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RELATIONSHIP PREDICTORS OF UNWANTED PURSUIT

by

Farrahdya Tassy B.A. May 2000, Emory University

A Dissertation Submitted to the Faculties of

The College of William and Mary Eastern Virginia Medical School Old Dominion University Norfolk State University

In Partial Fulfillment of the Requirement for the Degree of

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ABSTRACT

RELATIONSHIP PREDICTORS OF UNWANTED PURSUIT

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The present study investigated relationship variables related to unwanted pursuit post dissolution of a romantic relationship. Online surveys were administered to 277 undergraduate and graduate students from a large southeastern university. Participants completed questionnaires that assessed levels of idealization, satisfaction, perceptions of alternatives to the relationship, investment size, commitment, and unwanted pursuit. These variables are often essential in romantic involvements, and contribute greatly to the continuation of a relationship. Additional measures of attachment, self-esteem, neuroticism, and jealousy were included to control for their potential effect on pursuit. The sample consisted of individuals who engaged in the pursuit of a former partner after their romantic relationship ended. Although it was predicted that individuals would be more likely to pursue if they reported higher levels of idealization, satisfaction, investments, and commitment while the relationship was intact, results did not yield support. However, as predicted, there was a negative correlation between relationship alternatives and pursuit, such that pursuers who believed they had fewer alternatives to the relationship were more likely to engage in unwanted pursuit behaviors. This thesis is dedicated to my inner wisdom, Hawk.

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INTRODUCTION

It is not uncommon for individuals to seek reconciliation after the ending of an intimate relationship. Many times, people succeed in convincing their former romantic partners to reunite; however, other times, the attempts are futile. At that point, the pursuer may cease contact or continue to engage in these unwanted pursuit behaviors. Behaviors of unwanted pursuit range from mild (unwanted telephone calls, writing letters) to moderate (following, unexpected visiting) to serious (verbal and physical threats, actual acts of violence) (Cupach & Spitzberg, 2004). The milder forms of unwanted pursuit (i.e., unwelcome e-mails) may be perceived as annoying or harassing, whereas the more threatening acts (i.e., vandalism) and/or dangerous acts (i.e., physical assault) may be perceived as stalking. The existing body of literature consists of research that has attempted to define and clarify unwanted pursuit and stalking as well as provide further understanding about precursors and consequences. Researchers have explored characteristics of perpetrators and targets, but only limited research focuses on the relationship dynamics that might contribute to unwanted pursuit.

There are factors in a relationship that are considered positive in its building and maintenance such as high levels of satisfaction, investment, and commitment, among others. It is true that such qualities are necessary for the relationship's strength and longevity; however, if the relationship ends or one partner leaves, the rejected partner's allegiance does not necessarily weaken. Paradoxically, the same qualities required to sustain the relationship becomes problematic for both partners once the relationship ends. For the pursuer, no major internal shift has occurred as those same qualities that helped nurture the relationship have suddenly become problematic because the other person no longer wants to maintain the relationship. In essence, some of the positive characteristics that helped strengthen the relationship may in fact be detrimental for the rejected partner once separation occurs, largely and simply due to the change of context. In particular, no research to date has investigated multiple variables such as

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idealization, commitment, or investment in the context of unwanted pursuit behaviors. This study contributes to the literature by investigating possible links between multiple relationship factors and unwanted pursuit in close relationships.

Numerous positive qualities have been investigated in relation to the stability of romantic relationships. For instance, Hendrick, Hendrick, and Adler (1988) demonstrated that couples who remained together had significantly higher commitment and investment compared to those who terminated a relationship, showing that both variables were significant predictors of relationship endurance. Further, Felmlee, Sprecher, and Bassin (1990) explored the factors of commitment, investments, and perceived quality of alternatives to study the dissolution of premarital relationships. They found that relationships were significantly less likely to end at any time when individuals reported higher levels of commitment, greater investments, and lower perceived alternatives. Both of these studies focused on the couple while the relationship was intact, and on the negative aspects (i.e., lower satisfaction, fewer investments, etc.) affecting the dissolution of the relationship ends is warranted, especially when one person no longer desires the relationship while the other does.

The purpose of this study was to investigate specific relationship variables that predict unwanted pursuit behaviors occurring after the dissolution of a romantic relationship among pursuers. In particular, the relationship factors, idealization, satisfaction, alternatives, investment, and commitment, were investigated as predictors of unwanted pursuit behavior. Investigating the effects of relationship variables during the course of the relationship provided important information in unwanted pursuit research. This study provided relevant research on the relationship dynamics of individuals who continually pursue their former partners.

Unwanted Pursuit/Stalking

The criminalization of stalking commenced in California in 1990, only after a fan stalked well-known actress Rebecca Schaeffer for two years and subsequently murdered her in 1989 (Davis & Chipman, 2001). The increased media attention involving high-profile celebrities and their families allowed many victims of stalking to voice their own personal experiences (Davis & Chipman, 2001). The media tends to depict stalking as a predatory crime of strangers, but the majority of stalking and unwanted pursuit cases consist of pursuers who had prior acquaintanceship or established relationships with the victims of pursuit (Melton, 2000; Cupach & Spitzberg , 2004; Spitzberg & Cupach, 2007; Baum, Catalano, Rand, & Rose, 2009). In fact, Tjaden and Thoennes (1998) found that only 23% of female stalking victims and 36% of male stalking victims were stalked by strangers. Baum et al. (2009) reported that only a tenth of stalkers or harassers were strangers to the victims, while nearly 75% of victims knew their perpetrators.

When laws were initially passed in the early 1990s, states varied greatly in their antistalking laws, and to some extent there continue to be variations. For example, the state of Virginia's stalking law is quite broad, only requiring that a stalker's repeated acts were intended to cause reasonable fear (The National Center for Victims of Crime, 2008a). Further, a prosecution would yield to a class 1 misdemeanor, and a third offense within 5 years leads to a class 6 felony. A restraining order is automatically issued upon conviction. In contrast, New York's stalking law very specifically stipulates that stalking occurs whether or not the acts are intentional, and mentions the impact of the stalking on emotional and physical health of a person and the person's family. New York also specifies provisions based on the degree (i.e., 1st through 4th degree) of stalking, victim and stalker's ages, and whether weapons were used. Punishment of stalking is contingent upon the degree of stalking. If a prosecution occurs within 10 years of a prior conviction, it results in 3rd degree charge, while a conviction within 5 years of a prior offense leads to a 2nd degree charge (The National Center for Victims of Crime, 2008b). Virginia's law does not include exempted constitutionally protected activities while New York's law specifically includes certain employment and labor laws. However, since the National Institute of Justice (NIJ) and the National Criminal Justice Association (NCJA) developed a model antistalking code in 1993, many states have amended their laws. The NIJ (1996) requires

three main elements to classify a case as stalking: when a person "1. purposefully engages in a course of conduct directed at a specific person that would cause a reasonable person to fear bodily injury to himself or herself or a member of his or her immediate family or to fear the death of himself or herself or a member of his or her immediate family; 2. has knowledge or should have knowledge that the specific person will be placed in reasonable fear of bodily injury to himself or herself or a member of his or her immediate family or will be placed in reasonable fear of the death of himself or herself or a member of his or her immediate family; and 3. whose acts induce fear in the specific person of bodily injury to himself or herself or a member of his or her immediate family or will be placed in reasonable fear of the death of himself or herself or a member of his or her immediate family" (pp. B-1). Further, the model specifies that "course of conduct" refers to when a person repeatedly maintains a visual or physical proximity to a person or repeatedly conveys verbal or written threats or threats implied by conduct or a combination of both; "repeatedly" refers to two or more occurrences; and "immediate family" consists of one's spouse, parents, children, siblings, or any other person who regularly resides in the person's household or who within the prior six months regularly resided in the household (National Institute of Justice, 1996).

The NIJ's three elements are helpful in the legal aspect; however, the research on stalking and its related behaviors uses other terminology to capture the acts. Researchers attempt to capture the broader behaviors that are related to pursuit, whether or not those concrete behaviors are considered threatening. Various terminologies in the body of literature are used to describe the phenomenon of stalking and its related behaviors. A uniform operational definition is also lacking. For example, Coleman (1997) refers to the behaviors as "harassment," or as the legal term "stalking," Emerson, Ferris, and Gardner (1998) call it "relational stalking," Dunn (1999) utilizes "domestic stalking," Rosenfeld (2000) terms the concept "obsessional harassment," Cupach and Spitzberg (1998, 2004) employ "obsessive relational intrusion (ORI)," and Langhinrichsen-Rohling, Palarea, Cohen, and Rohling (2000) label the behavior broadly as, "unwanted pursuit behaviors."

This study will adopt Langhinrichsen-Rohling et al.'s (2000) "unwanted pursuit behaviors," defined as "activities that constitute ongoing and unwanted pursuit of a romantic relationship between individuals who are not currently involved in a consensual romantic relationship with each other" (pp. 73). Therefore, the general term "unwanted pursuit" (UWP) or "pursuit" was employed throughout the text when referring to the behaviors being investigated. The term was used from the non legal perspective to capture behaviors that may or may not constitute the act of stalking, according to legal statutes.

Prevalence

Prevalence rates of stalking and its related behaviors vary widely, mainly due to how the behaviors are defined and measured. For instance, a study that defines stalking by a state's legal statute combined with higher requirements of threat and/or fear would produce lower prevalence rates than a study that defines stalking in broader terms and with less strict requirements of fear and/or threat. Few researchers have similar goals in their investigations of stalking and even fewer utilize the same measures (Cupach & Spitzberg, 2004). An additional issue that affects prevalence rates is the population being studied. Studies that include specialized populations, such as participants from forensic, clinical, or domestic violence samples would yield higher rates of stalking behaviors than in more generalized samples. According to a recent meta-analytical investigation of 175 samples of respondents, of the studies that used well-designed items, a lifetime prevalence rate of stalking ranged from 2% to 13% for males and 8% to 32% for females (Spitzberg & Cupach, 2007). When prevalence and incidence rates were averaged across the 175 studies, 25% of individuals (males and females) sampled reported having experienced stalking. Cupach and Spitzberg (2004) contend in their review, that as many as 27% of all women and 10% of all men should expect to be stalked in their lifetime.

The first national and most extensive survey on stalking was the National Violence

Against Women (NVAW) study, which used a nationally representative telephone survey of 8,000 males and 8,000 females (Tjaden & Thoennes, 1998). The survey was sponsored by the National Institute of Justice and the Centers for Disease Control, and consisted of questions about respondents' experience with violence, including stalking. Tjaden and Thoennes (1998) adopted NIJ's definition, but the study's definition did not require the existence of credible threat of violence, although it required that victims of stalking experience an increased level of fear. To measure stalking, respondents were asked to report whether they had experienced any of the eight types of stalking behaviors, and if any of the acts occurred on more than one occasion. Further, respondents who had experienced the behaviors were asked to report their level of fear. Only participants who reported being very frightened or fearing bodily harm were categorized as stalking victims. Results indicated that 8% of females and 2% of males had been stalked at some point in their lives. When the definition of stalking is looser, allowing victims to feel somewhat fearful of the perpetrator rather than very fearful, the prevalence rates increase moderately. In particular, lifetime prevalence rates change from 8% to 12% for women and from 2% to 4% for men. These findings illustrate that level of fear used in the operational definition of stalking generates varied prevalence rates.

When annual prevalence was assessed, 1% of all females surveyed experienced stalking, while .4% of males surveyed experienced stalking during the past 12 months. Tjaden and Thoennes (1998) explained that when compared to the lifetime prevalence rates, the annual prevalence is higher due to two factors. One, the age of the population most at risk ranges from 18 to 39 years old, and this age group comprises almost half of the adult population from which the sample was acquired. The second reason for the higher annual prevalence rates is related to the repeated and ongoing victimization. A number of individuals are continually stalked for months or years. Due to the fact that many are stalked from one year to the next, the average annual rates of victimization cannot be included to generate an estimate of the total number of individuals who will be stalked in two, three, or more years.

The most recent extensive national survey on stalking in the United States by the National Institute of Justice, consists of 5.9 million U.S. residents who experienced harassment or stalking (Baum et al., 2009). The survey was sponsored by Department of Justice Office on Violence Against Women and the study uses the Supplemental Victimization Survey (SVS) to measure harassment and stalking that occurred within a 12-month period prior to the interview. The SVS consisted of seven types of harassment or unwanted behaviors. Respondents met the requirement for stalking victims if they or their families experienced at least one of the behaviors on at least two separate occasions, and in addition must have felt some level of fear or experienced threatening behavior that would cause a reasonable person to feel fear. Targets who experienced the behaviors without the addition of fear and/or the threatening behaviors that would cause reasonable persons to fear, were classified as harassment victims. The SVS contained elements of both the federal and state definitions of stalking. Out of the 5.9 million respondents, over 3.4 million were stalking victims (.74% males, 2% females) and over 2.4 million were harassment victims (.95% males, 1.02% females), yielding an annual prevalence rate of 2.4% for all respondents (1.4% stalking, 1% harassing). Compared to Tjaden and Thoennes (1998) who measured both annual and lifetime prevalence, Baum et al. (2009) only assessed harassment and stalking within a 12-month period before the interview. The SVS avoided mentioning the word "stalking" throughout the interview until the last question asked respondents if they perceived the unwanted or harassing acts as stalking. Baum et al. (2009) also assessed victim perceptions of whether the unwanted acts would constitute stalking. Those who were stalking victims were more than twice as likely as those who were harassed to identify the behaviors as stalking (54% versus 21%). Out of those who perceived themselves as being stalking victims, 53.6% correctly identified themselves as stalking while 46.4% did not. Lastly, 20.7% of those who perceived themselves as harassment victims were actually identified as stalking victims, while 79.3% were not. Unlike Tjaden and Thoennes (1998), although fear was assessed, varying levels of fear were not.

