THE ASSOCIATION OF INSECURE ATTACHMENT ON PHYSICAL AND PSYCHOLOGICAL DATING ABUSE: A LONGITUDINAL STUDY ON YOUNG ADULT ROMANTIC RELATIONSHIPS DURING THE COVID-19 PANDEMIC

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ABSTRACT

The COVID-19 pandemic has significantly impacted the population's health and well-being. Specifically, young adults are vulnerable because they are susceptible to mental health disorders (Arnett et al., 2014). One area in particular that may affect mental health is romantic relationships. Previous literature has shown increased difficulties and conflict (Luetke et al., 2020), and increased withdrawal and hostility (Pietromonaco & Overall, 2022) in romantic relationships during the pandemic. These findings suggest that relationship functioning, such as attachment and dating abuse, may be impacted from COVID-19. Although literature has linked attachment and dating abuse, it is unclear how these are associated during times of stress, such as the pandemic. The current study sets out to examine how the COVID-19 pandemic may have altered young adult romantic relationships, specifically in the areas of romantic attachment and dating abuse. According to Bowlby's (1969) theory on attachment, attachment style should be stable over time. However, previous literature has shown that stressful life events may be predictors of attachment instability (McConnel & Moss, 2011). Further research has shown that dating abuse perpetration and subsequent victimization has increased during the pandemic (Agüero, 2021, Lyons & Brewer, 2021). The present study aimed to examine the stability of attachment (anxious and avoidant) and physical and

psychological dating abuse during times of stress due to the COVID-19 pandemic, while also exploring the association between the changes of attachment and dating abuse.

Results showed that avoidant attachment was stable across waves, however anxious attachment had small stability. Additionally, results showed that physical dating abuse perpetration and victimization had medium stability from wave 1 and 2. Lastly, psychological dating abuse perpetration had medium stability, while victimization had small stability. Further findings demonstrated that only the changes in anxious attachment significantly predicted the changes in physical dating abuse victimization. These results suggest that future interventions should focus on coping with increased stress while also accounting for attachment related behaviors. Interventions should aim to increase attachment security as a way to decrease conflict in a relationship.

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CHAPTER I

INTRODUCTION

The COVID-19 pandemic is likely to have long-lasting effects on the global population's health and well-being. Stay-at-home orders were put in place to reduce the spread of the coronavirus. Although these orders were enforced to protect physical health, they may have caused economic hardships, such as job loss and increased financial difficulties (Lu & Lin, 2021; Tull et al., 2020). These uncertainties during stay-at-home orders and lockdown also related to psychological distress and negatively impacted mental health (Timming et al., 2021). Many people could not see loved ones and were confined at home due to the risk of infection. As a result of social distancing, quarantines, and stay-at-home orders, many individuals reported increased feelings of loneliness and isolation (Ernst et al., 2022), which severely impacted mental health (Hwang et al., 2020). For example, research indicated a higher prevalence of adverse psychiatric symptoms since the pandemic (Xiong et al., 2020) with higher levels of depression, anxiety, post-traumatic stress disorder (PTSD), and stress (Salari et al., 2020). The extent of the impact on mental health due to the pandemic is still unknown; however, it is anticipated that the effects will be severe and long-standing (Gavin et al., 2020).

Young adults have been particularly affected by the COVID-19 pandemic, with many reporting emotional distress (Emery et al., 2021). Given that young adulthood is a time filled with developmental changes and transitions, young adults can be more susceptible to mental health disorders, with this true even before the pandemic (Arnett et al., 2014). Pre-pandemic research showed that young adults under the age of 25 typically reported elevated levels of loneliness and feelings of isolation compared to older adults (Domagala-Krecioch & Majerek, 2013). The COVID-19 pandemic may have only exacerbated symptoms of mental health disorders and feelings of loneliness. For example, Liu et al. (2020) found that young adults, ages 18-30, had elevated levels of anxiety, depression, and PTSD symptoms, resulting in high loneliness and a low tolerance for distress during the pandemic lockdown. Another study also found that groups below the age of 40, women, and student populations were at increased risk for psychiatric symptoms during the pandemic (Xiong et al., 2020). Therefore, young adult populations may be one of the most vulnerable populations during the COVID-19 pandemic due to their susceptibility to mental health disorders during a developmental period commonly full of stress and transitions.

One of the most relevant transitions during young adulthood that may impact mental health relates to the area of romantic relationships (Arnett et al., 2014). Within this developmental period, dating relationships begin to shift to more serious commitments (Arnett, 2000). The quality and stability of romantic relationships may have led to detrimental mental health challenges during the COVID-19 pandemic. It is important to understand how COVID-19 may affect romantic relationships, as economic standing, social health, and mental health are all interconnected with the relationship

functioning of a couple (Pietromonaco & Overall, 2021). One study, in particular, found that many romantic relationships experienced increased difficulties and conflict and decreased intimacy since the beginning of the pandemic (Luetke et al., 2020). Given the stress of the pandemic, couples may have had greater difficulties in effectively communicating during conflict which may have resulted in increased withdrawal and hostility within the couple (Pietromonaco & Overall, 2022). Couples may have also found providing support to their partners more difficult during COVID (Pietromonaco & Overall, 2021). These findings suggest that some areas of relationship functioning, such as romantic attachment and dating abuse, may need a closer examination during COVID-19. Although previous literature has examined the link between attachment and dating abuse, it is unclear how these relate during times of stress and mental health challenges, such as the COVID-19 pandemic. Therefore, this study seeks to address this gap in the literature to examine how COVID-19 may have altered young adult romantic relationships, specifically romantic attachment, dating abuse and the association between the two.

Attachment Style

Attachment style refers to a person's way of relating and bonding with a close emotional figure (Levy et al., 2011). The theory of attachment posits that people are prone to making emotional bonds with important figures during infancy and early childhood. Infants seek support, proximity and security from individuals who provide care, and these individuals are referred to as attachment figures (Kammrath et al., 2020). Ideally, these figures are responsive and emotionally available (Bowlby, 1969), as well as caring and affectionate (Ainsworth, 1989). Early in life, an individual should feel secure

to explore the world and feel as though their attachment figure is a safe haven for comfort during times of distress (Levy et al., 2011). Typically, these attachments begin with parents and caregivers during infancy and early childhood (Seibert & Kerns, 2009), however, attachment figures begin to shift during middle childhood when new peer relationships form (Mayseless, 2005). During adolescence, attachment is transferred onto friends (Nickerson & Nagle, 2005) and then shifts to romantic partners during young adulthood (Bowlby, 1969; Hazan & Shaver, 1987). Early attachment typically remains stable into older ages, and individuals usually have the same type of attachment throughout their lifetime.

Attachment has been classified in numerous ways and evolved over time. Initially, Ainsworth (1985) classified three different types of attachment during infancy: secure, insecure/anxious, and insecure/avoidant. These attachment styles were classified using parent-child interactions which were referred to as the Strange Situation procedure, which separate children and parents and observed the child's reactions (Ainsworth et al., 1978). Children with avoidant attachment distanced themselves from their parents when separated, ignored their parents, and refused to be in close proximity when they returned. Those with anxious attachment exhibited high distress when separated from their parents. When their parents returned, these individuals sought out contact from them, but they remained highly distressed. Children who were securely attached showed some distress when separated, but also sought out proximity to their parent when they returned.

The attachment styles that emerge in childhood help to develop internal working models of attachment (Bowlby, 1973). These internal working models shift into romantic attachment when a romantic bond is formed (Shaver et al., 1996). Hazan & Shaver

(1987) first conceptualized romantic attachment and found that those with secure attachment described their relationship as happy, trusting, and supportive. Securely attached individuals also exhibit healthy behaviors, such as being able to have reciprocal relationships, and can be both independent and codependent (Simmons et al., 2009). Anxious attachment can be characterized by the fear of abandonment and rejection, including unhealthy obsessions and preoccupation with the relationship (Brennan et al., 1998). Those with anxious attachment described their relationship as filled with extremes across jealousy, sexual attraction, and emotion, as well as a desire for these feelings to be reciprocated (Hazan & Shaver, 1987). Avoidant attachment involves discomfort with being close and evasion of intimacy (Brennan et al., 1998). Those who are avoidantly attached described that the relationship as filled with high emotions and jealousy and feared being intimate with their partner (Hazan & Shaver, 1987).

