high diversity ratio, which limits the generality of this study to students in the United States. It is important to investigate whether the observed relationships remain the same across diverse demographic groups, including different age ranges, cultural backgrounds, and clinical populations. To improve the external validity of this study in future research, participants could be chosen at random and from different majors rather than just the psychology department.

Furthermore, relying on self-report measures may include response biases, such as social desirability or inaccurate self-assessment. The CD-RISC scale we used in the current study could produce a ceiling effect of resilience, leading to a limited understanding of the effects of attachment security and coping on overall psychological-wellbeing. Future studies could use measures of depression, academic performance and outcomes, academic continuity and other variables to provide a more thorough understanding of the relationship between attachment, coping and resilience. Incorporating multi-method approaches, including behavioral assessments and qualitative interviews, could improve the validity of the findings.

Future Directions

Future research should address the limitations outlined above and extend the current findings in several ways. Longitudinal studies would be needed to establish causal pathways and examine how changes in attachment security and coping strategies over time influence resilience. Experimental designs could also be used to test interventions aimed at enhancing attachment security and promoting adaptive coping strategies, thereby providing evidence for causal

relationships. The inverse relationship between attachment security and problem-focused coping calls for further exploration. It is possible that different coping strategies (emotion-focused coping, avoidant coping) interact with attachment in complex ways, requiring a more comprehensive examination of coping strategies in future studies.

This study would serve as a basis for research on older adults, since it is observed that adults change their attachment styles over the years, having gone through various defining experiences and relationships and adopting better coping mechanisms. Additionally, since previous studies in adult populations (Komorowska-Pudło, 2016, Mikulincer and Shaver, 2003, Mikulincer and Shaver, 2019) indicated that securely attached people use problem-focused coping and our study found that high attachment security did not predict problem focused coping strategies, it would be interesting to examine the circumstances under which problem-focused coping is preferred over other strategies. For instance, it might be possible that problem-focused coping is used more when the stressors are external (ex. job or academic responsibilities, delegating tasks, etc.) while emotion-focused or avoidant strategies are used when the stressors are internal (ex. relationships, trauma, etc.). Considering the high emotional fallout and cognitive load from internal stressors, individuals might prefer not to face the stressor and employ active coping, but rather use other forms of coping to regulate their emotions and prioritize other important tasks. Exploring the role of other coping strategies and their interaction with attachment security would offer a more comprehensive understanding of the mechanisms underlying resilience.

Additionally, examining the moderating effects of contextual factors, such as family dynamics, peer relationships, financial responsibilities and academic environments, could shed light on the conditions under which attachment security and coping strategies are most effective

in boosting resilience. Future studies should also explore the role of contextual variables like minority identities, and individualist vs collectivist cultures in the relationship between attachment, coping and resilience, as these variables could help explain the contexts in which a certain coping strategy is adopted over another.

Further research should also consider the biological and neuropsychological foundations of attachment, coping, and resilience. Investigating how physiological responses, such as stress reactivity and hormonal regulation, interact with psychological processes could provide deeper insights into the pathways linking attachment and resilience. This could also contribute to establishing precautionary measures to prevent the development of unhealthy coping strategies by finding ways to counteract the effects of attachment in infants.

Conclusion

This study highlights the important role of attachment security and problem-focused coping in promoting resilience among students. While the findings support the mediating role of problem-focused coping, the unexpected inverse relationship between attachment security and coping strategies suggests the need for further investigation. Addressing the limitations and exploring the outlined future directions will enhance our understanding of the complex dynamics between attachment, coping, and resilience, ultimately informing interventions to support students' adaptive functioning and psychological well-being.

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Appendix A

Revised Adult Attachment Styles (RAAS)

The following questions concern how you generally feel in important close relationships in your life. Think about your past and present relationships with people who have been especially important to you, such as family members, romantic partners, and close friends. Respond to each statement in terms of how you generally feel in these relationships.

Please use the scale below by placing a number between 1 and 5 in the space provided to the right of each statement.

	1-----	2-----	3-----	4-----	-----5
	Not at all				Very
	characteristic				characteristic
	of me				of me
1)	I find it relatively easy to get close to people.				_____
2)	I find it difficult to allow myself to depend on others.				_____
3)	I often worry that other people don't really love me.				_____
4)	I find that others are reluctant to get as close as I would like.				_____
5)	I am comfortable depending on others.				_____
6)	I don't worry about people getting too close to me.				_____
7)	I find that people are never there when you need them.				_____
8)	I am somewhat uncomfortable being close to others.				_____
9)	I often worry that other people won't want to stay with me.				_____
10)	When I show my feelings for others, I'm afraid they will not feel the same about me.				_____
11)	I often wonder whether other people really care about me.				_____
12)	I am comfortable developing close relationships with others.				_____
13)	I am uncomfortable when anyone gets too emotionally close to me.				_____
14)	I know that people will be there when I need them.				_____
15)	I want to get close to people, but I worry about being hurt.				_____
16)	I find it difficult to trust others completely.				_____
17)	People often want me to be emotionally closer than I feel comfortable being.				_____
18)	I am not sure that I can always depend on people to be there when I need them.				_____

Appendix B

Brief COPE

The following questions ask how you have sought to cope with stress or hardship in your life. Obviously, different people deal with things in different ways, but I'm interested in how you've tried to deal with things. Each item says something about a particular way of coping. I want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

Read the statements and indicate how much you have been using each coping style.

1= I haven't been doing this at all, 2 = A little bit, 3= A medium amount, 4= I've been doing this a lot, 5= I do this all the time

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real".
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I've been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I've been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I've been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.

Appendix C

Connor-Davidson Resilience Scale (CD-RISC)

On a scale of 0 - 4, please indicate how strongly you agree to the statements about yourself- 0 (not true at all) to 4 (true nearly all of the time):

1. I adapt when changes occur.
2. I have close and secure relationships
3. Sometimes fate or God helps me.
4. I can deal with whatever comes my way.
5. Past success gives confidence for new challenges.
6. I try to see humorous side of things.
7. Coping with stress make me stronger.
8. I tend to bounce back after illness or hardship.
9. I believe things happen for a reason.
10. I put forward my best effort no matter what
11. I can achieve my goals.
12. When things look hopeless, I don't give up.
13. I know where to find help.
14. Under pressure, I can focus and think clearly.
15. I prefer to take the lead in problem-solving.
16. I'm not easily discouraged by failure.
17. I think of myself as strong person
18. I am comfortable making unpopular or difficult decisions.
19. I can handle unpleasant feelings.
20. I have to act on hunch.
21. I have a strong sense of purpose in life.
22. I feel in control of my life.
23. I like challenges.
24. I work to attain goals.
25. I take pride in my achievements.