In their large scale study in the United Kingdom, Budd and Mattinson (2000) defined stalking broadly as an "experience of persistent and unwanted attention" and found a higher lifetime prevalence rate of 11.8%. Further, this study found that out of 880,000 men and women, 2.9% (4% female, 1.7% male) had been stalked in the past year. However, estimates are somewhat lower (2.6%) when the additional criterion labeled 'experienced distress,' is applied and are significantly lower when fear of violence is experienced (1.9%).

Dressing, Kuehner, and Gass (2005) conducted an epidemiological study of stalking in a mid-sized city in Germany and found prevalence rates of stalking occurrence of 11.6% (68 women, 10 men) out of a sample of 675 participants. Randomly selected participants responded to surveys that included a list of 18 possible harassing behaviors (i.e., unwanted communications by letters, emails, faxes, phone calls, following, damage of property, and so forth).

Estimates from a recent national study (Basile, Swahn, Chen, & Saltzman, 2006) show similar rates to Tjaden and Thoennes' (1998) findings. Basile et al. (2006) found that 7% of women and 2% of men in the United States had been stalked in their lifetime. This study utilized a telephone survey and a sample of 9,684 respondents. Participants were asked: "Have you ever had someone besides bill collectors or sales people follow or spy on you, try to communicate with you against your will, or otherwise stalk you for more than a month?" (pp. 173). Additionally, respondents rated level of seriousness to the stalking as "nothing to be concerned about," "annoying," "somewhat dangerous," or "life threatening." Respondents who said they had been stalked and had perceived the seriousness as "somewhat dangerous" or "life threatening" were considered stalking victims.

Some studies have focused specifically on college students and found higher rates of stalking compared to the general population. Specifically, Fremouw, Westrup, and Pennypacker (1997) found that while only 2.9% of males and no females reported being stalkers in their lifetime, 26.6% females and 14.7% of males reported being stalking victims in their lifetime. The state definition of West Virginia was used to define stalking. The results were replicated in a

second study using an additional sample of students. Results of the second study demonstrated slightly higher rates of stalking yielding a rate of 35.2% for females and a rate of 18.4% for males. The stalking survey included 29 items (e.g., you secretly followed the other or the person kept watch on you, etc), but there was no report of this study assessing fear in either sample.

Westrup, Fremouw, Thompson, and Lewis (1999) assessed stalking among undergraduate female students. Individuals who experienced intentional repetitive acts of pursuit and self-labeled as stalking victims were placed in the stalked category. Those who experienced the intentional and repetitive acts without the self-label of stalking victim were placed in the harassed category. Those who stated they were in a relationship and did not experience stalking were placed in a control group. They found that 15.5% were stalked, almost 19% were harassed, and 33% were not harassed or stalked. Compared to the harassed group, participants in the stalked group generally experienced more severe forms stalking and higher number of occurrences of stalking behaviors. The study utilized a 17- item stalking questionnaire consisting of mild to serious behaviors, but fear was not assessed.

Although stalking, when legally defined ranges between 2% to 13% for males and 8% to 32 % for females, when more broadly defined as unwanted and repeated pursuit, much higher rates occur. Cupach and Spitzberg (1998) define obsessive relational intrusion (ORI) as "repeated and unwanted pursuit and invasion of one's sense of physical and symbolic privacy by another person, either stranger or acquaintance, who desires and/or presumes an intimate relationship" (pp. 234-235). They conceptualize ORI in the context of an individual hoping to gain greater intimacy with the object of pursuit. Cupach and Spitzberg (2000) conducted a study on rates of ORI within a college population using three different samples (n =366, n = 300, n = 209). The scale utilized was a 63-item list of behaviors derived after consulting the literature, experts in stalking, and students. Some examples of the ORI behaviors are: "would call and hang up without answering," "made exaggerated claims of affection for you," "watched you from a distance," "broke into your home or apartment," and "sent you offensive photographs."

Participants rated the extent to which they experienced each behavior since the age of 18. The pursuers in these samples consisted of former romantic partners as well as classmates and work acquaintances. Results indicated that each of the 63 ORI behaviors occurred at least once by 3 to 78% of the participants in all three samples, demonstrating the high occurrence of these unwanted pursuit behaviors.

Langhinrichsen-Rohling and colleagues (2000) conducted a study that explored the prevalence and predictors of unwanted pursuit behaviors (UPBs) among college students in the context of an intimate relationship. The study consisted of individuals who reported they initiated a break-up (relationship dissolvers) within the past 12 months and individuals who reported they were broken up with (break-up sufferers) within the past 12 months. Results illustrate that UPB is quite prevalent among college students. Almost all break-up sufferers (99.2%, n = 120) reported perpetrating at least one unwanted pursuit behavior. Similarly, relationship dissolvers indicated were very likely to experience pursuit as well. For instance, 88.9% reported that their former partner had engaged in at least one unwanted pursuit behavior.

Former Romantic Partners

Across studies, there is ample evidence demonstrating that a considerable number of the stalking cases occurred as a means of attempting to reconcile a former intimate relationship. Results from Spitzberg and Cupach's (2007) meta-analysis demonstrate that across the 175 studies examined, a substantial majority (80%) of stalking results from a shared acquaintanceship, with the largest of this group being former romantic partners. Spitzberg and Cupach (2007) indicate that approximately half of all stalking results from prior romantic relationships.

Estimates of stalking or unwanted pursuit occurring by former partners range from 20% to 60%. For instance, Hall (1997) found that 60% of stalking occurred by former intimate partners attempting to reconcile the relationship. Similarly, Tjaden and Thoennes (1998) found that 43% of their female sample was stalked after the termination of a relationship and 36% of individuals experienced stalking both during the relationship and after its termination. Overall,

20% of stalking respondents reported that their victimization occurred because the stalker wanted to reconcile their former relationship. Budd and Mattinson (2000) demonstrated that almost onethird (29%) of the victims surveyed experienced stalking that was perpetrated by a person who was in an intimate relationship with the victim or by a former intimate. Harris (2000) found that out of a sample of 157 cases, nearly all the suspects were known to the victims, with ex-partners or relatives (43%) forming the largest group. The intimate/relative group was not separated; therefore, the exact percentage resulting from former romantic partners is unknown. However, the most common reason noted for the harassment was the complainant ended an intimate relationship with the suspect (83%). The study did not report what percentage of this group was actually comprised of former romantic partners. Further, Bjerregaard's (2000) research found that 41% of females and 40% of males (n = 788) were stalked by former boyfriends or girlfriends. In their study of female stalkers, Meloy and Boyd (2003) concluded that 50% (n = 40) of the stalkers shared prior acquaintanceship with their victims, with 27% being prior sexual intimates. Of the many motives for stalking, 18% reported they attempted to reconcile with the victim. Amar (2006) found that of the 25% of a sample of 601 women who had been harassed or stalked in their lifetime, 32% stated that a former boyfriend engaged in the behavior; however, the researcher did not report the motive behind the pursuit. A recent study of stalking by Dennison and Stuart (2006) demonstrated that ex-boyfriends or ex-girlfriends comprised the largest group of those affected by stalking (39%) out of a sample of 222. Most recently, Baum et al. (2009) also found that former boy/girlfriend and spouses comprised the largest group of stalking perpetrators (21.5%), and the second largest group of harassers (15.6%). The motive of wanting to remain in a relationship was reported as a reason for nearly 8% for harassment victims and 16% for stalking victims; however, the specific nature of the relationship is unknown. Sex Differences

The prevalence of sex differences in stalking and unwanted pursuit is affected by how stalking and unwanted pursuit behaviors are defined and measured. However, although stalking

is a gender-neutral crime, research on gender and stalking consistently shows that significantly more females experience stalking than males (Baum et al., 2009; Bjerregaard, 2000; Dennison & Stuart, 2006; Tjaden & Thoennes, 1998; Tjaden, Thoennes, & Allison, 2000), with most perpetrators being males and most victims being females. However, examination of gender and nonlegally defined unwanted pursuit yields different results. When using the nonlegal term and less threatening behaviors, there are no significant sex differences between males and females with regard to the prevalence of unwanted pursuit experienced (Baum et al., 2009; Cupach & Spitzberg, 2000; Davis, Ace, & Andra, 2000; Dutton & Winstead, 2006; Dye & Davis, 2003; Langhinrichsen-Rohling et al., 2000; Logan, Leukefeld, & Walker, 2000; Spitzberg, Nicastro, & Cousins, 1998).

Relationship Variables

The research on relationship factors and unwanted pursuit has primarily explored attachment style (K. Davis et al., 2000; Davis, Shaver, & Vernon, 2003; Dutton & Winstead, 2006; Dye & K. Davis, 2003; Langhinrichsen-Rohling et al., 2000; Langhinrichsen-Rohling & Taylor, 2003) love styles (Langhinrichsen-Rohling & Taylor, 2003), relationship satisfaction and relationship alternatives (Dutton & Winstead, 2006), relationship passion (Dye & K. Davis, 2003; Langhinrichsen-Rohling et al., 2000), break-up initiation (K. Davis et al., 2000; Dye & K. Davis, 2003), emotional reactions to break-up (K. Davis et al., 2000, Dutton & Winstead, 2006; Dye & K. Davis, 2003), and partner dependency and jealousy during the relationship (Langhinrichsen-Rohling et al., 2000). Attachment style is studied more as an individual predictor; however the research on individual attachment style and UWP demonstrates that an individual's internal attachment style greatly affects interactions with others. According to Langhinrichsen-Rohling et al. (2000), although attachment styles are fairly constant within individuals, to some extent attachment styles are also believed to be partner-specific.

In their recent study, Dutton and Winstead (2006) investigated attachment style, relationship satisfaction, relationship alternatives and break-up distress as predictive factors of

unwanted pursuit behaviors in samples of targets and pursuers. The study utilized scales by Spitzberg and Cupach (1997a, 1997b) to measure unwanted pursuit behaviors for targets and for pursuers. Factor analyses were conducted on both scales and two factors for each version were found, and then labeled Pursuit and Aggression. Pursuit captured the more annoying and harassing types of behaviors, while Aggression captured the more threatening behaviors that were more closely related to stalking. Dutton and Winstead (2006) measured attachment both in terms of categories (i.e., secure, preoccupied, fearful, dismissive) and in terms of dimensions (i.e., anxiety avoidance). They found that targets and pursuers had significant differences in their distribution in the attachment categories, with pursuers being more likely to be preoccupied and less likely to be secure or dismissive compared to their targets. Also, individuals with a preoccupied style engaged in the most Pursuit and significantly more than secure individuals. No significant differences were found for Aggression among the attachment categories. Results further revealed that anxious attachment and break-up distress predicted Pursuit and Aggression, but avoidant attachment, relationship satisfaction, and relationship alternatives did not. They also found that higher levels of emotional distress over the breakup and having perceived fewer relationship alternatives predicted more Pursuit and Aggression among pursuers.

Langhinrichsen-Rohling et al. (2000) investigated relationship predictors of unwanted pursuit (UPB) after the dissolution of a relationship, including attachment styles (Anxiety and Avoidance), types of love styles, abusiveness, and jealousy during the relationship. They compared samples of individuals who initiated the break-up (relationship dissolvers) with those who had been broken up with (break-up sufferers). Both groups rated themselves, their relationship, and their ex-partner's behavior. Relationship dissolvers and break-up sufferers were not reporting on the same relationship. Relationship dissolvers reported on their experiences of pursuit that was perpetrated by their former partners. Conversely, break-up sufferers selfreported on the perpetration of unwanted pursuit behaviors toward former partners after the relationship ended. A 26-item instrument was used to assess unwanted pursuit behaviors,

consisting of both mild and severe acts. To assess attachment style, both individual attachment style (Anxious and Avoidant attachment styles) and partner-specific attachment style were measured. Individual attachment was defined as a person's ability to form emotional bonds with others, while partner-specific dependency assessed for three aspects of attachment to the expartner: anxious attachment/insecure, exclusive dependency/narrow focus, and emotional dependency/support seeking. Relationship dissolvers and break-up sufferers reported on their own attachment anxiety and avoidance; however, dissolvers rated their ex-partners' dependency, while break-up sufferers rated their own dependency. Results indicated that dissolvers who described their partners as insecurely and anxiously attached experienced more pursuit. Also, more unwanted pursuit behaviors were committed by pursuers who described themselves as high on the nurturance-and-support-seeking subscale. Further, love styles (passionate, game-playing, friendship, and possessive-dependent) was a significant predictor of UPB among dissolvers and breakup sufferers. More unwanted pursuit behaviors were committed by break-up sufferers who characterized themselves as having a high possessive-dependent style, more friendship love, and low sexual passion. Dissolvers who characterized their pursuers as highly dependent and possessive, but as low in friendship love, also experienced more unwanted pursuit. When referring to reports of break-up sufferers' self-report of perpetration, many relationship variables were not significant predictors of UPB, including jealousy, abusiveness, and physical violence. However, jealousy and abusiveness predicted pursuit among dissolvers. Langhinrichsen-Rohling and Taylor (2003) replicated findings of Langhinrichsen-Rohling et al. (2000) when they explored the same relationship variables using the same scales of measurements; however, participants in this study consisted of individuals who had initiated the break-up of one of their most important dating relationships and experienced unwanted pursuit after the relationship ended. No pursuers or breakup sufferers were included.