However, research has criticized these attachment styles as only classifying some of the population resulting in researchers expanding on other styles or observations of attachment. For example, Bartholomew & Horowitz (1991) proposed an alternative model of attachment styles such that anxious and avoidant attachment are dimensional, rather than categorical. For instance, if an individual has both low anxious and avoidant attachment behavior, then they have securely attached. In contrast, if an individual has high anxious and low avoidant attachment behavior, then they would be considered preoccupied.

Bowlby's (1969) theory suggests that attachment styles (or behaviors) should be relatively stable across the lifespan and should increase in resistance to change as one develops. Previous studies have suggested that change in attachment style is uncommon

(Fraley et al., 2011), meaning the attachment style one has during early childhood follows one throughout one's life and remains stable. For example, Waters et al. (2003) conducted a longitudinal study that compared attachment styles (i.e., secure or insecure attachment) of participants from infancy to adulthood. Individuals first participated when they were 12 months old and then were recontacted twenty years later. Findings showed that 72% of participants had the same type of attachment style after 20 years. Furthermore, another study showed that 70% of participants have stable attachment styles over time (Baldwin & Fehr, 1995; Kirkpatrick & Hazan, 1994). Although 70% is generally considered to indicate medium stability, some researchers have argued that it is not indicative of stability (Davila et al., 1997). Research has shown that predictors of attachment instability include depressive symptoms, and negative life events such as losing a loved one and stressful life events (McConnel & Moss, 2011). As such, stressful life events, such as the COVID pandemic, may reduce security and increase negative interactions with a partner, thus altering attachment styles/behavior (Varga et al., 2014).

Current literature has not examined the stability of romantic attachment behaviors during times of stress, particularly during a development period (i.e., emerging adulthood) inherently full of stress and transitions. During times of internal distress, those who are anxiously attached view their relationship with their partner as more negative and change their behavior in ways that are dysfunctional and could potentially damage their relationship (Simpson & Rholes, 2017). Further, those who are avoidantly attached may cognitively, emotionally, and behaviorally disengage from their partner during times of internal distress. On the other hand, during times of external stress, anxiously attached individuals feel less close to their partners (Simpson et al., 1992), while avoidantly

attached individuals seek less support and comfort from their partners (Simpson et al., 1999). More securely attached individuals behave in an opposite manner and think, feel, and behave in constructive ways during times of stress (Simpson & Rholes, 2017). Since COVID-19 has induced external stress on the population due to fear of infection, concerns with the health of others, reduced social contact, and economic insecurity (Daly & Robinson, 2021), it would be expected that those who exhibit more insecurely attached behaviors would also behave in more negative and dysfunctional ways in their romantic relationships due to stress, thus perhaps increasing levels of poor attachment style. Although the stress of COVID-19 might increase behaviors indicative of poor attachment styles, it would be anticipated that the type of attachment would remain the same. This research examines the theory of attachment within a period of high stress to further test this and determine if this pattern is evident.

Dating Abuse

Dating abuse (also referred to as intimate partner violence or dating violence) is a serious public health concern that is preventable. According to the Centers for Disease Control and Prevention (CDC, 2021), dating abuse refers to aggression in a romantic relationship with a current or former dating partner either in person or electronically. Dating abuse includes behaviors of physical, psychological, and sexual violence, as well as stalking. Lifetime statistics show that dating abuse occurs early in life with 7 in 10 women and almost 6 in 10 men experiencing forms of physical violence, sexual violence, and/or stalking before the age of 25 (Smith et al., 2018). Dating abuse reaches its peak in early twenties with young adult women perpetrating abuse more and then increased perpetration by men in later twenties (Johnson, et al., 2015).

There are two primary forms of dating abuse: victimization and perpetration. These forms differ based on who receives (i.e., victims) and who inflicts the abuse (i.e., perpetrators). Victims are likely to suffer from adverse mental health outcomes, the most prominent being depression, anxiety, and PTSD (Lagdon et al., 2014). Victims are also more likely to engage in risk behaviors such as alcohol and drug abuse (Ulloa & Hammett, 2016) and are likely to be re-victimized in the future (Kuijpers et al., 2012). Research shows that victims who experience more severe or longer durations of abuse recover less quickly and have more difficulty in daily life functioning (Warshaw et al., 2013). On the other hand, some predictors of dating abuse perpetration are heightened and internalized negative emotions and anger (Birkley & Eckhardt, 2015), and childhood exposure to violence (Stith et al., 2000). Perpetrators are also likely to have lower well-being, such as low self-esteem and depression (Anderson, 2002). Given these related consequences, both victimization and perpetration are important to examine among young adults.

The two most prevalent types of dating abuse are psychological abuse and physical abuse (World Health Organization, 2017). Physical abuse can be defined as the intention to use or use of physical force to potentially cause harm, injury, or death. Physical behaviors can include hitting, choking, shoving, and use of a weapon. Psychological abuse (also known as emotional abuse) involves the use of non-verbal or verbal communication that has the intention to emotionally or mentally harm or exert control over the partner. Psychological behaviors can include name-calling, coercion, threatening, exploitation, and gaslighting (Breiding et al., 2015). Gendered stereotypes usually surround physical abuse, with beliefs that men are perpetrators and women are

victims. However, research has shown that women report perpetrating physical abuse in slightly higher rates than men, particularly during young adulthood, but physical abuse perpetrated by men is more likely to result in injury or death (Archer, 2000; Johnson et al., 2015). Psychological abuse is more prevalent in dating relationships (Ureña et al., 2015) and is more emotionally damaging compared to other forms of relationship abuse (Follingstad et al., 1990). Further, psychological abuse in dating relationships has been shown to predict physical abuse later into the relationship (O'Leary et al., 1994). Nevertheless, both types of dating abuse are salient and result in negative outcomes for both involved parties.

Previous evidence suggests that dating abuse perpetration, and subsequently victimization, increases during stressful life events (Chen & Foshee, 2015), such as the economic downturn during the Great Recession financial crisis in the late 2010s (Schneider et al., 2016) and previous epidemics like the outbreak of Ebola in West Africa (Roesch et al., 2020). The idea that violence increases in times of stress is rooted in psychological theories such as the frustration-aggression hypothesis (Berkowitz, 1989) and the sociological theory of general strain (Agnew & Raskin White, 1992). Berkowitz's (1989) frustration-aggression hypothesis posits that stressful events lead to negative emotions and increase the chance of aggression, especially when the event is uncontrollable, such as the nature of the COVID-19 pandemic. In these circumstances, aggression can result in displacing the aggression, resulting in frustration or anger enacted toward an innocent target, such as a partner (Denson et al., 2006). An example of displaced aggression includes a significant other insulting their partner for no reason after losing their job due to COVID-19 shutdown. Similarly, general strain theory states that

stressful events, such as the COVID pandemic, may also cause negative emotions, such as anger and disappointment, that cannot be regulated (Agnew & Raskin White, 1992). The response to these emotions can turn to violence, such as dating abuse.

These theories can be applied to the context of dating abuse during the COVID-19 pandemic if the pandemic is conceptualized as a major stressor. The pandemic drastically altered daily behavior and significantly impacted the social, economic, physical, and mental well-being of individuals (Park et al., 2020). Recent research has shown that dating abuse increased during the pandemic (Agüero, 2021, Lyons & Brewer, 2021). Agüero (2021) discovered increased rates of call line requests to domestic violence help lines in Peru. Call lines rates were collected from January 2007 to July of 2020. Results showed that call lines were highest during July 2020 followed by June and then May of the same year. In another example, Lyons & Brewer (2021) examined Reddit discussion forum posts of victims of dating abuse from March to May 2020. Posts, mainly written by women, showed four major themes: 1) Weaponizing COVID-19 by perpetrators, 2) Intimate partner violence service disruption, 3) Increased preparation to leave partners/homes due to abuse, and 4) Discussion of factors increasing abuse and distress, such as financial stress and increased time togethers. The forum posts indicated that dating abuse was exacerbated due to stressors related to COVID-19. Notably, nobody reported a decrease in frequency or severity of abuse during that time.

The spike in dating abuse may also be explained by the stay-at-home orders, as these orders required individuals to work from home, attend school virtually, or remain in close confines with partners. The stay-at-home orders caused partners to be together for significantly longer periods of time which may have led to strains on the relationship,

interpersonal tension, and relationship stress. Although the orders were created as a safety precaution to prevent the COVID-19 virus from spreading, these orders also meant that victims of dating abuse were confined with their perpetrators. In line with this, Schokkenbroek et al. (2021) examined perceived romantic relationship stress before and during the COVID-19 lockdown. Results showed that both men and women felt more stress during the lockdown because they felt restricted in their romantic relationships due to limited escape and limited social interactions with others beside their partners. However, women perceived more relationship stress due to increased conflict. There was a significant decrease in demands for resources (e.g., domestic violence hotlines) during lockdown, as victims remained near their abuser but could not safely connect with these services as they were closed, unavailable, or unsafe to access (Evans et al., 2020). Therefore, this current research attempts to explore how the COVID-19 pandemic has affected romantic relationships, specifically in the context of dating abuse. It is anticipated that dating abuse perpetration and subsequent victimization has increased during the pandemic.

Attachment Style and Dating Abuse

Certain attachment styles have been associated with adverse dating relationship outcomes, such as dating abuse. Previous literature provides results that both anxious and avoidant attachment are linked to both dating abuse victimization (Capaldi et al., 2012) and perpetration (Miga et al., 2010). Therefore, it is unclear what types of attachment styles are more prone to engage in dating abuse perpetration or victimization. However, some clues from the literature can be found. For example, Henderson et al. (2005) explored how attachment and dating abuse were related through telephone surveys and

attachment interviews. Results indicated that specific attachment behaviors, such as higher anxious attachment, predicted dating abuse perpetration and victimization. Notably, those with anxious attachment are fearful of rejection, show increased insecurities and display a greater need for intimacy, which may explain this association (Rholes & Simpson, 2004). Thus, individuals with anxious attachment may utilize abusive behaviors towards their partners to preserve the relationship (Mayseless, 1991). In a two-part study conducted by Campbell et al. (2005), participants were asked to complete diary entries pertaining to their relationship conflict for two weeks and then were videotaped discussing the conflicts with their partners. During the videotaped portion, those with anxious attachment had higher levels of distress, intensified emotions, greater use of negative conflict resolution, and greater use of coercive and controlling behaviors during relationship conflict. Other studies found that those who have experienced dating abuse often had higher levels of anxious attachment (Bonache et al., 2019; Henderson et al., 1997). These findings could indicate that those with anxious attachment may have difficulty leaving abusive relationships due to fear of loss and separation anxiety. Anxious attachment has also been linked to both physical and psychological dating abuse perpetration (Barbaro & Shackelford, 2019; Bookwala & Zdaniuk, 1998; Goncy & van Dulmen, 2016; Roberts & Noller, 1998). These studies examined the associations of anxious attachment with dating abuse perpetration from a cross-sectional perspective. This research will attempt to improve this limitation by using a longitudinal design while also incorporating a stressor, the COVID-19 pandemic.

Previous literature is unclear on whether those who are avoidantly attached are more likely to be victims or perpetrators of dating abuse. Those with avoidant attachment are

described as independent, likely to suppress feelings, and avoidant of intimacy with a partner (Li & Chan, 2012). These characteristics may lead to emotional detachment, reduced affection, and a superficial connection to one's partner (Mikulincer & Shaver, 2003). A partner who is avoidantly attached may tolerate more abusive behaviors towards them to maintain distance from their partner. For example, a meta-analysis conducted by Stefania et al. (2021) found that regardless of the type of dating abuse, the relationship between avoidant attachment and dating abuse victimization was significant. They argued that it is likely that the avoidance of intimacy and emotions leads to the development of problematic romantic relationships and increased tolerance to relationship dysfunction. In a longitudinal study conducted by Kuijpers et al. (2005), female participants were recruited from victim support services and completed questionnaires pertaining to abuse at three different time points across six months. Results found that women who were abused were more likely to be avoidantly attached, and were more likely to be revictimized, both physically and psychologically. This could suggest that if one individual is withdrawn (i.e., avoidantly attached), then their partner may utilize both physical and psychological abusive behaviors towards them. Conversely, a previous study conducted by Spencer et al. (2021) found that avoidant attachment was associated with dating abuse perpetration in both men and women. Previous literature theorized that individuals with avoidant attachment perpetrate dating abuse, so their partner does not get intimate or close to them (Mayseless, 1991). As a result, the current literature offers evidence that avoidant attachment relates to both victimization and perpetration.

Current literature offers varying results on how attachment style plays a role in both dating abuse perpetration and victimization. Prior research has linked both types of

insecure attachment (i.e., anxious and avoidant) to victimization and perpetration. This research will attempt to clarify the relationship between insecure attachment styles and dating abuse.

CHAPTER II

CURRENT STUDY

The current study will use secondary data analysis of a two-wave study consisting of romantic young adult dating couples. These waves are distinguished by the COVID-19 pandemic. Wave 1 data were collected prior to the pandemic (before March 2020), and wave 2 data were collected nearly two years after the start of the COVID pandemic during a surge of a variant (December 2021 and January 2022). Previous literature has examined how stress plays a role in behaviors surrounding attachment and dating abuse. However, less is known about the stability of these behaviors (e.g., attachment, dating abuse) during a period of instability. Although attachment is thought to be static throughout one's life (Bowlby, 1969), previous literature suggests that negative and stressful life events may be predictors of attachment instability (McConnel & Moss, 2011). Therefore, the first aim of this study is to examine the stability of attachment behavior through two continuums, anxious attachment and avoidant attachment, in the course of a stressful life event (COVID-19) during a key developmental period (young adulthood) (Aim 1). The second aim of this study will be to examine the change in dating abuse. Given the stress of the pandemic and the potential to be nearer one's partner due to the stay-at-home orders and quarantine experiences, I expect that dating abuse

perpetration and subsequent victimization have increased from wave 1 to wave 2 (Aim 2). Further, current literature has not examined how insecure attachment and dating abuse are associated during times of stress, specifically in the context of the COVID-19 pandemic. Therefore, I will explore the role of attachment on dating abuse (Aim 3). Specifically, I will examine if the change insecure attachment (i.e., avoidant attachment, anxious attachment) at wave 1 will predict the change in physical and psychological dating abuse perpetration (Aim 3a) and change in physical and psychological dating abuse victimization (Aim 3b) at wave 2.

CHAPTER III

METHOD

Procedure

Wave 1

Prior to the COVID-19 pandemic (i.e., before March 2020), data were collected from 49 young adult couples (98 individuals). The requirements for participation consisted of couples being in a dating relationship for at least 1 month, with both individuals between the ages of 18-30. Further, both individuals had to agree to participate in the study. If a couple met the requirements, the research team scheduled a time for the couple to complete the in-person study. During the in-person study, trained research assistants first obtained consent for the study. Participants also completed recontact forms and indicated whether they would like to be contacted for future studies. Participants created their own identification numbers by using the first initial of their first name, last letter of their last name, and the last two numbers of their phone number and social security number. These identifications numbers could be used in future follow-up studies to link participant data. Following consent, individuals then completed an individual semi-structured interview, self-report measures on a tablet, and a video-recorded structured observational couple task. Only data from the self-report measures are used for this study. Each participant was compensated with $25 for their time. After

the couple completed their tasks, they were debriefed and provided with local and national resources. Prior to the collection of data, IRB approval was obtained.