K. Davis and colleagues (2000) conducted two studies that investigated the link between stalking and anxious and avoidant attachment; and stalking related to relationship factors such as

anger and jealousy as emotional reactions to the break-up, expressions of love toward the partner after the break-up, psychological maltreatment of partner during the relationship, and who initiated the break-up. The first sample consisted of 169 college students and the second included 203 students. Stalking was measured using a 16-item scale, of which 6 items that were milder forms of stalking were labeled as mild harassment. Results of both studies indicate that anxious attachment was consistently related to stalking, but avoidant attachment was not. Specifically, anxious attachment serves as an indirect predictor of pursuit. They also found that break-up status was predictive of stalking. In particular, non-initiators were more likely to stalk compared to initiators and mutuals. Results also demonstrated, through bivariate correlational analyses, that emotional reactions to the break-up, expressions of love after the break-up, psychological maltreatment of partner during the relationship, and break-up initiator status all predicted pursuit. However, when a structural equation model for both studies was conducted, there was a direct path for anger-jealousy to stalking. The indirect path from anxious attachment through psychological maltreatment to stalking was not significant.

Similar to K. Davis et al.'s (2000) explorations on reactions to breaking up, D. Davis et al. (2003) conducted a study that investigated adult attachment styles as they relate to social coping strategies after experiencing the loss of a partner. The sample consisted of individuals who had experienced a break-up within the past several years. Results indicate a strong association between attachment-related anxiety and exaggerated attempts to reestablish the relationship.

Dye and K. Davis (2003) explored anxious attachment and relationship-specific factors that are associated with the occurrence of stalking following the dissolution of an intimate relationship. Relationship-specific characteristics consisted of breakup initiation (initiator versus recipient), level of passion in the relationship prior to break up, and anger-jealousy as an emotional reaction to the break-up. Their sample consisted of 342 college students, who reported on their most recent break-up and former relationship. This study utilized a 14-item stalking scale that was a revised version of K. Davis et al.'s (2000). Similar to K. Davis et al. (2000), Dye and K. Davis (2003) found that anxious attachment was significantly correlated to pursuit, and that anxious attachment indirectly predicted stalking two ways, firstly through need for control and secondly through need for control and break-up anger. Thus, anxious attachment predicted need for control, which in turn predicted stalking; and anxious attachment predicted need for control, which in turn predicted break-up anger, which subsequently predicted stalking. Additionally, break-up anger-jealousy directly predicted stalking; however, passion and break-up initiator status related to stalking through breakup anger-jealousy. Higher levels of passion and being the recipient of the breakup predicted higher levels of breakup anger, which in turn, predicted stalking.

Pursuit has been defined in various ways in the literature leading to inconsistency in reported prevalence rates. Gender differences are not found when broader, non-legal definitions are used. Given that the majority of pursuit behaviors occur in the context of former relationships, relationship variables should be further explored as predictors of pursuit. Previous studies have explored adult attachment as well as such relationship-specific variables as relationship satisfaction and relationship alternatives, love styles, passion, abusiveness, anger/jealousy, and so forth. Some of the variables are directly linked to unwanted pursuit (i.e., break-up anger-jealousy, anxious attachment, etc.) while other variables are indirectly linked to unwanted pursuit (i.e., passion, breakup initiator status, etc.). The existing body of literature adds significantly to the understanding of pursuit; however, empirical research is scarce in investigating positive relationship variables as contributors of pursuit among pursuers. The current study seeks to explore idealization, satisfaction, alternatives, investments, and commitment as predictors of pursuit from the pursuer's perspective.

Proposed Predictors of Unwanted Pursuit

Idealization. Idealization refers to the process of perceiving another person as better or as having more desirable attributes even though the evidence might suggest otherwise. According to Murray, Holmes, and Griffin (1996a), a person who idealizes the partner would choose to view the partner's faults as virtues rather than accepting the alternate reality about that person's actual attributes. Murray et al. argue that relationships need a certain degree of idealization or "positive illusion" to maintain a gratifying dating or marital relationship. The appeal of a partner's noticeable virtues draws individuals into their relationships, leading to feelings of confidence. As the union becomes increasingly interdependent, the couple begins to relate across broader domains, with increasing likelihood of differing opinions, and increased possibility for partners to exhibit negative behaviors. Undergoing these disappointments may ironically strengthen the person's idealized perceptions rather than weakening them. For example, a person might begin to view the partner's stubbornness during arguments as integrity rather than as egocentrism. By embellishing their partners' virtues and minimizing the faults, individuals may eventually perceive their partners in a highly idealized manner.

The research on partner idealization has specifically focused on relationship quality, stability, and/or satisfaction. Murray et al. (1996a) used a sample of dating and married couples to investigate the link between idealization/positive illusions and satisfaction. Findings showed that idealization predicted satisfaction with the relationship. Individuals were happier when they idealized their partners and when their partners idealized them. These results suggest that some level of positive illusion or idealism may be critical for the endurance of a dating relationship or marriage. An extension of the Murray et al. study (1996a) found that relationships lasted longer when partners idealized each other (Murray, Holmes, & Griffin, 1996b). Further, partners who idealized each other had increased satisfaction and a decrease in conflicts and serious doubts throughout the year. Additionally, they found that feelings of satisfaction mediated the correlation between positive illusions and stability.

Knee, Nanayakkara, Vietor, and Patrick (2001) also discovered that rating one's partner more favorably yielded greater satisfaction with the relationship. Results indicated that partners were perceived more positively when there was less discrepancy between the respondent's ideal partner and current partner. An earlier study by Kurdek (1995) found that people whose partners were a closer or actual match to their ideal were more committed to that relationship.

Fletcher, Simpson, Thomas, and Giles (1999) explored the correlation between consistency of ideals and perceptions of current partner in relation to the quality of relationship. Findings demonstrate that higher consistency between the ideals and perceptions of the current partner or the relationship yielded more positive views of the relationship. Further, results remained significant even after controlling for perceptions of being able to find a similar partner or relationship. Those who rated their relationships more positively also were more likely to rate their current partners and relationships as harder to replace. Fletcher, Simpson, and Thomas (2000) examined the relationship perceptions and ideals across time, from the first month of dating to the 12th month of dating. Consistent with previous findings from Fletcher et al. (1999), higher ideals-perception consistency was associated with better relationship quality. An important finding was that greater consistency between ideal and perception was associated with lower occurrence of relationship dissolution; however, this finding was mediated through perceptions of relationship quality. In particular, individuals who reported higher consistency between their ideals and their perceptions had higher rates of relationship satisfaction, which led to lower rates of relationship termination.

In summary, the current research on idealization consists of studies of ongoing relationships. To date, there is no research that investigates idealization following the dissolution of a relationship or in relation to unwanted pursuit behaviors. It is believed that individuals who idealized their former partners during the relationship may engage in unwanted pursuit in hopes of regaining and preserving the ideal.

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Relationship Variables from Rusbult's Investment Model. Rusbult's (1980, 1983) investment model is derived from Kelly and Thibaut's (1978) Interdependence Theory, which uses interdependence concepts to predict whether individuals remain in a relationship. A key aspect of the interdependence paradigm is the concept of dependence level, referring to the degree a person "needs" a particular relationship or relies on this relationship to meet essential needs. The theory indicates that two main processes must occur for the maintenance of dependence: satisfaction level and quality of alternatives. Satisfaction level consists of positive versus negative affect experienced in the relationship. Satisfaction is affected by the degree to which a partner fulfills the individual's desired needs. The second process, quality of alternatives, consists of the individual's perceived attraction to the best available alternatives to the relationship. Alternatives is based on the degree an individual's essential needs can be effectively met by a person outside of the relationship, which may include other potential partners, family, friends, etc. Thus, Interdependence Theory purports that dependence on a relationship is greater to the degree that a person desires to remain with a particular partner (i.e., high degree of satisfaction), and to the degree that the person has no choice but to remain with a particular partner (i.e., alternatives are scarce).

Rusbult's Investment Model expands Interdependence Theory in two ways (Rusbult, 1980; Rusbult, Johnson, & Morrow, 1986; Rusbult, Martz, & Agnew, 1998). First, Rusbult asserts that the two constructs are not sufficient in explaining dependence because many relationships persist even when the individual's needs are not met and even when there is lack of satisfaction. The Investment Model asserts that two more constructs are necessary to explain dependence: investment size and commitment. Investment size is defined as the magnitude and importance of the resources that would decline in value or be lost if the relationship were to end. As the relationship grows, partners invest numerous resources both directly (i.e., revealing secrets) and indirectly (mutual friends, shared possessions) in hopes of strengthening the relationship. Such invested resources presumably enhance commitment to the relationship because investments raise the costs of ending the relationship, thus serving as a psychological incentive for stability. The theory purports that all three factors (satisfaction, alternatives, investment size) affect, a fourth factor, the individual's commitment to remain in a relationship (Rusbult, 1983). Individuals who are satisfied, those with the perception of poorer alternatives, and those with more investment should have greater levels of commitment. Rusbult et al. (1986) discovered that commitment is positively correlated to satisfaction and investment size. Further, longer relationship duration was related to greater investment size and stronger commitment. A study by Lin and Rusbult (1995) found similar support for the model in samples of both American and Chinese participants. Results indicated that higher levels of commitment existed in dating relationships when respondents were more satisfied, had more investments, and had a perception of poorer alternatives.

Rusbult and colleagues (1998) developed an Investment Model Scale and conducted three studies investigating its reliability and validity. The empirical evidence on Rusbult's Investment Model consistently demonstrates that: 1) commitment is positively correlated with relationship satisfaction and investment, but negatively correlated with alternatives, 2) each of the variables contributes unique variance to predicting commitment, 3) compared to less committed individuals, those with higher levels of commitment are significantly more likely to remain in their relationships, and 4) commitment is the most direct and robust predictor of relationship maintenance, partially or wholly mediating the effects of the satisfaction, investment, and alternatives (Rusbult et al., 1998). In all three studies performed by Rusbult and colleagues (1998), factor analyses demonstrate that the four relationship factors (satisfaction, alternatives, investment, commitment) collectively accounted for 98% to 100% of the variance. Examination of factor loadings for Satisfaction, Alternatives, and Investments demonstrate that 1) all items loaded on a single factor with coefficients exceeding .40 and 2) no items exhibited cross-factor loadings exceeding an absolute value of .40. Additional inter-factor analyses demonstrate that the four factors exhibit the predicted pattern of association with each other. The three bases of

dependence relate to each other, with Satisfaction being negatively correlated with the Alternatives factor, positively correlated with the Investments factor; and the Alternatives factor was negatively correlated with the Investments factor.

To date, there has been no research exploring the full Investment Model and unwanted pursuit behaviors. One study (Dutton & Winstead, 2006) used 5 items from Rusbult et al. (1998) Investment Model Scale to assess poor alternatives to the relationship as a predictor of unwanted pursuit behaviors among pursuers and targets of pursuit. Results indicated that the relationship alternatives variable was significantly negatively correlated to nonaggressive and aggressive forms of pursuit among pursuers. This demonstrated that the perception of having fewer alternatives to the relationship predicts nonaggressive and aggressive forms of pursuit. Dutton and Winstead (2006) measured satisfaction as well, but used Hendrick, Dicke, and Hendrick's (1998) 7-item Relationship Assessment Scale. Results indicated that satisfaction was not correlated to nonaggressive or aggressive pursuit among pursuers. Further analyses of multiple regression analyses showed that although the overall test of the model was significant for aggressive and nonaggressive forms of pursuit, relationship alternatives and relationship satisfaction did not significantly contribute to the prediction of mild or severe pursuit among pursuers, after accounting for attachment anxiety and emotional distress about the breakup.

Briefly, the literature on relationship satisfaction, alternatives, investments and commitment has focused on longitudinal studies involving the stability and dissolution of relationship with samples of couples. One research study (Dutton & Winstead, 2006) has explored the aspects of relationship satisfaction and relationship alternatives relating to unwanted pursuit, with some evidence that having fewer alternatives predicts unwanted pursuit. It was believed that individuals who felt more satisfied, invested, committed, and perceived themselves as having fewer alternatives during their courtship would be more likely to engage in unwanted pursuit of their former partners compared to pursuers who felt less satisfied, less invested, less committed, and perceived themselves as having more alternatives. It was proposed that such

individuals would likely pursue the relationship after breakup because they would feel as though they have lost a valuable aspect of their lives, one that brought contentment. Thus, the pursuer adopts a maladaptive perception that because he or she has invested in and committed to the relationship and ignored other potential mates, that he or she should not lose the former partner whom they regard as a most valuable object.