Wave 2

Individuals who indicated an interest in future studies from wave 1 were recontacted to complete a self-report online survey regarding the COVID-19 pandemic (*N* = 13 couples; 42 individuals; 56% White, 8% Biracial, 4% Latinx; 65% Heterosexual, 10% Bisexual, 4% Pansexual; 85% Full-time students; 44% Full-time employee). Wave 2 only involved an online survey hosted on Qualtrics and included abbreviated measures of many of the original measures from wave 1, as well as additional COVID specific measures. One hundred percent of those who participated in wave 1 consented to be recontacted for future studies. Therefore, all participants were invited to participate in wave 2; however only 46 of the original 98 participants completed wave 2 (47% of wave 1 sample). Participants who provided an email were sent a direct link to the study to participate. Other participants were contacted by phone or text based on their indicated preference at wave 1. We re-contacted participants up to a total of three times to invite them to participate in wave 2. Using the identification number created in wave 1, data were linked across waves. Those that participated in wave 2 received a $25 gift card as a thank you.

Measures

Demographics *(Waves 1 and 2) (Appendix A and B).* Demographic information was obtained in wave 1 using a 14-item measure that asked about age, gender identity, ethnicity, education status, work status, living situation, number of prior romantic relationships, sexual orientation, and social media use. Demographic information was

obtained in wave 2 using a 21-item measure that evaluated the same demographics in wave 1 as well as political affiliations and change in employment due to COVID-19. Demographic information was used to describe the sample.

Romantic Attachment *(Waves 1 and 2) (Appendix C and D).* The Experiences in Close Relationship-Revised measure (ECR-R) was used to measure attachment in romantic relationships at wave 1 (Fraley & Brennan, 2000). To reduce participant fatigue, a shortened version of The Experiences in Close Relationship (ECR-S) was used in wave 2 (Wei et al., 2007). Both instruments include two subscales: attachment-related avoidance scale and attachment-related anxiety scale. For each item, respondents were asked how closely the items reflect how they feel in an intimate relationship. Respondents rated each item on a 7-point Likert scale, from 1 (*strongly disagree*) to 7 (*strongly agree*). Examples of items include "I worry that romantic partners won't care about me as much as I care about them" and **"**I am nervous when partners get too close to me". Corresponding items in each subscale were averaged to create scores for attachment-related avoidance and attached-related anxiety for both wave 1 and wave 2. Wei et al. (2007) demonstrated that the subscales from the original ECR and the ECR-S were not statistically different from each other, indicating that the ECR-S is an appropriate short version of original ECR. Both the ECR-R and the ECR-S show high internal consistency for both subscales and sufficient construct validity (Fraley et al, 2000; Wei et al., 2007). In this sample, the ECR-R showed acceptable reliability for the anxious attachment subscale at wave 1 ($\alpha = .94$) and wave 2 ($\alpha = .76$), and for the avoidant attachment subscale at wave 1 ($\alpha = .93$) and wave 2 ($\alpha = .74$).

Dating Abuse ***(Waves 1 and 2) (Appendix E and F).*** The Conflict in Adolescent Dating Relationship Inventory (CADRI) was used to assess abusive behaviors in dating relationships in wave 1 (Wolfe et al., 2001). A shortened version of the Conflict in Adolescent Dating Relationship Inventory (CADRI-S) was used in wave 2 (Fernández-González et al., 2012). Only the items that were included in both waves were used in this study. Both the CADRI and CADRI-S assess components of dating abuse, including physical abuse, threatening behaviors, sexual abuse, relational aggression and emotional and verbal abuse. These subscales are further broken down into perpetration and victimization. This study will only be using two subscales, physical abuse and emotional and verbal abuse, for both perpetration and victimization to produce four different scores. For each item, respondents were asked to rate the frequency of each behavior in a dating relationship in the past year for each item on a 4-point Likert scale from 1 (*never happens)* to 4 (*6 or more conflicts*). Example items include "I spoke to (her/him/them) in a hostile or mean tone of voice" and "(She/He/They) kicked, hit, or punched me". The scores for each subscale will be averaged, with higher scores indicating greater frequencies of victimization or perpetration. Fernández-González et al. (2012) supported high internal consistency (α = .85) and indicated good convergent, predictive, and concurrent validity for the CADRI-S when compared with the CADRI. In this sample, the CADRI showed acceptable internal consistency for emotional dating abuse perpetration (α = .85) and victimization (α = .82) at wave 1, but emotional dating abuse perpetration (α = .57) and victimization (α = .68) had poor internal consistency at wave 2. Physical dating abuse perpetration (α = .84) and victimization (α = .78) had acceptable

internal consistency at wave 1, however, internal consistency for physical dating abuse perpetration and victimization at wave 2 was zero due to no variance in the data.

Data Analysis Plan

Descriptive Analysis. Prior to hypothesis testing, preliminary analyses were run using SPSS v. 28. Prior to aim examination, the dataset was cleaned and investigated for assumptions of normality and checked for outliers. Physical dating abuse perpetration and victimization were positively skewed based on criteria of skewness being less than or equal to two and kurtosis less than or equal to seven (Hahs-Vaughn, 2017). However, no outliers were present for any study variable. To assess if individual scores on the study variables changed from wave 1 to wave 2, a reliable change index was computed. A reliable change index (RCI) is a psychometric criterion which assesses if an individual change score is significantly different from no change (Guhn et al., 2014). To compute an RCI score for each individual, the formula used was

$$RCI = \frac{(W2-W1)}{SEW1+SEW2-2(COV)}.$$

The numerator represents the observed difference between the two scores (Wave 2 score minus Wave 1 score), and the denominator is the standard error of measurement of the difference, whereas SE represents the standard error for each wave and COV represents the covariance of the scores across waves. RCIs help to account for measurement error, whereas simple mean differences do not. RCI scores can be positive or negative where a positive score indicates an increase between the two scores, while a negative score indicates a decrease. If the absolute value of the RCI score is above 1.96 this indicates a significant difference between the two time points. RCI scores from wave 1 to wave 2 were calculated for anxious attachment, avoidant attachment, physical dating abuse

perpetration and victimization, and psychological dating abuse perpetration and victimization.

Aim 1. To examine the stability of attachment behavior across two waves during a time of stress, bivariate correlations between Wave 1 and Wave 2 were calculated using mean scores for each form of attachment. RCIs scores from wave 1 and wave 2 were also calculated for anxious attachment and avoidant attachment. Cohen's (1988) conventions were used to interpret effect size. A correlation coefficient of .10 is thought to represent a small effect size and a correlation coefficient of .30 represents a medium effect size. A large effect size is thought to have a correlation coefficient of .50 or higher. Mean RCIs are presented, and participants were also grouped as either increasing, decreasing, or stable.

Aim 2. To examine the change in dating abuse perpetration and victimization from wave 1 to wave 2, bivariate correlations between Wave 1 and Wave 2 were calculated using mean scores for each form (perpetration/victimization) and type (physical/psychological) of dating abuse. RCIs scores from wave 1 and wave 2 also were calculated for physical dating abuse perpetration and victimization, as well as emotional dating abuse perpetration and victimization. Mean RCIs are presented and participants were then grouped as either increasing, decreasing, or stable.

Aim 3a. To explore the association between changes in attachment and dating abuse perpetration, two linear regressions were run with the RCI score for anxious and avoidant attachment as independent variables and the RCI score for both physical dating abuse perpetration (Model 1) and emotional dating abuse perpetration (Model 2) as the dependent variable in two separate models. It was predicted that the change in attachment

(anxious or avoidant) would predict the change in dating abuse perpetration (physical or emotional).

Aim 3b. To explore the association between changes in attachment and dating abuse victimization, two linear regressions were run with the RCI score for anxious and avoidant attachment as independent variables and the RCI score for both physical dating abuse victimization (Model 1) and emotional dating abuse victimization (Model 2) as the dependent variable in two separate models. It was predicted that the change in attachment (anxious or avoidant) at wave 1 would predict the change in dating abuse victimization at wave 2 (physical or emotional).