Hypotheses and Research Questions

Hypothesis 1: Relationship idealization

It was hypothesized that pursuers who reported a higher level of idealization of the relationship would engage in more pursuit behaviors against their former partners than those with lesser degrees of idealization. Therefore, a positive correlation between scores of relationship idealization and unwanted pursuit was expected.

Hypothesis 2: Relationship satisfaction

It was predicted that respondents with greater degrees of satisfaction in the relationship would engage in more unwanted pursuit behaviors. Therefore, a positive correlation was expected between relationship satisfaction and unwanted pursuit.

Hypothesis 3: Relationship alternatives

Pursuers with the perception of fewer alternatives in the relationship were expected to engage in more unwanted pursuit. Therefore, a negative correlation was expected between relationship alternatives and unwanted pursuit.

Hypothesis 4: Relationship investment

Respondents with greater degrees of investments in the relationship were expected to engage in more unwanted pursuit behaviors. Therefore, a positive correlation was expected between relationship investment and unwanted pursuit.

Hypothesis 5: Relationship commitment

It was predicted that pursuers with a higher degree of commitment to the relationship would engage in more pursuit behaviors against their former partners than those who were less committed. A positive correlation between relational commitment and unwanted pursuit was expected.

Hypothesis 6: Proposed Model

The hypotheses were tested using the path diagram below to demonstrate that idealization would predict unwanted pursuit. Further, the model was tested to show that commitment would be a mediator for satisfaction, alternatives, and investment.

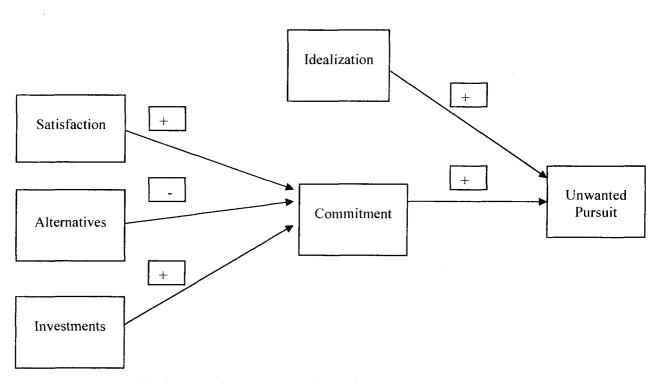


Figure 1. Proposed Meditational Model of Unwanted Pursuit

METHOD

The study met ethical guidelines of the American Psychological Association and was reviewed by a university human subjects committee. All participants completed an online selfreport, anonymous survey. Students accessed the description of the survey via the university's research database, which provided an outside link to the web survey. Different directions were given for the various measures, as some required participants to respond as though the relationship was intact, while some required responses after the relationship ended. Given the sensitive nature of this research, at the conclusion of the survey, all participants were advised to consider calling the student counseling center should the questionnaire cause distress.

Participants

Participants from this study included undergraduate students from a large southeastern university. To be eligible for the study, participants must have experienced difficulty letting go of a romantic relationship. They were presented with the following statement: "Often, when relationships are hard to end, a person has a difficult time letting go. If at some point in your life you had a difficult time letting go of a romantic partner after the relationship ended and that relationship lasted at least two months, you are eligible for this study." Among the 277 participants who completed the questionnaire, 23 (8.3%) were excluded for not meeting the primary study inclusion criteria, which required participants to be in a relationship for at least 2 months and have ended their relationship for a period of at least 4 weeks relative to the timing of this study. An additional individual was omitted as no information was given about relationship status. Of the remaining 253 participants, 85 (33.6%) were excluded for not engaging in pursuit. Therefore, n=168 (60.6%) of the initial 277 recruited participants engaged in pursuit. Four additional participants were excluded as outliers (see Results), leaving n=164 as the final sample of pursuers. Overall, the majority of participants were female (n=122, 74.4%) between the ages of 18 and 21 (n=128, 78%). The sample consisted of 104 Caucasian (63.5%), 28 (17.1%) African

American/African descent, 11 (6.5% Asian/Pacific Islander, 8 (4.9%) Hispanic, and 13 (7.9%) Other participants. The length of the previous romantic relationship had considerable variability with many reporting greater than 1 to 3 years (42.1%), some 6 to 12 months (25.0%), another substantial group reporting a 2 to 6 month relationship (21.3%), and smaller groups of 3 to 5 years (8.5%), and 6 to 10 years (3%). The amount of time since the termination of the previous romantic relationship and participation in this study was: 4 to 6 weeks (7.3%), 6 to 8 weeks (7.3%), 3 to 6 months (20.1%), 6 to 12 months (23.2%), 1 to 5 years (36%), and 5 to 10 years (3.7%). In terms of characteristics that might describe their most recent romantic partnership, the majority of participants said they dated (57.3%), followed by long-term committed relationship, not living together (32.3%), followed those who lived together (6.1%), engaged (3.7%), and married (.6%). In many cases (n=71, 43.3%), the study participant reported they initiated the break-up with their target of pursuit, and another notable percentage reported the break-up was after mutual agreement (n=53, 32.3%). The majority of participants had (53.0%) reported no previous break-ups. Among those who had a history of break-ups, there were typically 1 to 2 times prior break-ups before the final break-up, with each break-up likely to last for less than one month.

Measures

Satisfaction, Alternatives, Investments, and Commitment. This study utilized Rusbult et al.'s (1998) 37-item Investment Model Scale to assess Satisfaction, Alternatives, Investment, and Commitment (see Appendix A). The wording throughout the scale was slightly modified to reflect respondents focusing on past rather than current relationships. The scale is comprised of four separate subscales. Two types of items were included in the first three subscales for satisfaction, quality of alternatives, and investment size: (1) 5 facet items, which measure concrete examples of each construct, and (2) 5 global items, which measure the general items for each construct. Facet items help prepare respondents to better answer global items and improve comprehensibility of what global items are measuring. Only global items were scored and

measured in the data analysis. Global items are the broader and more generalized version of the facet items. Example items are: satisfaction, "Our relationship did a good job of fulfilling my needs for intimacy, companionship, etc.;" quality of alternatives, "If I weren't dating my former partner, I would do fine – I would find another appealing person to date;" and investment, "Compared to other people I know, I have invested a great deal in my relationship with my former partner." The commitment scale included 7 global items (e.g., "I wanted our relationship to last for a very long time"). All facet items were scored using a 4-point scale (1 = Don't Agree at All, 4 = Agree Completely) and all global items are scored using a 9-point scale (9 = Agree Completely, 1 = Do Not Agree at All). Higher scores on both the facet and global items for Satisfaction, Alternatives, Investments, and Commitment reflected greater satisfaction, perceived alternatives, investment, and commitment. Participants were provided with instructions asking them to respond to each item remembering their thoughts and feelings at a time the former relationship was ongoing. Rusbult et al. (1998) found good reliability for all global scales, with the following Coefficient alphas: .91 to .94 for Commitment Level, .92 to .95 for Satisfaction Level, .82 to .88 for Quality of Alternatives, and .82 to .84 for Investment Size. For each measure, mean scores were obtained across the items. In the present study, alpha levels were .84 for Commitment, .93 for Satisfaction, .77 for Quality of Alternatives, and .74 for Investments.

Idealization. Idealization of former intimates was measured using a total of three measures of idealization: two direct measures and one indirect measure. This study utilized Fletcher et al.'s (1999) Partner Ideal Scales-Short Forms (see Appendices B-D), to directly and indirectly assess idealization. The scales measuring partner idealization consisted of three separate subscales: Partner Ideal Standards, Perceptions of Actual Partner Qualities, and Consistency Between Partner Perceptions and Ideal Standards. Each subscale consisted of the same 17 items that make up three dimensions. The three partner dimensions are as follows: warmth/trustworthiness ("understanding," supportive," "kind," "good listener," "sensitive," and "considerate), attractiveness/vitality ("sexy," "nice body," attractive appearance," "good lover,"

"outgoing," and "adventurous"), and status/resources ("successful," "nice house," "financially secure," "dresses well," "and "good job"). The Partner Ideal Standards Scale (see Appendix B) required participants to rate each trait in describing their ideal partner in a close relationship (dating, cohabitating, or married; 1 = very unimportant to 7 = very important). Higher ratings indicated greater expectations for an individual's ideal partner. With the Perceptions of Actual Partner Qualities Scale (see Appendix C), respondents rated each item in terms of how accurately it represented their former romantic partner (1 = not at all like my former partner to 7 = verymuch like my former partner). Higher scores reflected more positive former partner perceptions. The third subscale, Consistency Between Partner Perceptions and Ideal Standards (see Appendix D), which directly measures real-ideal consistency, required that participants compare their former partner with their expectations of their ideal partner. They rated each item based on how close they feel their former romantic partner matches their ideal (1 = does not match my ideal atall to 7 = completely matches my ideal). Higher scores demonstrated greater consistency between an individual's partner ideal standards and his or her former partner perceptions. Based on previous research, the Cronbach's alphas for each of the dimensions were as follows: Partner ideal standards: Warmth/trustworthiness .85, Attractiveness/vitality .75, Status/resources .84; Partner perceptions: Warmth/trustworthiness.86, Attractiveness/vitality .72, Status/resources .82; Partner ideal-perception consistency: Warmth/trustworthiness .88, Attractiveness/vitality .79, and Status/resources .86 (Overall, Fletcher, & Simpson, 2006). Cronbach's alphas obtained in this study were as follows: Partner ideal standards: Warmth/trustworthiness .94, Attractiveness/vitality .84, Status/resources .86; Partner perceptions: Warmth/trustworthiness.88, Attractiveness/vitality .83, Status/resources .85; Partner ideal-perception consistency: Warmth/trustworthiness .93, Attractiveness/vitality .90, and Status/resources .89.

To elicit the best possible responses from the Perceptions of Actual Partner Qualities Scale and the Consistency Between Partner Perceptions and Ideal Standards Scale, participants were instructed to recall thoughts and feelings associated with a time the former relationship was ongoing. Mean scores were obtained for each of the three dimensions (i.e.,

Warmth/trustworthiness, Attractiveness/vitality, Status/resources) from each of the three subscales. The Consistency Between Partner Perceptions and Ideal Standards Scale was used as one direct measure of ideal-actual consistency, and the Partner Ideal Standards Scale and the Perceptions of Actual Partner Qualities Scale was used as an indirect measure of ideal-actual consistency.

The indirect measure of ideal-perception consistency was calculated utilizing a residual discrepancy. The discrepancy consisted of (a) taking the average of ideal partner ratings from the three dimensions of Partner Ideal Standards Scale, (b) taking the average of former partner ratings from the three dimensions Perceptions of Actual Partner Qualities Scale, and (c) examining former partner ratings controlling for ideal partner ratings, which resulted in a residualized variable that reflected what the pursuer saw in his/her former partner that was not part of the pursuer's ideal partner. The standardized residuals from each of the three regressions served as an index of ideal perception consistency. The more negative the residuals reflected the less like the ideal. This method was introduced by Knee et al. (2001) and was subsequently used by Overall et al. (2006), both yielding valid and reliable results.

This study utilized a third measure used by Knee et al. (2001), directly asking respondents the following: "My former partner is ___% of what I would like in a partner" (see Appendix E). Prior to responding, participants were instructed to think of a time the relationship was ongoing or intact.

Additional measures

Additional measures of attachment, self-esteem, neuroticism, and jealousy were included as covariates to determine their potential effects on idealization, satisfaction, alternatives, investments, and commitment.

Attachment. A short form of the Brennan, Clark, and Shaver's (1998) Experiences in Close Relationships Scale (see Appendix F) was used to assess for adult attachment style (Wei,

Russell, Mallinckrodt, & Vogel, 2007). All scale items are rated on a 7 point Likert scale (1 = disagree strongly, 5 = agree strongly). Higher scores on the subscales, Anxiety and Avoidance, represented greater maladaptive attachment style. Sample items included "I try to avoid getting too close to my partner" and "I want to get close to a partner, but I keep pulling back." In several studies, Wei et al. (2007) found Cronbach's alphas ranging from .77 - .86 for Anxiety and .78 - .88 for Avoidance. Short form scores were also found to be highly (.95) correlated with scores from the original longer measure. A stable factor structure and evidence of construct validity were also found (Wei et al., 2007). In the present study, an alpha of .62 was found for Anxiety, and .76 for Avoidance.

Neuroticism. Goldberg et al.'s (2006) 10-item Neuroticism Scale (see Appendix G) from the 5 NEO domains was used to measure neuroticism. Golderg et al. (2006) reported an alpha of .86 for the scale. Alpha reliability for this study was .88.

Self-Esteem. Self-esteem was measured using Rosenberg's (1965) 10-item SES (see Appendix H). Scale items were scored using a 4 point Likert scale, ranging from "strongly agree" to "strongly disagree." There are five positively keyed items and five negatively keyed items. Higher scores for the positively keyed items indicated greater self-esteem, and lower scores on the negatively keyed items indicated higher self-esteem. The following are sample items: "I feel that I have a number of good qualities (positively keyed)" or "I feel that I do not have much to be proud of (negatively keyed item)." Higher average scores for the scale represented lower self-esteem. The SES is one of the most frequently used measures of general self-esteem for adolescents and adults, with satisfactory internal reliability, ranging from .77 to 88 (Blascovich & Tomaka's, 1991). This study found an alpha reliability of .89.

Jealousy. Pfeiffer and Wong's (1989) 24-item Multidimensional Jealousy Scale (see Appendix I) was used to assess jealousy of former partner within the relationship. The scale consisted of three subscales that measured separate types of jealousy, including cognitive, emotional, and behavioral. Previous research indicates that this scale was constructed for both current and past relationships. The following are sample items: cognitive jealousy ("I suspected that X was secretly seeing someone of the opposite sex,", 1 = never, 7 = all the time); emotional jealousy ("X comments to you on how great looking a particular member of the opposite sex is," 1 = very pleased, 7 = very upset); and behavioral jealousy ("I looked through X's drawers, handbags, or pockets," 1 = never, 7 = all the time"). This scale has been widely used within the jealousy literature. Most recently, Maner, Gailliot, Rouby, and Miller (2007) reported good reliability with an alpha level of .89 across all items in a study that assessed both former and current relationships. Russell and Harton (2005) reported the following individual Cronbach's alpha levels in a study of current relationships: .82 for cognitive, .90 for emotional, and .81 for behavioral. Alpha reliabilities for this study were as follows: .92 for cognitive, .86 for emotional, and .83 for behavioral.

Unwanted Pursuit. Cupach and Spitzberg's (2004) 28-item Relational Pursuit-Pursuer Short Form (see Appendix J) was utilized to assess participants who engaged in unwanted pursuit after the relationship breakup. Compared to other measures of unwanted pursuit/stalking, the survey encompasses a wide range of items that range from milder forms of stalking such as unwanted phone calls, waiting around while conversing with another person to more serious forms that might constitute stalking such as being physically violent toward the pursued or forced sexual contact.

The instructions prompted the participant to respond to questions pertaining to unwanted pursuit of a specific former partner after the termination of a romantic relationship. Sample items include: "Have you ever persistently pursued someone who did not want to be pursued by invading the person's personal space?" or "Have you ever persistently pursued someone who did not want to be pursued by physically threatening the person?" Items are rated on a 5-point Likert-scale (0 = Never, 4 = Over 5 times). Lower scores reflected fewer occurrences of pursuit and higher scores reflected greater occurrences of pursuit.

The 28-item scale is the most recently proposed version of the shortened obsessive relational intrusion scales. There is no previous research to date that reports the internal consistencies of the 28-item scale. Since the 24-item scale is very similar to the 28-item scale, which comprises the identical 24 items plus an additional four items, the alphas from the 24-item Relational Pursuit- Pursuer Short Form (Spitzberg & Cupach, 1997b) were reported for this study. Dutton and Winstead (2006) recently conducted factor analyses on the 24-item scale and found two factors: Pursuit and Aggression. Coefficient alphas were .83 for the Pursuit Scale and .84 for the Aggression Scale. In this study, the reliability for the 28-item Relational Pursuit-Pursuer Short Form was .84.

Relationship Demographics. The online survey also included a demographics section that assessed age, gender, and ethnicity, as well as relationship details such as the length of the previous relationship, who initiated the break-up, and the amount of time that had lapsed since the termination occurred (see Appendix K). Participants were instructed to think of only one specific former partner. They were told to report data on their most recent former partner.

RESULTS

Prior to producing descriptive statistics and applying inferential analyses to the study hypotheses, the covariate, predictor, and outcome variables were screened to examine accuracy of data, missing values, outliers, and fit between distributions and assumptions for multivariate analyses. Missing values were replaced using the mean of adjacent values for pursuit variables. Outliers were screened using standard exploratory analyses of the data that included examination of stem-and-leaf diagrams and the most and least extreme cases for each variable. Four cases represented outliers in both univariate and multivariate outlier analyses. These 4 outlier cases were excluded from analysis, leaving an n of 164 for the final sample of pursuers for descriptive and inferential analysis. With the exception of preliminary analyses comparing Pursuers to Nonpursuers, all results and statistics presented are based on this n = 164 sample.

Out of 253 total participants who met the study's criteria, there were 85 individuals who reported they did not engage in pursuit, and 168 who reported they did engage in pursuit. Nonpursuers were identified as those who reported zero pursuit for all 28 items on the scale, and Pursuers were identified as those who engaged in at least one act of pursuit. To better understand the study's sample, preliminary analyses were conducted to explore whether those who pursued were significantly different from those who did not in terms of demographic variables (sex, age, length of relationship, time since relationship ended, number of times broken up, nature of relationship). Chi-square tests were performed to assess differences between Pursuers and Nonpursuers in relation to sex, who initiated the break-up, and the nature of the relationship (i.e., dated, married). Pursuers and Nonpursuers were not significantly different from each other for sex, break-up initiation, or nature of relationship. Additionally, independent *t* tests were performed to assess the following variables: age, length of relationship, time since relationship. Additionally, independent *t* tests were performed to assess the following variables: age, length of relationship, time since relationship

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significant difference between those who reported pursuit and those who reported no pursuit for the number of times broken up, t(236) = -1.98, p < .05. Not surprisingly, Pursuers (M = 2.46, SD = 2.01) have broken up more often than Nonpursuers (M = 1.98, SD = 1.70). To further understand the study's sample, and the predictors of pursuit, additional preliminary analyses were conducted using one-way analysis of covariances (ANCOVAs) to compare Pursuers and Nonpursuers to assess whether the two samples were significantly different from each other in terms of the predictor variables. Variables explored included Idealization (Consistency Warm, Consistency Attract, Consistency Status, Residual Warm, Residual Attract, Residual Status, and Idealization Percentage), Satisfaction, Alternatives, Investments, and Commitment, Anxious Attachment, Avoidant Attachment, Self-Esteem, Neuroticism, Jealousy Cognitive, Jealousy Emotion, and Jealousy Behavior were used as covariates. Results from the ANCOVAs indicated that there were no significant differences between Pursuers and Nonpursuers found in relation to Idealization, Satisfaction, Alternatives, or Commitment after accounting for all covariates. However, for Investments, results revealed a significant difference between Pursuers and Nonpursuers F(1, 239) = 8.33, p < .05, $\eta^2 = .03$. Pursuers (M = 5.83, SD = 1.63) reported significantly higher levels of Investment compared to Nonpursuers (M = 4.87, SD = 2.02) after accounting for all covariates.

In the sample of pursuers, the normality, linearity, and kurtosis of distributions of predictors and covariates were found to be within acceptable limits for all variables except for Pursuit. Screening revealed a substantial skewness for Pursuit, thus a standard logarithmic transformation, as recommended by Tabachnick and Fidell (1996), was used to normalize this variable. All results presented reflect the transformed pursuit variable. Table 1 summarizes means, standard deviations, skewness and kurtosis that were calculated for all primary study variables.

Table 1

Descriptive Statistics for Primary Study Variables

	Mean	Min	Max	SD	Skewness	Kurtosis
Experiences in Close Relationships	,					
Anxious Attachment	3.00	1.00	5.00	0.67	0.04	-0.00
Avoidant Attachment	2.20	1.00	3.83	0.66	0.18	-0.65
Rosenberg Self-Esteem Scale	1.89	1.00	4.00	0.54	0.43	0.49
Neuroticism	2.65	1.10	4.90	0.83	0.31	-0.39
Jealousy						
Cognitive	3.39	1.13	7.00	1.42	0.40	-0.53
Emotion	5.53	2.63	7.00	0.77	-0.77	1.19
Behavior	2.85	1.00	5.63	0.99	0.36	-0.38
Idealization						
Percentage	64.96	0.00	100.00	23.39	-0.76	0.07
Ideal Warmth	6.12	1.00	7.00	1.16	-2.97	9.70
Ideal Attractiveness	5.39	2.20	7.00	1.02	-0.70	0.47
Ideal Status	5.12	1.00	7.00	1.16	-0.71	0.43
Actual Warmth	5.04	1.00	7.00	1.38	-0.90	0.61
Actual Attractiveness	5.31	1.20	7.00	1.33	-0.86	0.34
Actual Status	4.29	1.00	7.00	1.42	-0.23	-0.52
Consistency Warmth	4.86	1.00	7.00	1.63	-0.77	-0.20
Consistency Attractiveness	5.23	1.00	7.00	1.47	-0.95	0.22
Consistency Status	4.23	1.00	7.00	1.56	-0.12	-0.80
Rusbult						
Satisfaction	5.94	1.00	9.00	2.07	-0.71	-0.18
Alternatives	5.94	1.20	9.00	1.64	-0.46	-0.14
Investment	5.83	1.00	9.00	1.63	-0.29	0.25
Commitment	6.15	2.14	8.43	1.18	-0.85	0.62
Pursuit	0.83	0.02	1.45	0.42	0.02	-1.10

Note. Pursuit reflects logarithmic transformation of this variable.

Prior to conducting inferential analyses of hypotheses, all primary study variables were correlated to assess for potential multicollinearity. Table 2 displays intercorrelations between all covariate, predictor, and outcome variables. Correlation coefficients reveal no values above r =0.70, which would have indicated a possibility of multicollinearity.

Factor analyses were conducted on the items from the Relational Pursuit –Pursuer Short Form (Cupach & Spitzberg, 2004). Scree plots suggested a 6 factor solution. After factors were rotated and analyzed, factors were not interpretable. In order to be consistent with Dutton and Winstead (2006), a two factor solution was tried. However factor loadings were not clear-cut with almost half of the items loading on both factors, even after further rotating the axes. Since efforts to find interpretable factors were not successful, the decision was made to consider the unwanted pursuit measure as a unifactorial scale.

Table 3 presents the frequency of pursuit behaviors by all participants who reported engaging in at least one intrusive behavior (n= 164). The most frequently reported unwanted pursuit behaviors were leaving unwanted messages, making exaggerated expressions of affection, and monitoring the person's behaviors. The least commonly reported behaviors were physically hurting the person's life, kidnapping or physically constraining the person, and leaving or sending the person threatening objects.

The primary study hypotheses were tested using sequential multiple regression analyses, with covariates entered first into the model, followed by entry of the predictor variables of interest relevant to hypotheses 1 through 6. Several sequential multiple regressions were conducted with alpha for null rejection set to p < 0.05 with Anxious Attachment, Avoidant Attachment, Self-Esteem, Neuroticism, Jealousy-Cognitive, Jealousy-Emotional, Jealousy-Behavioral as covariate variables; Consistency Warm, Consistency Attract, Consistency Status, Residual Warm, Residual Attract, Residual Status, Idealization Percentage, Satisfaction,

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Table of Variable Inter-correlations

	12	(m)	41	5	0	7	∞i	6	10		12	13	14	15	<u>16</u>	17	18	61
1. Pursuit	0.31	-0.01	0.12	0.17	0.20	-0.03	0.33	0.02	-0.12	0.15	0.17	0.00	0.03	0.09	-0.03	-0.01	-0.03	0.06
2. ECR Anxiety		0.19	0.43	0.37	0.24	0.08	0.17	0.00	-0.09	0.26	0.19	0.04	-0.03	0.05	0.04	-0.05	0.11	-0.09
3. ECR Avoidance			0.20	0.17	0.18	-0.16	-0.11	-0.11	0.00	0.04	-0.13	-0.14	-0.04	- 0.09	-0,14	-0.08	-0.08	-0.13
4. Self-Esteem				0.73	0.18	0.01	0.09	-0.07	-0.16	0.10	0.07	0.03	-0.07	-0.03	10.0-	-0.04	0.04	- 0.09
5. Neuroticism					0.32	0.17	0.23	-0.15	-0.05	0.05	0.04	-0.08	-0.10	-0.13	-0.15	-0.03	-0.05	-0.15
6. Jealousy Cognitive						0.25	0.45	-0.35	0.13	-0.08	0.08	-0.36	-0.03	-0.11	-0.37	0.03	10.0-	-0.26
7. Jealousy Emotion							0.27	-0.03	10.0-	-0.14	0.07	-0.11	0.01	-0.13	-0.14	0.00	-0.05	-0.09
8. Jealousy Behavior								-0.12	0.12	-0.01	0.14	-0.20	-0.06	-0.10	-0.17	0.02	-0.05	-0.11
9. Satisfaction									-0.25	0.44	0.35	0.67	0.47	0.41	0.68	0.35	0.34	0.78
10. Alternatives										-0.16	-0.18	-0.27	-0.25	-0.33	-0.23	-0.24	-0.28	-0.32
11. Investment											0.48	0.30	0.31	0.22	0.26	0.13	0.17	0.33
12.Commitment												0.29	0.32	0.25	0.26	0.23	0.24	0.30
13. Consistency Warm													0.46	0.47	0.87	0.32	0.33	0.75
14. Consistency Attract														0.52	0.36	0.73	0.45	0.61
15. Consistency Status															0.36	0.39	0.83	0.56
16. Residual Warm																0.35	0.29	0.01
17. Residual Attract																	0.44	0.03
18. Residual Status																		0.03
19. Percentage																		

Note: *r* ± .16, *p* < .05; *r* ± .20, *p* < .01

Table 3

Frequency of Unwanted Pursuit Behavior (n = 164)

	%	Never %	l to 3 times %	4 or More times %
Left unwanted gifts	17.1	83.0	17.0	0.0
Left unwanted messages	53.7	46.3	42.7	11.0
Made exaggerated expressions of affection	48.2	51.8	38.4	9.8
Followed the person around	11.0	89.0	9.8	1.2
Watched person	31.1	68.9	25.6	5.5
Intruding uninvited into the person's interactions	11.0	89.0	9.2	1.8
Invading the person's personal space	22.0	78.0	19.0	3.0
Involving the person in activities in unwanted ways	9.8	90.2	9.2	0.6
Invading the person's personal property	7.9	92.1	6.7	1.2
Intruding upon the person's friends, family, or coworkers	24.4	75.6	20.7	3.7
Monitoring the person or her/his behavior	40.1	59.1	35.4	5.5
Approaching or surprising the person in public places	15.9	84.2	13.4	2.4
Covertly obtaining private information	17.1	83.0	15.2	1.8
Invading the person's property	6.1	93.9	5.5	0.6
Leaving unwanted threatening messages	11.0	89.0	9.2	1.8
Physically restraining the person	7.3	92.7	5.5	1.8
Engaging in regulatory harassment	3.7	96.3	3.7	0.0
Stealing or damaging valued possessions	6.1	93.9	6.1	0.0
Threatening to hurt yourself	11.6	88.4	11.0	0.6
Threatening others the person cares about	9.8	90.2	9.8	0.0

Table 3 (cont.)