Power Analysis. To determine the minimum sample size needed to be sufficiently powered, an a-priori power analysis was completed using G*Power. An F test for a fixed model linear multiple regression (Aim 3A and 3B) with an R^2 increase was conducted. Two tested predictors were used in the a-priori analyses. To detect a medium effect size of .15 and a power at or above .80, a sample size of 68 is needed, however the current study only has a maximum of 42. Post-hoc analysis using a sample size of 42 indicated a power of .57.

CHAPTER IV

RESULTS

Descriptive Statistics

The final sample of young adults who were used in the analyses ($N = 42$) ranged in age from 19 to 32 ($M_{age} = 23.78$). Participants identified as primarily female (60.4%), with the remaining identifying as male (31.3%), gender non-binary (4.2%), and transmasculine (2.1%). The sample was comprised of White (68.8%), Biracial (8.3%), Black (10.4%), Latinx (6.3%), and Middle Eastern or North African (6.3%) participants. Participants also were predominantly heterosexual (54.2%), followed by bisexual (27.1%), pansexual (6.3%) or other (12.5%). The majority of the participants were students (58.3%) with 56.3% being full time and 2.1% being part time students. Participants identified as full-time employees (47.9%), part time employees (37.5%) or currently unemployed or not working (14.6%). Bivariate correlations were run between all mean-levels of Wave 1 and Wave 2 variables (see Table 1), as well as the RCI study variables (see Table 2).

Table 1

Correlations for Mean-Level Wave Specific Study Variables

Variable	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. Anxious Attach W1	--										
2. Anxious Attach W2	.22	--									
3. Avoidant Attach W1	.17	.10	--								
4. Avoidant Attach W2	-.06	.27	.58**	--							
5. Physical Perp DA W1	.17	.08	.04	-.00	--						
6. Physical Perp DA W2	.16	.01	.16	.26	.42*	--					
7. Physical Vic DA W1	.33*	-.09	-.02	-.19	-.06	-.05	--				
8. Physical Vic DA W2	.40*	-.24	.10	.07	.20	.56**	.36*	--			
9. Emotional Perp DA W1	.21	.17	-.06	-.07	.50**	.49**	.07	.12	--		
10. Emotional Perp DA W2	-.04	.13	-.18	.10	.35	.34*	-.10	.36*	.29	--	
11. Emotional Vic DA W1	.28	.27	-.04	-.19	.35*	.16	.08	-.16	.69**	.35*	--
12. Emotional Vic DA W2	.19	-.07	-.03	-.10	.29	.29	.16	.58**	.17	.74**	.30

Note. $N = 42$; DA = dating abuse. W1 = Wave 1. W2 = Wave 2. Attach = Attachment. Perp = Perpetration. Vic = Victimization.

**$p < .01$, *$p < .0$

Table 2

Correlations for Reliable Change Index Study Variables

Variable	*M (SD)*	Range	1.	2.	3.	4.	5.
1. Anxious Attachment	-2.19 (.70)	-12.17 to 8.19	--				
2. Avoidant Attachment	-.07 (.19)	-3.11 to 1.97	.42	--			
3. Physical Perpetration DA	-.12 (.70)	-3.85 to 0.00	.02	-.07	--		
4. Physical Victimization DA	2.42 (7.51)	0.00 to 25.00	.51**	.04	.06	--	
5. Emotional Perpetration DA	.00 (.47)	-.90 to 1.20	.14	.06	-.12	-.21	--
6. Emotional Victimization DA	-6.99 (26.45)	-83.33 to 33.33	-.15	.00	-.05	-.68**	.67**

Note. $N = 42$; DA = dating abuse.
**$p < .01$

Table 3

Groupings Based on Reliable Change Index

Variable	*M (SD)*		Frequency	Percentage (%)
Anxious Attachment	-2.19 (.70)	Decrease	21	55.3
		Stable	12	31.6
		Increase	5	13.2
Avoidant Attachment	-.07 (.19)	Decrease	3	9.7
		Stable	27	87.1
		Increase	1	3.2
Physical Perpetration DA	-.12 (.70)	Decrease	3	3.2
		Stable	30	96.8
		Increase	0	0
Physical Victimization DA	2.42 (7.51)	Decrease	0	0
		Stable	28	90.3
		Increase	3	9.7
Emotional Perpetration DA	.00 (.47)	Decrease	0	0
		Stable	31	100
		Increase	0	0
Emotional Victimization DA	-6.99 (26.45)	Decrease	10	32.3
		Stable	12	38.7
		Increase	9	29

Note. N = 29-38; *DA* = dating abuse.

Stability of Attachment (Aim 1)

To examine the stability of anxious attachment from wave 1 to wave 2, a Pearson bivariate correlation coefficient was computed to assess the stability of anxious attachment across wave 1 and wave 2. Although there was a positive correlation, $r(38) = .22$, $p = .18$, it was not statistically significant. Further, the size of this correlation indicated small stability of anxious attachment. The RCI for anxious attachment averaged -2.19 ($SD = .70$), with the majority of participants indicating a decrease in anxious attachment (55.3%), with 31.6% remaining stable, and 13.2% indicating an increase. Both analyses, the correlations and RCI groupings, indicate that anxious attachment has small stability, with the majority of participants significantly decreasing in anxious attachment (See Table 3).

A Pearson correlation coefficient was computed to assess the stability between avoidant attachment at wave 1 and wave 2. There was a statistically significant positive correlation between the two variables, $r(31) = .58$, $p < .001$, with the magnitude of this correlation indicating large stability of avoidant attachment. The RCI for avoidant attachment averaged -.07 ($SD = .19$), with the majority of participants remaining stable in avoidant attachment (87.1%), with 9.7% decreasing, and 3.2% indicating an increase. The correlation and RCI groupings indicate that avoidant attachment was stable from wave 1 to wave 2, with a majority of participants remaining stable in avoidant attachment (See Table 3).

Stability of Dating Abuse (Aim 2)

To examine the stability of each form of dating abuse (physical and emotional) perpetration and victimization from wave 1 to wave 2, bivariate correlations were calculated to assess the stability of both physical and emotional dating abuse perpetration and victimization at wave 1 and wave 2. For physical DA there was a statistically significant positive correlation across time for perpetration, $r(29) = .42$, $p = .02$, and victimization, $r(29) = .36$, $p = .05$. These correlations indicate a medium stability for both physical dating abuse perpetration and victimization from wave 1 to wave 2. The RCI for physical dating abuse perpetration averaged -.12 ($SD = .70$), with the majority of participants remaining stable in physical dating abuse perpetration (96.8%), with 3.2% decreasing, and 0% indicating an increase. The RCI for physical dating abuse victimization averaged 2.42 ($SD = 7.51$), with the majority of participants remaining stable in physical dating abuse victimization (90.3%), with 9.7% increasing, and 0% indicating a decrease. Both the correlations and RCI groupings indicate that physical

dating abuse perpetration and victimization have medium stability, with most participants remaining stable from wave 1 to wave 2 (See Table 3).

Pearson correlation coefficients were also computed to assess the stability between emotional dating abuse perpetration and victimization at wave 1 and wave 2. There was a non-statistically significant positive correlation for emotional perpetration, $r(29) = .29$, $p = .12$, and for emotional victimization, , $r(29) = .30$, $p = .11$. Despite being non-significant, these coefficients indicate a medium stability of both emotional dating abuse perpetration and victimization from wave 1 to wave 2. The RCI for emotional dating abuse perpetration averaged 0.00 ($SD = .47$), with all participants remaining stable in emotional dating abuse perpetration (100%). The RCI for emotional dating abuse victimization averaged -6.99 ($SD = 26.45$), with some participants remaining stable in emotional dating abuse victimization (38.7%), 32.3% decreasing, and 29% indicating an increase. Both analyses, the correlations and RCI groupings, demonstrate that emotional dating abuse perpetration had medium stability from wave 1 to wave 2, however, the RCI groupings for emotional dating abuse victimization may suggest small stability from wave 1 to wave 2 (See Table 3).