Behavior	%	Never %	l to 3 times %	4 or More times %
Verbally threatening the person personally	8.5	91.5	7.3	1.2
Leaving or sending the person threatening objects	2.4	97.6	2.4	0.0
Showing up at places in threatening ways	3.0	97.0	3.0	0.0
Sexually coercing him/her	10.4	89.6	10.4	0.0
Physically threatening the person	6.1	93.9	6.1	0.0
Physically hurting the person	9.8	90.2	9.2	10.6
Kidnapping or physically constraining the person	2.4	97.6	1.8	0.6
Physically endangering the person's life	1.8	98.2	1.8	0.0

Table 4

Multiple regression analysis for study covariates

Predictor	β	SD	t	р	Partial
Anxious Attachment	0.29	0.05	3.58	0.00	0.28
Avoidant Attachment	-0.06	0.05	-0.77	0.44	-0.06
Self-Esteem	-0.05	0.09	-0.44	0.66	-0.04
Neuroticism	0.07	0.06	0.59	0.56	0.05
Jealousy Cognitive	0.03	0.03	0.33	0.74	0.03
Jealousy Emotion	-0.18	0.04	-2.33	0.02	-0.18
Jealousy Behavior	0.31	0.04	3.75	0.00	0.29

Note. Criterion = Log transformed pursuit. R = 0.47; $R^2 = 0.22$, p < 0.001

Alternatives, Investment, Commitment as the independent variables; and Pursuit as the dependent variable. Table 4 presents all covariates and their relationship to Pursuit. Covariates were employed as they have been found to predict pursuit in previous research. Analyses revealed that Anxious Attachment, Jealousy Emotion, and Jealousy Behavior contributed significantly to the prediction of Pursuit. Anxious Attachment and Jealousy Behavior were positively correlated to Pursuit, while Jealousy Emotion was negatively correlated to Pursuit.

Hypothesis 1. The initial study hypothesis posited that there would be a significant positive relationship between Idealization and Unwanted Pursuit. This hypothesis was tested using the three idealization measures including: 1) Consistency Between Partner Perceptions and Ideal Standards (Consistency Warm, Consistency Attract, Consistency Status), 2) the residual variables from the regressions of Partner Ideal Standards Scale and the Perceptions of Actual Partner Qualities Scale, including Residual Warm, Residual Attract, and Residual Status, and 3) Idealization Percentage.

The results of the multiple regression indicated that the three measures of Idealization, did not significantly contribute to Unwanted Pursuit above and beyond the significant covariates. There was no significant relationship between Consistency Warm ($\beta = .08$, t =0.91, *ns*), Consistency Attract ($\beta = .08$, t = 1.07, *ns*), or Consistency Status ($\beta = .11$, t = 1.50, *ns*) and Unwanted Pursuit. Similarly, Idealization Percentage was not a significant predictor of Pursuit ($\beta = .12$, t = 1.60, *ns*). Finally, there was no significant relationship between Residual Warm ($\beta = .04$, t = 1.18, *ns*), Residual Attract ($\beta = .04$, t = 0.47, *ns*), or Residual Status ($\beta =$.04, t = 0.18, *ns*) and Pursuit. Therefore, Hypothesis 1 was not supported.

Hypothesis 2. The second study hypothesis posited that there would be a significant positive correlation between relationship Satisfaction and Unwanted Pursuit. The results indicated there was not a significant association between relationship Satisfaction and Unwanted

Pursuit ($\beta = .07$, t = 0.96, *ns*) after the covariates were entered. Thus, Hypothesis 2 was not supported.

Hypothesis 3. The third study hypothesis posited that there would be a significant negative correlation between relationship Alternatives and Unwanted Pursuit. The results indicated a significant association between relationship Alternatives and Unwanted Pursuit F(8, 153) = 6.14, p < 0.001), R² change = 0.27, after the covariates were entered, indicating that as relationship Alternatives increased, Unwanted Pursuit decreased significantly. Table 5 provides a summary of the model coefficients. Based on the results obtained, there was support for Hypothesis 3.

Hypothesis 4. The fourth study hypothesis predicted a significant positive relationship between Investment and Unwanted Pursuit. Although there was a moderately significant correlation between Investment and Pursuit (see Table 2), the results indicated no significant association between relationship Investment and Unwanted Pursuit ($\beta = .09$, t = 1.19, ns) after accounting for the significant covariates. Therefore, there was no support for Hypothesis 4.

Hypothesis 5. The fifth study hypothesis posited a significant positive relationship between Commitment and Unwanted Pursuit. Results revealed that although there was a moderately significant relationship between Commitment and Pursuit (see Table 2), there was no significant association between Commitment and Unwanted Pursuit ($\beta = .06$, t = 0.86, ns) beyond the significant covariates. Thus, Hypothesis 5 was not supported.

Hypothesis 6. The sixth and final study hypothesis posed a comprehensive path model in which a) Idealization is a significant predictor for Unwanted Pursuit and b) Commitment significantly mediates the relationship between Satisfaction, Alternatives, and Investment and Unwanted Pursuit, both while holding constant the study covariates of Anxious Attachment, Avoidant Attachment, Self-esteem, Neuroticism, and Jealousy Cognitive, Jealousy Emotion, Jealousy Behavior. Since neither Idealization nor Commitment were correlated to Pursuit, the

model was not supported. Specifically, since Commitment was not related to Pursuit, the requirement for mediation was not met. Thus the proposed path within Hypothesis 6 could not be supported.

Table 5

Table of Coefficients for Alternatives on Unwanted Pursuit

Predictor	β	SD	t	р	Partial
Anxious Attachment	0.28	0.05	3.48	0.00	0.33
Avoidant Attachment	-0.06	0.05	-0.74	0.46	0.00
Self-Esteem	-0.09	0.09	-0.78	0.44	0.14
Neuroticism	0.08	0.06	0.71	0.48	0.18
Jealousy Cognitive	0.05	0.03	0.58	0.56	0.19
Jealousy Emotion	-0.19	0.04	-2.51	0.01	-0.04
Jealousy Behavior	0.33	0.04	4.00	0.00	0.34
Alternatives	-0.17	0.02	-2.34	0.02	-0.14
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Note. R = 0.50; $R^2 = 0.03$, p < 0.001

Predictor = relationship alternative; Criterion = logarithmic transformed unwanted pursuit; Covariates = Anxious Attachment, Avoidant Attachment, Self-Esteem, Neuroticism, and the Cognitive, Emotion, and Behavior subscales of the Jealousy scale.

DISCUSSION

The current research examined the association between relationship variables and unwanted pursuit behaviors after the dissolution of a romantic relationship among pursuers. Previous research typically focused on individual predictors of pursuit, with very few studies investigating the relationship factors that may contribute to unwanted pursuit after a romantic relationship ends. This study investigated several relationship variables, including idealization of partner, relationship satisfaction, investments in the relationship, perception of alternatives to one's partner, and commitment to the former relationship, and their association with unwanted pursuit.

Similar to previous research by Dutton and Winstead (2006), the pursuers in this study were most likely to report leaving unwanted messages, making exaggerated expressions of affection, and monitoring the target's behaviors. They were least likely to report physically endangering the target's life, leaving or sending threatening objects, and kidnapping or physically constraining the target. The frequency of occurrence of these mild and severe behaviors in this study is also similar to existing research by Cupach and Spitzberg (2000), Langhinrichsen-Rohling et al. (2000), Sinclair and Frieze (2005), and Spitzberg et al. (1998). Moreover, consistent with previous research on unwanted pursuit (K. Davis et al., 2000; Dutton & Winstead, 2006; Dye & K. Davis, 2003; Langhinrichsen-Rohling et al., 2000), there were no gender differences found among pursuers, demonstrating that females are just as likely as males to engage in unwanted pursuit.

Anxious attachment, avoidant attachment, self-esteem, neuroticism, cognitive jealousy, emotional jealousy, and behavioral jealousy were included as covariates in this investigation to control for their potential effects on the proposed relationship predictors (Idealization, Satisfaction, Alternatives, Investments, and Commitment). Anxious attachment, emotional jealousy, and behavioral jealousy emerged as significant covariates across all analyses, regardless

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of the predictor. Essentially, these three variables were significantly related to pursuit, and were generally better predictors of pursuit than the hypothesized predictors. Other covariates such as avoidant attachment, neuroticism, self-esteem, and cognitive jealousy did not predict pursuit. Anxious attachment and behavioral jealousy were positively correlated to unwanted pursuit, while emotional jealousy was negatively correlated to pursuit. Research has consistently shown that anxious attachment either predicted pursuit directly (Dutton & Winstead, 2006; Langhinrichsen-Rohling et al., 2000) or indirectly (K. Davis et al., 2000; Dye & K. Davis, 2003). The current study's findings that avoidant attachment did not predict pursuit has consistently been found by previous research (K. Davis et al., 2000; Dutton & Winstead, 2006).

Previous research has found that jealousy is a strong predictor of pursuit among pursuer self reports (K. Davis et al., 2000; Dutton & Winstead, 2006; Dye & K. Davis, 2000). However, in Langhinrichsen-Rohling et al.'s (2000) sample, jealousy was not predictive of pursuit among pursuer self-reports. In the current study, behavioral jealousy tapped into the frequency of which pursuers engaged in the questioning of their former partners' whereabouts, monitoring their former partners' communications with others, and looking through their former partners' belongings, while the relationship was intact. Respondents were asked to report from the perspective of when their relationship with their ex-partner was ongoing. Higher levels of behavioral jealousy correlated to higher levels of unwanted pursuit. Although the behavioral jealousy acts occurred during the relationship and the pursuit occurred after the break-up, the direction of the association between behavioral jealousy and pursuit seems most suitable as both sets of behaviors describe mild to aggressive intrusive acts against the pursued partner. Cupach, Spitzberg, and Carson (2000) theorized that jealousy contributes greatly to the emotional inner workings of obsessive relational intrusion and stalking since the obsessive nature of the pursuer is to assume that they are losing a desired or imagined relationship. While there are similarities between previous studies and the current study, there is a notable difference in the time and context in which the jealousy occurred. With the exception of Langhinrichsen-Rohling et al.

(2000), such studies have explored jealous reactions at break-up, while the current study measured jealousy that occurred during the relationship. Emotional jealousy was assessed by asking participants to describe what their emotional reactions (pleased or upset) would be if the person they pursued hypothetically flirted with others, dated others, worked closely with others , and/or actively showed interest in others while the relationship was ongoing. Results indicated that pursuers who engaged in less pursuit post break-up, also reported they would have been more emotionally jealous during the relationship. Perhaps the manner in which emotional jealousy was presented could have impacted results. For instance, while the other two forms of jealousy asked respondents what they actually thought or how they actually behaved, emotional jealousy was hypothetical. The hypothetical format may have impacted pursuer responses.

There are elements in a relationship that are considered positive in its building and maintenance such as high levels of idealization, satisfaction, investment, and commitment, among others. These qualities are necessary for the relationship's strength and longevity; however, once the relationship ends, what happens to a partner who had strongly positive feelings and high commitment and investments? Do the same qualities required to sustain the relationship become problematic once the relationship ends? This study sought to investigate these variables, including higher levels of idealization of partner, relationship satisfaction, relationship investment, and relationship commitment, as well as the perception of having fewer alternatives to the relationship, as predictors of unwanted pursuit.

Previous research on idealization has focused on relationship sustenance (Murray et al., 1996a, 1996b), higher quality (Fletcher et al., 1999; Fletcher et al., 2000; Murray et al., 1996a, 1996b), greater levels of satisfaction (Knee et al., 2001; Murray et al., 1996a, 1996b), and higher degrees of commitment (Kurdek, 1995). In contrast to existing literature, the current study measured the impact of idealization after the relationship ends. It was believed that individuals who idealized their former partners during the relationship would engage in unwanted pursuit in order to regain and preserve the ideal. Results indicated no significant difference between

pursuers and nonpursuers on their levels of idealization. Moreover, among pursuers, there was no significant relationship between idealization and the extent of unwanted pursuit. This study measured idealization of partner both directly and indirectly, but the results suggest that idealization has no link to unwanted pursuit.

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The existing literature on Rusbult's Investment Model (1980, 1983) has consistently found that individuals report higher levels of commitment in their relationships when they are more satisfied, have more investments, and have the perception of poorer alternatives (Lin & Rusbult, 1995; Rusbult et al., 1986, 1998). This study tested the complete model including satisfaction, alternatives, investments, and commitment and their association to unwanted pursuit. The current study found no differences between pursuers and nonpursuers with regard to levels of satisfaction and commitment. Further, there was no support found for the assumption that greater levels of satisfaction and commitment would lead to greater levels of unwanted pursuit among pursuers. Concurrent with previous research, Dutton and Winstead (2006) also found that satisfaction was not correlated with pursuit, although satisfaction was assessed using a different measure. There were mixed results for investment, as there was a significant difference between pursuers and nonpursuers such that, when compared to nonpursuers, pursuers as a group exhibited higher levels of investment. However, results indicated that investment did not predict the extent of pursuit among pursuers. For perceptions of relationship alternatives, pursuers and nonpursuers did not significantly differ; however, alternatives did predict the extent of pursuit among pursuers. Specifically, as predicted, findings indicated that as the perception of having fewer alternatives increased, pursuers engaged in more pursuit post break-up. One study of pursuers (Dutton & Winstead, 2006) that explored the alternatives aspect of Rusbult's model also found that pursuers with fewer relationship alternatives reported higher pursuit, although not when alternatives were combined with other study variables. In the current study, the perception of having fewer alternatives predicted more pursuit above and beyond a set of covariates, which

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demonstrates that pursuers who felt they had more social or romantic options engaged in less pursuit.

Relationship variables were investigated as predictors of unwanted pursuit after the break-up of a romantic relationship; however, it was the individual predictors such as attachment anxiety, emotional jealousy, and behavioral jealousy that were stronger predictors of pursuit than the hypothesized relationship variables. After accounting for anxious attachment, emotional jealousy, and behavioral jealousy as confounding factors, there was some support for investments and alternatives but not for idealization, satisfaction, investments, and commitment. Greater investment may intensify a sense of loss, and fewer alternatives may increase the feelings of desperation. Good feelings about one's partner (idealization) and the relationship (satisfaction), and even the strong feelings that the relationship would last (commitment) do not appear to be risk factors for pursuit. It may be that these proposed positive relationship factors are straightforwardly unrelated to pursuit. Most of the variables leading to pursuit might be internally driven, such as anxious attachment and jealousy. Anxious attachment style is characterized by having a deep seated fear of rejection and abandonment by others, excessive need for reassurance from others, and high distress when a partner is unresponsive or unavailable (Wei et al., 2007). This general anxious attachment style when fueled with behavioral jealousy during the relationship, may lead the individual to engage in these persistent and repetitive acts after the relationship has ended in order to regain their own personal sense of security. The one relationship predictor that significantly contributed to level of pursuit among pursuers was the perception of having fewer alternatives to one's relationship, which is similar to Dutton and Winstead's (2006) findings. Although one's perception of having greater or fewer alternatives to the relationship was tested as a relationship variable, the fact that it is one's internal perception may separate it to some extent from the other relationship variables.

Overall, more pursuit occurred when the pursuer had an anxious attachment style, engaged in more acts of jealousy while the relationship was ongoing, reported lower rates of emotional jealousy in response to hypothetical scenarios, and perceived themselves as having fewer alternatives to their relationship such as not having sufficient social networks including friends, family, or prospective romantic partners. Also, there were no gender differences in how much males and females pursued. When compared to those who do not pursue, pursuers are likely to be more invested in their relationships and are more likely to report breaking up more often with their ex-partners.

Study Limitations

A major component impacting the generalizability of this study was that it was retrospective in nature, asking participants to recall how they felt about their ex-partners while the relationship was intact. Respondent judgments about these positive relationship factors could have been marred by the fact they reported on a relationship that ended. For those who pursued their partners, there could have been the additional bias of rating their former relationships from the perspective of someone who failed at attempts of reconciliation.

Another limitation was that this sample consisted mostly of young dating adults, who at this point in their lives most likely have not been involved in longer term and/or stable relationships. Although this age group is the most likely to engage in pursuit (Baum et al., 2009), results should be approached carefully so as to not generalize to different types of relationships. It may be that the issues that plague pursuers in this younger sample may be inherently different from other samples (i.e., long marriages, long-term same-sex couples, divorced couples with children, etc).

Future Directions

Participants were asked to recall events that occurred during the relationship, which poses bias since they are commenting on the relationship from a different state of mind. Specifically, longitudinal studies would strengthen our understanding of relational aspects of pursuit if individual and relationship predictors are gathered at multiple times, both prospectively during the relationship and prior to any pursuit; and retrospectively after the break-up of a relationship. Repeated observations could provide better insight into how various forms of jealousy, investment, and perceptions of alternatives impact unwanted pursuit. Reports of actual experiences of emotional jealousy could relate differently to unwanted pursuit compared to reports based on hypothetical formats.

Pursuers in this study reported they were either the main initiator of the break-up (43.3%) or mutually agreed to end the relationship (32.3%). The pursuer motives for ending the relationship may be important to investigate, as self reports about reasons for engaging in these intrusive behaviors could potentially reveal other internally driven objectives beside relationship reconciliation.

The current study demonstrated that more pursuit occurs when the pursuer exhibits anxious attachment, behavioral jealousy, and the perception of having fewer relationship alternatives. Based on the findings from this study, psychological approaches could potentially develop treatments to address difficulties that may plague pursuers. Treatments could include methods for managing jealousy and/or anxious attachment styles. For instance, those with anxious attachment styles could receive therapies that emphasize confidence and ego strength building to help control the chronic anxiety related to fears of abandonment and constant need for reassurance. Additionally, visualization techniques of imagining oneself with other potential mates or helping the pursuer feel more comfortable with other people within their social networks could be greatly beneficial. Since results also showed that pursuers are significantly more invested in their relationships compared to those who do not engage in pursuit, pursuers could receive distress/anger management techniques related to learning acceptance of events and finding ways to cope if a relationship ends even after they have invested much of themselves into the relationship. If such treatments are developed and are efficacious, future studies on pursuit should compare prevalence rates among pursuers who receive psychological treatments with those who do not receive treatments in control groups.

There are elements about the pursuer-target relationships that may contribute to pursuit, yet there may be a certain type of individual with personality characteristics who is more prone to pursue. Inclusion of various research methodologies such as repeated observations, comparisons of treatment and control groups, and motives among pursuers could help partners identify characteristics that put them at risk of becoming pursuers or targets. In addition, these characteristics could also help at-risk pursuers seek appropriate help when their relationships end.

SUMMARY AND CONCLUSIONS

Individuals experience break-ups in a romantic relationship frequently, and many of them engage in tactics attempting to maintain the relationship. These pursuers engage in acts to convince their former partner to reconcile, despite their target's unwillingness. Unwanted pursuit behaviors range from mild (unwanted telephone calls, writing letters) to moderate (following, unexpected visiting) to serious (verbal and physical threats, actual acts of violence) (Cupach & Spitzberg, 2004). The milder forms of unwanted pursuit can appear more as nuisances, whereas the more threatening acts may constitute stalking, a criminal behavior. In this study the most frequently reported acts consisted of pursuit were leaving unwanted messages, making exaggerated expressions, and monitoring the person's behaviors. The least commonly reported behaviors were physically hurting the person's life, kidnapping or physically constraining the person, and leaving or sending the person threatening objects. The study examined specific relationship variables that were hypothesized to predict unwanted pursuit behaviors occurring after the dissolution of a romantic relationship. Results revealed that extent of pursuit is related to perceiving oneself as having fewer alternatives. Covariates such as higher levels of anxious attachment and behavioral jealousy, and lower levels of emotional jealousy also predicted more pursuit among pursuers. Additionally, compared to those who did not pursue, those who pursued had significantly higher investment levels and had broken up more often with their former partners. However, there was no support for the proposal that higher levels of idealization, satisfaction, and commitment would predict unwanted pursuit. Future research should include prospective methods, investigating both targets and pursuers prior to the break-up of the relationship as well as post dissolution of the relationship to gain better information about the interactional aspects of unwanted pursuit. Detecting and categorizing such factors would be a starting point to identifying risk factors for unwanted pursuit that could lead to prevention or intervention for pursuers.

REFERENCES

- Amar, A. F. (2006). College women's experience of stalking: Mental health symptoms and changes in routines. Archives of Psychiatric Nursing, 20, 108-116.
- Basile, K. C., Swahn, M. H., Chen, J., & Saltzman, L. A. (2006). Stalking in the United States: Recent national prevalence estimates. *American Journal of Preventive Medicine*, 31, 172-175.
- Baum, K., Catalano, S., Rand, M., & Rose, K. (2009). Stalking victimization in the United States: Findings from the National Crime Victimization Survey. Washington, DC: National Institute of Justice (NCJ 224527).
- Bjerregaard, B. (2000). An empirical study of stalking victimization. Violence and Victims, 15, 389-406.
- Blascovich, J., & Tomaka, J. (1991). Measures of self-esteem. In J. P. Robinson, P. R. Shaver, &
 L. S. Wrightsman (Eds.), *Measures of personality and social psychological* attitudes, Volume I (pp. 115-160). San Diego, CA: Academic Press.
- Brennan, K. A., Clark, C. L., & Shaver, P. R. (1998). Self-report measurement of adult attachment: An integrative overview. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46-76). New York: Guilford.
- Budd, T., & Mattinson, J. (2000). Stalking: Findings from the British crime survey (Home Office Research, Research Findings No. 129). London: Research Development and Statistics Directorate.
- Coleman, F. L. (1997). Stalking behavior and the cycle of domestic violence. *Journal* of Interpersonal Violence, 12, 420-433.
- Cupach, W. R., & Spitzberg, B. H. (1998). Obsessive relational intrusion and stalking. In
 B.H. Spitzberg & W.R. Cupach (Eds.), *The dark side of close relationships*(pp. 233-263). Hillsdale, NJ: Lawrence Erlbaum Associates.

- Cupach, W. R., & Spitzberg, B. H. (2000). Obsessive relational intrusion: Incidence, perceived severity, and coping. *Violence and Victims, 15*, 357-372.
- Cupach, W. R., & Spitzberg, B. H. (2004). *The dark side of relationship pursuit: From attraction to obsession and stalking*. Mahwah, NJ: Lawrence Erlbaum Associates.
- Cupach, W. R., Spitzberg, B. H., & Carson, C. L. (2000). Toward a theory of obsessive relational intrusion and stalking. In K. Dindia, & S. Duck (Eds.), *Communication and Personal relationships* (pp. 131-146). New York, NY: John Wiley & Sons Ltd.
- Davis, D., Shaver, P. R., & Vernon, M. L. (2003). Physical, emotional, and behavioral reactions to breaking up: The roles of gender, age, emotional involvement, and attachment style. *Personality & Social Psychology Bulletin, 29*, 871-884.
- Davis, J. A., & Chipman, M. A. (2001). Stalkers and other obsessional types: A review and forensic psychological typology of those who stalk. In J.A. Davis (Ed.), *Stalking crimes and victim protection: Prevention, intervention, threat assessment, and case management* (pp. 3-19). Florida: CRC Press.
- Davis, K. E., Ace, A., & Andra, M. (2000). Stalking perpetrators and psychological maltreatment of partners: Anger-jealousy, attachment insecurity, need for control, and break up context. *Violence and Victims*, 15, 407-425.
- Dennison, S. M., & Stuart, A. (2006). Facing rejection: New relationships, broken relationships, shame, and stalking. *International Journal of Offender Therapy* and Comparative Criminology, 50, 324-337.
- Dressing, H., Kuehner, C., & Gass, P. (2005). Lifetime prevalence and impact of stalking in a European population: Epidemiological data from a middle-sized German city. *British Journal of Psychiatry*, 187, 168-172.
- Dunn, J. L. (1999). What love has to do with it: The cultural construction of emotion and sorority women's responses to forcible interaction. *Social Problems*, *46*, 440-459.

Dutton, L. B., & Winstead, B. A. (2006). Predicting unwanted pursuit: Attachment,

relationship satisfaction, relationship alternatives, and break-up distress. *Journal* of Social and Personal Relationships, 23, 565-586.