Association Between Attachment and Dating Abuse Perpetration (Aim 3a)

To explore the association between attachment behaviors and dating abuse perpetration, linear regressions were modeled for both physical and emotional abuse perpetration (2 total models). Multiple linear regression tested if change in anxious attachment and change in avoidant attachment significantly predicted the change in physical dating abuse perpetration, using the RCIs for all variables. Although the association was positive, change in anxious attachment ($\beta = .06$, $p = .78$) did not

significantly associate with the change in physical dating abuse perpetration. Also, although the association was negative, change in avoidant attachment (β =-.10, p =.67) also did not significantly associate with the change in physical dating abuse perpetration (see Table 3). Similarly, a multiple linear regression was used to test if change in anxious attachment and avoidant attachment significantly associated with the change in emotional dating abuse perpetration. The results of the regression showed that although the association was positive, the change in anxious attachment (β =.14, p =.55) did not significantly associate with the change in emotional dating abuse perpetration. Similarly, the change in avoidant attachment (β =.00, p =1.00) did not significantly associate with the change in emotional dating abuse perpetration (See Table 4).

Table 4

Linear Regression Estimates of RCI Attachment and RCI Dating Abuse

		RCI Anxious Attachment			RCI Avoidant Attachment		
		β	*SE*(β)	*p*	β	*SE*(β)	*p*
RCI DA Perp	Physical	.06	.04	.78	-.10	.21	.67
	Emotional	.14	.03	.55	.00	.14	1.00
RCI DA Vic	Physical	.62	.36	<.004**	-.23	1.85	.25
	Emotional	-.2	1.47	.39	.09	7.64	.69

Note. Separate models were run for each row. N = 26; RCI = Reliable Change Index, DA = dating abuse, Perp = perpetration, Vic = victimization.
**p < .01

Association Between Attachment and Dating Abuse Victimization (Aim 3b)

To explore the association between attachment behaviors and dating abuse victimization linear regressions were modeled for both physical and emotional abuse victimization (2 models). Multiple linear regression tested if change in anxious attachment and change in avoidant attachment significantly associated with the change in

physical dating abuse victimization. The results of the regression showed that greater change in anxious attachment (β =.62, p =.004) significantly associated with greater change in physical dating abuse victimization. However, the regression for avoidant attachment (β =-.23, p =.25) did not show a statistically significant change in physical dating abuse victimization, despite having a negative association (see Table 4). This indicates that those who became more anxiously attached reported a greater increase in physical dating abuse victimization and those who decreased in their anxious attachment reported a smaller decrease in physical dating abuse victimization. Similarly, a multiple linear regression was used to test if change in anxious attachment and change in avoidant attachment significantly associated with the change in emotional dating abuse victimization. The results of the regression showed a negative association in which however, the change in anxious attachment (β =-.20, p =.39) did not significantly associate with the change in emotional dating abuse victimization. Similarly, although the association was negative, the change in avoidant attachment (β =.09, p =.69) did not significantly associate with the change in emotional dating abuse victimization (See Table 4).

CHAPTER V

DISCUSSION

The purpose of the study was to gain a better understanding of the stability of attachment and dating abuse in romantic relationships during the COVID-19 pandemic across two waves. This study also set out to explore the associations between changes in attachment and dating abuse. The first aim of this study was to examine the stability of attachment behaviors during a period of high stress as previous research suggests that during stressful life events, attachment behaviors may become unstable (McConnel & Moss, 2011). The findings of this research showed that avoidant attachment was very stable from wave 1 to wave 2, whereas the stability of anxious attachment was low. The second aim of the study was to examine the change in dating abuse as previous research has suggested an increase in dating abuse perpetration and subsequent victimization during COVID-19 (Agüero, 2021; Lyons & Brewer, 2021). The key findings from this aim showed that emotional dating abuse perpetration and victimization had small stability, and physical dating abuse perpetration and victimization had medium stability. The third aim of the study was to explore the associations between both types of attachment behaviors (anxious and avoidant) and physical and emotional dating abuse

perpetration and victimization. Only changes in anxious attachment between waves significantly predicted change in physical dating abuse victimization.

The findings from this study showed that anxious attachment had small stability across waves. According to the RCI groupings, over 55% of the sample decreased in their anxious attachment behavior. Conversely, avoidant attachment had a strong stability, with 87% of the sample remaining stable. These results may suggest that anxious attachment may be influenced by outside factors such as time spent with partners. During the COVID-19 pandemic many couples isolated together when they were quarantining or under lockdown (Pietromonaco & Overall, 2022). People who have anxious attachment behaviors try to maximize the time they spent with their partners and desire frequent attention from their partner (Dziergwa, 2018). Those who displayed higher initial anxious attachment may have decreased in their anxious attachment behaviors due to being close with their partner and frequently spending time with them during the pandemic. On the other hand, avoidant attachment may have remained stable because avoidant behaviors could be a protective factor against contracting COVID-19 as these individuals find discomfort being in close proximity to their partner and may not want to get physically close (Segal et al., 2021). More research is needed on how cohabitation during the COVID-19 may have affected attachment in couples.

The findings from this study showed that physical dating abuse victimization and perpetration were moderately stable from wave 1 to wave 2. RCI scores showed that almost 97% of the sample remained stable for physical perpetration and 90.3% remained stable for physical victimization. These results indicate that although physical dating abuse may not have increased, if it was present at wave 1 then it remained at wave 2. This

is in line with previous research that shows that physical abuse is a repeated pattern of behavior that continues (Rakovec-Felser, 2014). Furthermore, findings from this study showed that emotional dating abuse perpetration had medium stability from wave 1 to wave 2 which is demonstrated because everyone remained in the stable grouping across waves. Additionally, emotional dating abuse victimization had medium stability, but many participants changed in their RCI groupings across waves. Approximately, one third of the sample belonged to each group (increasing, decreasing, and stable). This may suggest that emotional dating abuse victimization had more of a small stability.

This study explored the associations between insecure attachment and dating abuse perpetration and victimization. The most notable finding included that only changes in anxious attachment significantly predicted changes in physical dating abuse victimization. This finding is consistent with previous research which shows that anxious attachment is a robust risk factor for dating abuse victimization (Hellemans et al., 2015). Previous literature has hypothesized that those with anxious attachment behave in ways that may increase interpersonal conflict (Collins et al., 2002). They may become clingy, require more attention, and try to control their partner (Simpson et al., 1996), which may make it more likely for their partner to perpetrate physical abuse against them as a way to regulate emotional and physical proximity (Allison et al., 2008). On the other hand, previous literature has hypothesized that those with anxious related behaviors may perpetrate abuse as a way to force their partner to get close to them emotionally or coerce them to give them the attention they require (Godbout, 2009). Contrary to previous findings (Pollard & Cantos, 2021; Spencer et al., 2021), changes in anxious attachment did not predict changes in dating abuse perpetration. This may be explained because

individuals with anxious attachment may seek out attention from their partner and close proximity during lockdown and stay-at-home orders permitted frequent feelings of emotional closeness. By being able to communicate or being in close proximity to their partner, anxious behaviors may have decreased, which is in line with our current findings that anxious attachment decreased across the two waves.

Further findings showed that changes in avoidant attachment did not significantly predict changes in physical or emotional dating abuse perpetration or victimization. These findings are somewhat consistent with previous literature as the associations between avoidant attachment and dating abuse have been less clear (Velotti et al., 2022). Previous findings have indicated that avoidant attachment is not a robust predictor of physical dating abuse perpetration (Barbaro et al., 2019) but has been linked to emotional dating abuse perpetration (Velotti et al., 2022). Current findings showed that the change in avoidant attachment did not predict the change in physical or emotional dating abuse perpetration. This could be explained because there was small stability for avoidant attachment which meant there was little variability. This may indicate that avoidant attachment is a poor predictor. Furthermore, this may explain why the changes in avoidant attachment did not predict the changes in dating abuse victimization, despite previous literature linking the two (Stefania et al., 2021).

Limitations

Various limitations of the present study should be addressed in the future. For example, wave 2 data collection occurred from December 2021 through January 2022. This period was later during the pandemic when stay-at-home orders and lockdown were already over, and most COVID-19 precautions were lifted. Pandemic related stress may

have decreased due to decreasing levels of COVID-19 cases and the increase of normal daily activities (Manchia et al., 2022). These results may have been different if data were collected during the midst of the initial lockdown and the stay-at-home orders (i.e., April-July 2020) as an increased pattern in dating abuse perpetration and victimization was heightened during the peak of the pandemic (Agüero, 2021). Further, since stressful life events are predictors of attachment instability (McConnel & Moss, 2011), attachment may have been more unstable during the peak of the pandemic due to stress. Although this research examined the associations between these constructs using a pre-COVID/post-COVID design, the associations may have been different during the peak of COVID.

This study was underpowered. More research needs to be conducted with a larger sample size to understand how insecure attachment and dating abuse interact with each other on a larger scale during times of stress. Various external factors made it impossible to obtain a larger sample, with the most salient being that the response rate for wave 2 was below 50%, indicating a large attrition from the first wave. The low response rate may be due to the time gap between initial participation and the participants being recontacted. Moreover, the sample was even further reduced because respondents had to still be currently in a relationship to respond to the CADRI-S. If a larger sample size was retained, it would make it more likely to detect an effect if it was present.

This study also has limited geographical generalizability which used a sample specifically from a large Midwestern city, given that wave 1 included in person data collection. These results may be affected by the geographical area of the sample as different prevalence rates and COVID-19 precautions varied by region, state, and city.

Despite little geographic diversity, these results should be considered generalizable to the demographics represented in this sample. Further, this present study has low internal consistency for the CADRI-S subscales at wave 2. This indicates that increased measurement error may be present in the data and thus the results should be interpreted with caution. Lastly, physical dating abuse perpetration and victimization were positively skewed at wave 2. This indicates that participants were more likely to report less abuse present in their relationships, suggesting a substantial floor effect is present within the sample. Despite these limitations, these results suggest several clinical and prevention implications.

Implications

The findings of this study suggest several important implications. Our most novel finding, that changes in anxious attachment significantly predicted changes physical dating abuse victimization, further strengthens previous literature that has shown a link between these two constructs. These findings could indicate a need to develop clinical interventions to help individuals better cope with unexpected stress, such as that noted within the COVID-19 pandemic. Furthermore, interventions such as cognitive behavioral therapy (CBT) and internet-based CBT have been shown to be effective in reducing mental health symptoms and stress and is more accessible for individuals (Kumar et al., 2017). Specifically, CBT has also been used to treat victims of dating abuse by reducing their negative symptoms following their abuse (Eckhardt et al., 2013). Additionally, recent research has shown the importance of attending therapy for increasing attachment security regardless of theoretical orientation. The key to earning attachment security is improving one's relationship with their self-worth and improving their connection with

others (Dansby Olufowote, 2020). If an individual increases their self-worth and connections with others, it may allow for individuals to feel more secure within their relationships even during periods of stress.

The data also suggests possible prevention implications. For example, future efforts should consider insecure attachment as a possible risk factor of dating abuse, specifically anxious attachment as a predictor for physical dating abuse victimization. The results of the current research suggest that early prevention efforts should focus on how to build security in romantic relationships, so regardless of stressful life events, these relationships have a secure romantic attachment foundation that allows for healthy behaviors in the relationship (Domingue & Mollen, 2009). Previous literature has examined how adults can become more secure in their romantic relationships. Findings suggest that individuals should commit to the process of earning attachment security, attend psychotherapy, and have an individual, such as a therapist, model what attachment security looks like (Dansby Olufowote, 2020). If an individual becomes more securely attached it would allow for individuals to behave and communicate in ways to decrease conflict and have increased well-being (Simpson & Rholes, 2017). Additionally, the pandemic has caused an increase in stress (Flaskerud, 2021) and previous research has indicated that increased levels of stress can lead to aggressive behaviors (Kruk et al., 2004). This may suggest that dating abuse prevention efforts would further benefit from educating individuals on coping mechanisms useful for managing stressful life events, such as the COVID-19 pandemic. Such efforts may then in turn prevent dating abuse perpetration. Future research should explore which coping mechanisms for stress may

better prevent dating abuse perpetration and subsequent victimization such as mindfulness or attending psychotherapy.

Conclusions

The study examined the stability of insecure attachment and dating abuse during a period of high stress (i.e., COVID-19). The present research also explored the associations between changes in these constructs. Findings showed that anxious attachment had small stability, with many individuals decreasing in anxious attachment. However, avoidant attachment had medium stability from wave 1 to wave 2. Further results showed that physical and emotional dating abuse perpetration and physical dating abuse victimization had medium stability while emotional dating abuse victimization had small stability. The most salient of our findings showed that changes in anxious attachment significantly predicted changes in physical dating abuse victimization. Although our other findings were not fully in line with previous research, the current research contributes to the growing body of literature by examining the association between insecure attachment and dating abuse across a stressful life event. Future interventions should focus on developing a way for individuals to be able to cope with stress while accounting for their insecure attachment related behaviors and should focus on building more securely attached behaviors in their romantic relationships.

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APPENDIX A

Wave 1 Demographics

1. Today's date:
2. Date of birth:
3. What is your gender?
   Female
   Male
   Other (please specify)
4. How do you define your ethnic origin? Select all that apply.
   African American/Black
   Asian American/Pacific Islander
   Caucasian/White
   Hispanic/Latinx
   Native American/Alaskan Native
   Middle Eastern/Northern African
   Other (please specify)
5. Are you currently attending school?
   Yes
   No
6. What is your current educational status?
   Part-time
   Full-time
7. What is your current paid work-status?
   Part-time
   Full-time
   I currently do not work
8. How many hours a week do you conduct paid work?
9. What is your current living situation?
   I live by myself
   I live with my parents/family
   I live with friends/roommates
   I live with my romantic partner
   Other (please specify)
10. How many romantic relationships would you say that you have been in?
11. How would you define your sexual orientation? (Select all that apply).
    Asexual
    Bisexual
    Gay
    Heterosexual
    Lesbian
    Pansexual
    Queer
    Other (please specify)

APPENDIX B

Wave 2 Demographics

12. Please enter the unique ID that we sent you.
13. Please enter the first letter of your first name.
14. Please enter the last letter of your last name.
15. Please enter the last two digits of your cell phone number.
16. Please enter the last two digits of your social security number.
17. What was your sex assigned at birth?
    Female
    Male
    Intersex
18. What is your gender?
    Cisgender woman
    Cisgender man
    Transgender woman/Trans feminine
    Transman/Trans masculine
    Gender non-binary/Genderqueer
    Two-spirit
    Other (please specify)
19. How do you define your ethnic origin? Select all that apply.
    African American/Black
    Asian American/Pacific Islander
    Caucasian/White
    Hispanic/Latinx
    Native American/Alaskan Native
    Middle Eastern/Northern African
    Other (please specify)
20. Are you currently attending school?
    Yes
    No
21. What is your current educational status?
    Part-time
    Full-time
22. What is your current paid work-status?
    Part-time
    Full-time
    I currently do not work
23. How many hours a week do you conduct paid work?
24. What is your current living situation?
    I live by myself
    I live with my parents/family
    I live with friends/roommates
    I live with my romantic partner
    Other (please specify)
25. How many romantic relationships would you say that you have been in?
26. How would you define your sexual orientation? (Select all that apply).

Asexual
Bisexual
Gay
Heterosexual
Lesbian
Pansexual
Queer
Other (please specify)

APPENDIX C

The Experiences in Close Relationships - Revised

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you *generally* experience relationships, not just in what is happening in a current relationship. Respond to each statement by circling a number 1 to 7 to indicate how much you agree or disagree with the statement, where 1 = strongly disagree and 7 = strongly agree.

1. I'm afraid that I will lose my partner's love.
2. I often worry that my partner will not want to stay with me
3. I often worry that my partner doesn't really love me.
4. I worry that romantic partners won't care about me as much as I care about them.
5. I often wish that my partner's feelings for me were as strong as my feelings for him or her.
6. I worry a lot about my relationships.
7. When my partner is out of sight, I worry that he or she might become interested in someone else.
8. When I show my feelings for romantic partners, I'm afraid they will not feel the same about me.
9. I rarely worry about my partner leaving me.
10. My romantic partner makes me doubt myself.
11. I do not often worry about being abandoned.
12. I find that my partner(s) don't want to get as close as I would like.
13. Sometimes romantic partners change their feelings about me for no apparent reason.
14. My desire to be very close sometimes scares people away.
15. I'm afraid that once a romantic partner gets to know me, he or she won't like who I really am.
16. It makes me mad that I don't get the affection and support I need from my partner.
17. I worry that I won't measure up to other people.
18. My partner only seems to notice me when I'm angry.
19. I prefer not to show a partner how I feel deep down.
20. I feel comfortable sharing my private thoughts and feelings with my partner.
21. I find it difficult to allow myself to depend on romantic partners.

22. I am very comfortable being close to romantic partners.
23. I don't feel comfortable opening up to romantic partners.
24. I prefer not to be too close to romantic partners.
25. I get uncomfortable when a romantic partner wants to be very close.
26. I find it relatively easy to get close to my partner.
27. It's not difficult for me to get close to my partner.
28. I usually discuss my problems and concerns with my partner.
29. It helps to turn to my romantic partner in times of need.
30. I tell my partner just about everything.
31. I talk things over with my partner.
32. I am nervous when partners get too close to me.
33. I feel comfortable depending on romantic partners.
34. I find it easy to depend on romantic partners.
35. It's easy for me to be affectionate with my partner.
36. My partner really understands me and my needs.

APPENDIX D

The Experiences in Close Relationships- Short Form

The statements below concern how you feel in emotionally intimate relationships. We are interested in how you *generally* experience relationships, not just in what is happening in a current relationship. Respond to each statement by circling a number 1 to 7 to indicate how much you agree or disagree with the statement, where 1 = strongly disagree and 7 = strongly agree.

1. It helps to turn to my romantic partner in times of need.
2. I need a lot of reassurance that I am loved by my partner.
3. I want to get close to my partner, but I keep pulling back.
4. I find that my partner(s) don't want to get as close as I would like.
5. I turn to my partner for many things, including comfort and reassurance.
6. My desire to be very close sometimes scares people away.
7. I try to avoid getting to close to my partner.
8. I do not often worry about being abandoned.
9. I usually discuss my problems and concerns with my partner.
10. I get frustrated if romantic partners are not available when I need them.
11. I am nervous when partners get too close to me.
12. I worry that romantic partners won’t care about me as much as I care about them.

APPENDIX E

The Conflict in Adolescent Dating Relationships Inventory

The following questions ask you about things that may have happened to you with your boyfriend/girlfriend while you were having an argument. Check the box that is your best estimate of how often these things have happened with your current or ex-boyfriend/ex-girlfriend in the past year. Please remember that all answers are confidential. As a guide use the following scale.

During a conflict or argument with my boyfriend/girlfriend in the past year

1. I gave reasons for his/her/them side of the argument.
   He/she/they gave reasons for their side of the argument.

2. I touched them sexually when he/she/they didn't want me to.
   He/she/they touched me sexually when I didn't want them to.

3. I tried to turn his/her/them friends against him/her/them.
   He/she/they tried to turn my friends against me.

4. I did something to make him/her/them feel jealous.
   He/she/they did something to make me feel jealous.

5. I destroyed or threatened to destroy something he/she/they valued.
   He/she/they destroyed or threated to destroy something I valued.

6. I told him/her/them that I was partly to blame.
   He/she/they told me I was partly to blame.

7. I brought up something bad that he/she/they had done in the past.
   He/she/they brought up something bad that I had done in the past.

8. I threw something at him/her/them.
   He/she/they threw something at me.

9. I said things just to make him/her/them angry.
   He/she/they said things just to make me angry.

10. I gave reasons why I thought he/she/they was wrong.
    He/she/they gave reasons why he/she/they thought I was wrong.

11. I agreed that he/she/they was partly right.
    They agreed that I was partly right.

12. I spoke to him/her/them in a hostile or mean tone of voice.

    He/she/they spoke to me in a hostile or mean tone of voice.

13. I forced him/her/them to have sex when they didn't want to.
    He/she/they forced me to have sex when I didn't want to.

14. I offered a solution that I thought would make us both happy.
    He/she/they offered a solution that he/she/they thought would make us both happy.

15. I threatened him/her/them in an attempt to have sex with him/her/them.
    He/she/they threatened me in an attempt to have sex with me.

16. I put off talking until we calmed down.
    He/she/they put off talking until we calmed down.

17. I insulted him/her/them with put-downs.
    He/she/they insulted me with put-downs.

18. I discussed the issue calmly.
    He/she/they discussed the issue calmly.

19. I kissed him/her/them when he/she/they didn't want me to.
    He/she/they kissed me when I didn't want him/her/them to.

20. I said things to him/her/them friends about him/her/they to turn his/her/their friends against them.
    He/she/they said things to my friends about me to turn my friends against me.

21. I ridiculed or made fun of him/her/them in front of others.
    He/she/they ridiculed or made fun of me in front of others.

22. I told him/her/them how upset I was.
    He/she/they told me how upset he/she/they was.

23. I kept track of who he/she/they was/were with and where he/she/they was.
    He/she/they kept track of who I was with and where I was.

24. I blamed him/her/them for the problem.
    He/she/they blamed me for the problem.

25. I kicked, hit or punched him/her/them.
    He/she/they kicked, hit or punched me.

26. I left the room to cool down.
He/she/they left the room to cool down.

27. I gave in, just to avoid conflict.
He/she/they gave in, just to avoid conflict.

28. I accused him/her/them of flirting with someone else.
He/she/they accused me of flirting with someone else.

29. I deliberately tried to frighten him/her/them.
He/she/they deliberately tried to frighten me.

30. I slapped him/her/them or pulled him/her/them hair.
He/she/they slapped me or pulled my hair.

31. I threatened to hurt him/her/them.
He/she/they threatened to hurt me.

32. I threatened to end the relationship.
He/she/they threatened to end the relationship

33. I threatened to hit or throw something at him/her/them.
He/she/they threatened to hit me or throw something at me.

34. I pushed, shoved, or shook him/her/them.
He/she/they pushed, shoved, or shook me.

35. I spread rumors about him/her/them.
He/she/they spread rumors about me.

APPENDIX F

The Conflict in Adolescent Dating Relationships Inventory – Short Form

The following questions ask you about things that may have happened to you with your boyfriend/girlfriend while you were having an argument. Check the box that is your best estimate of how often these things have happened with your current or ex-boyfriend/ex-girlfriend in the past year. Please remember that all answers are confidential. As a guide use the following scale.

During a conflict or argument with my boyfriend/girlfriend in the past year

1. I spoke to (her/him/them) in a hostile or mean tone of voice.
   (She/He/They) spoke to me in a hostile or mean tone of voice.

2. I insulted (her/him/them) with put-downs
   (She/He/They) insulted me with put-downs.

3. I said things to (her/his/their) friends about her to try and turn them against her.
   (She/He/They) said things to my friends about me to turn them against me.

4. I kicked, hit, or punched (her/him/them)
   (She/He/They) kicked, hit, or punched me.

5. I slapped or pulled (her/his/their) hair.
   She/He/They) slapped or pulled my hair.

6. I threatened to hurt (her/him/them).
   (She/He/They) threatened to hurt me.

7 I threatened to hit or throw something at (her/him/them).
   (She/He/They) threatened to hit or throw something at me

8. I spread rumors about (her/him/them).
   (She/He/They) spread rumors about me.

9. I touched (her/him/them) sexually when (she/he/they) didn't want me to.
   (She/He/They) touched me sexually when I didn't want (her/him/them) to.

10. I forced (her/him/them) to have sex when (she/he/they) didn't want to.
    (She/He/They) forced me to have sex when I didn't want to.