- Dye, M. L., & Davis, K. E. (2003). Stalking and psychological abuse: Common factors and relationship-specific characteristics. *Violence and Victims*, *18*, 163-180.
- Emerson, R. M., Ferris, K. O., & Gardner, C. B. (1998). On being stalked. Social Problems, 45, 289-314.
- Felmlee, D., Sprecher, S., & Bassin, E. (1990). The dissolution of intimate relationships: A hazard model. *Social Psychology Quarterly*, 53, 13-30.
- Fletcher, G. J. O., Simpson, J. A., & Thomas, G. (2000). Ideals, perceptions, and evaluations in early relationship development. *Journal of Personality and Social Psychology*, 79, 933-940.
- Fletcher, G. J. O, Simpson, J. A., Thomas, G., & Giles, L. (1999). Ideals in intimate relationships. *Journal of Personality and Social Psychology*, *76*, 72-89.
- Fremouw, W. J., Westrup, D., & Pennypacker, J. (1997). Stalking on campus: The prevalence and strategies for coping with stalking. *Journal of Forensic Science*, 42, 666-669.
- Goldberg, L. R., Johnson, J. A., Eber, H. W., Hogan, R., Ashton, M. C., Cloninger, C. R., &
 Gough, H. C. (2006). The International Personality Item Pool and the future of publicdomain personality measures. *Journal of Research in Personality*, 40, 84-96.
- Hall, D. M. (1997). Outside looking in: Stalkers and their victims. Unpublished doctoral dissertation, Claremont Graduate School, Claremont, CA.
- Harris, J. (2000). The Protection From Harassment Act 1997- An evaluation of its use and effectiveness (Research Findings No. 130). London Great Britain Home Office Research and Development and Statistics Directorate.
- Hendrick, S. S., Dicke, A., & Hendrick, C. (1998). The Relationship Assessment Scale. Journal of Social and Personal Relationships, 15, 137-142.

- Hendrick, S. S., Hendrick, C., & Adler, N. L. (1988). Romantic relationships: Love, satisfaction, and staying together. *Journal of Personality and Social Psychology*, *54*, 980-988.
- Kelly, H. H., & Thibaut, J. W. (1978). Interpersonal Relations: A theory of interdependence. New York: Wiley.
- Knee, C. R., Nanayakkara, A., Vietor, N. A., & Patrick, H. (2001). Implicit theories of relationships: Who cares if romantic partners are less than ideal? *Personality & Social Psychology*, 27, 808-819.
- Kurdek, L. A. (1995). Assessing multiple determinants of relationship commitment in cohabitating, gay, cohabitating lesbian, dating heterosexual, and married heterosexual couples. *Family Relations*, 44, 261-266.
- Langhinrichsen-Rohling, J., Palarea, R. E., Cohen, J., & Rohling, M.L. (2000). Breaking up is hard to do: Unwanted pursuit behaviors following the dissolution of a romantic relationship. *Violence and Victims*, *15*, 73-90.
- Langhinrichsen-Rohling, J. & Taylor, J. (2003). After the breakup: Relationship factors associated with intimate stalking. In M. P. Brewster (Ed.) *Stalking: Psychology, risk factors, interventions, and law* (pp. 8.1-8.13). Kingston, NJ: Civic Research Institute.
- Lin, Y. W., & Rusbult, C. E. (1995). Commitment to dating relationships and cross-sex friendships in America and China. *Journal of Social and Personal Relationships*, 12, 7-26.
- Logan, T. K., Leukefeld, C., & Walker, B. (2000). Stalking as a variant form of intimate violence: Implications from a young adult sample. *Violence and Victims*, *15*, 91-111.
- Maner, J. K., Gailliot, M. T., Rouby, D. A., & Miller, S. L. (2007). Can't take my eyes off you: Attentional adhesion to mates and rivals. *Journal of Personality and Social Psychology*, 93, 389-401.
- Meloy, J. R., & Boyd, C. (2003). Female stalkers and their victims. *Journal of the* American Academy and the Law, 31, 211-219.

- Melton, H. C. (2000). Stalking: A review of the literature and direction for the future. *Criminal Justice Review*, 25, 246-262.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996a). The benefits of positive illusions:
 Idealization and the construction of satisfaction in close relationships. *Journal of Personality and Social Psychology*, 70, 79-98.
- Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996b). The self-fulfilling nature of positive illusions in romantic relationships: Love is not blind, but prescient. *Journal of Personality and Social Psychology*, 71, 1155-1180.
- National Institute of Justice (1996). Domestic violence, stalking, and antistalking legislation (Annual Report to Congress under the Violence Against Women Act, NCJ 160943). Washington, DC: U.S. Department of Justice.
- Overall, N. C., Fletcher, G. J. O., & Simpson, J. A. (2006). Regulation processes in intimate relationships: The role of ideal standards. *Journal of Personality and Social Psychology*, 91, 662-685.
- Pfeiffer, S. M., &Wong, P. T. P. (1989). Multidimensional jealousy. Journal of Social and Personal Relationships, 6, 181-196.
- Rosenberg, M. (1965). Society and adolescent self-image. Princeton, NJ: Princeton University Press.
- Rosenfeld, B. (2000). Assessment and treatment of obsessional harassment. Aggression and Violent Behavior, 5, 529-549.
- Rusbult, C. E. (1980). Commitment and satisfaction in romantic associations: A test of the Investment Model. *Journal of Experimental Social Psychology*, 16, 172-186.
- Rusbult, C. E. (1983). A longitudinal test of the investment model: The development (and deterioration) of satisfaction and commitment in heterosexual involvements. *Journal of Personality and Social Psychology*, 45, 101-117.

Rusbult, C. E., Johnson, D. J, & Morrow, G. D. (1986). Predicting satisfaction and commitment

in adult romantic involvements: An assessment of the generalizability of the investment model. *Social Psychology Quarterly, 49*, 81-89.

- Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The Investment Model Scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships*, *5*, 357-391.
- Russell, E. B., & Harton, H. C. (2005). The 'Other Factors': Using individual and relationship characteristics to predict sexual and emotional jealousy. *Current Psychology*, 24, 242-257.
- Sinclair, H. C., & Frieze, I. H. (2005). When courtship persistence becomes intrusive pursuit: Comparing rejecter and pursuer perspectives of unrequited attraction. Sex Roles, 52, 839-852.
- Spitzberg, B. H., & Cupach, W. R. (1997a). *Obsessive pursuit: Victim short form.* Unpublished measure.
- Spitzberg, B. H., & Cupach, W. R. (1997b). Relational pursuit: Pursuer short form. Unpublished measure.
- Spitzberg, B. H. & Cupach, W. R. (2007). The state of the art of stalking: Taking stock of the emerging literature. *Aggression and Violent Behavior, 12,* 64-86.
- Spitzberg, B. H., Nicastro, A. M., & Cousins, A. V. (1998). Exploring the interactional phenomenon of stalking and obsessive relational intrusion. *Communication Reports*, 11, 34-47.
- Tabachnick, B. G., & Fidell, L. S. (1996). Using multivariate statistics. New York: HarperCollins College Publishers.
- The National Center for Victims of Crime (2008a). http://www.ncvc.org/src/ main.aspx?dbID=DB_Virginia146.
- The National Center for Victims of Crime (2008b). http://www.ncvc.org/src/ main.aspx?dbID=DB_NewYork214.

- Tjaden, P., & Thoennes, N. (1998). Stalking in America: Findings from the National Violence Against Women Survey. Washington, DC: National Institute of Justice and Centers for Disease Control and Prevention (NCJ 169592).
- Tjaden, P., Thoennes, N., & Allison, C. J. (2000). Comparing stalking victimization from legal and victim perspectives. *Victims & Violence*, 15, 7-22.
- Wei, M., Russell, D. W., Mallinckrodt, B., & Vogel, D. L. (2007). The Experiences in Close Relationship Scale (ECR)-Short Form: Reliability, validity, and factor structure. *Journal* of Personality Assessment, 88, 187-204.
- Westrup, D., Fremouw, W. J., Thompson, R. N., & Lewis, S. F. (1999). The psychological impact of stalking on female undergraduates. *Journal of Forensic Sciences*, 44, 554-557.

APPENDIX A

INVESTMENT MODEL SCALE

You will be reporting on a relationship that has ended. The thoughts/feelings you have at this moment may be very different from the thoughts/feelings you had when the relationship was ongoing. For this questionnaire, please remember thoughts/feelings about the relationship while it was intact.

Remember that your responses are completely anonymous. Your honest answers are very important. Respond to these questions with regard to how you felt and what you thought during times when the relationship was ongoing.

Satisfaction

Facet items.

Please indicate the degree to which you agree with each of the following statements regarding your former relationship.

{Choose one}

() Don't Agree At All

() Agree Slightly

() Agree Moderately

() Agree Completely

1. My former partner fulfilled my needs for intimacy (shared personal thoughts, secrets, etc.)

2. My former partner fulfilled my needs for companionship (did things together, enjoyed each other's company, etc.)

3. My former partner fulfilled my sexual needs (held hands, kissed, etc.)

4. My former partner fulfilled my needs for security (felt trusting, comfortable in a stable relationship, etc.)

5. My former partner fulfilled my needs for emotional involvement (felt emotionally attached, feeling good when another feels good, etc.)

Global items.

{Choose one}

- () Do Not Agree At All
- () Do Not Agree Almost Completely
- () Do not Agree Moderately
- () Do Not Agree Somewhat
- () Agree Slightly
- () Agree Somewhat
- () Agree Moderately
- () Agree Almost Completely
- () Agree Completely

6. I felt satisfied with our relationship.

7. My relationship was much better than others' relationships.

8. My relationship was close to ideal.

9. Our relationship made me very happy.

10. Our relationship did a good job of fulfilling my needs for intimacy, companionship, etc.

Quality of Alternatives Facet items

{Choose one}
() Don't Agree At All
() Agree Slightly
() Agree Moderately
() Agree Completely

11. My needs for intimacy (sharing personal thoughts, secrets, etc.) could've been fulfilled in alternative relationships.

12. My needs for companionship (did things together, enjoying each other company, etc.) could've been fulfilled in alternative relationships.

13. My sexual needs (holding hands, kissing, etc.) could've been fulfilled in alternative relationships.

14. My needs for security (feeling trusting, comfortable in a stable relationship, etc.) could've been fulfilled in alternative relationships.

15. My needs for emotional involvement (feeling emotionally attached, feeling good when another feels good, etc.) could've been fulfilled in alternative relationships.

Global items

{Choose one}

() Do Not Agree At All

() Do Not Agree Almost Completely

() Do Not Agree Moderately

() Do Not Agree Somewhat

() Agree Slightly

() Agree Somewhat

() Agree Moderately

() Agree Almost Completely

() Agree Completely

16. The people other than my former partner with whom I might've become involved were very appealing.

17. My alternatives to our relationship were close to ideal (dating another, spending time with friends or on my own, etc.).

18. If I weren't dating my former partner, I would do fine - I would've found another appealing person to date.

19. My alternatives were attractive to me (dating another, spending time with friends or on my own, etc.).

20. My needs for intimacy companionship, etc., could've easily been fulfilled in an alternative relationship.

Investment Size

Facet items

{Choose one}

() Don't Agree At All

- () Agree Slightly
- () Agree Moderately
- () Agree Completely

21. I invested a great deal of time in our previous relationship.

22. I told my former partner many private things about myself (I disclosed secrets to him/her).

23. My former partner and I had an intellectual life together that was difficult to replace.

24. My sense of personal identity (who I am) was linked to my former partner and our relationship.

25. My former partner and I shared many memories.

Global items

{Choose one}

- () Do Not Agree At All
- () Do Not Agree Almost Completely
- () Do Not Agree Moderately
- () Do Not Agree Somewhat
- () Agree Slightly
- () Agree Somewhat
- () Agree Moderately
- () Agree Almost Completely
- () Agree Completely

26. I put a great deal into our relationship which I lost when the relationship ended.

27. Many aspects of my life had become linked to my former partner (recreational activities, etc.), and I lost all of this when we broke up.

28. I felt very involved in our relationship - like I had put a great deal into it.

29. My relationships with friends and family members were complicated when my former partner and I broke up (e.g., former partner is friends with people I care about).

30. Compared to other people I know, I invested a great deal in my relationship with my former partner.

Commitment Level Items

{Choose one}

() Do Not Agree At All

() Do Not Agree Almost Completely

() Do Not Agree Moderately

() Do Not Agree Somewhat

() Agree Slightly

() Agree Somewhat

() Agree Moderately

() Agree Almost Completely

() Agree Completely

31. I wanted our relationship to last for a very long time.

32. I was committed to maintaining my relationship with my former partner.

33. During our relationship, I would not have felt very upset if our relationship were to end in the near future.

34. During our relationship, it is likely that I would've dated someone other than my former partner within the next year.

35. I felt very attached to our relationship - very strongly linked to my former partner.

36. I wanted our relationship to last forever.

37. I was oriented toward the long-term future of my relationship (for example, I imagined being with my former partner several years from now).

APPENDIX B

PARTNER IDEAL STANDARDS SCALE-SHORT FORM

Individuals sometimes have a perfect or ideal partner in mind. In this section, respond as honestly as possible when referring to your IDEAL partner.

Instructions: Please rate your IDEAL PARTNER in terms of the importance that each item below has in describing your IDEAL PARTNER in a close relationship (dating, living together, or married).

{Choose one}

- () Very Unimportant
- () Moderately Unimportant
- () Unimportant
- () Neutral
- () Important
- () Moderately Important
- () Very Important

1. Understanding

- 2. Supportive
- 3. Kind
- 4. Considerate
- 5. Good listener
- 6. Sensitive
- 7. Nice body
- 8. Outgoing
- 9. Sexy
- 10. Adventurous
- 11. Attractive appearance
- 12. Good lover
- 13. Good job
- 14. Financially secure
- 15. Nice house or apartment

16. Successful

17. Dresses well

APPENDIX C

PERCEPTIONS OF ACTUAL PARTNER QUALITIES SCALE-SHORT FORM

Instructions: Please rate your FORMER PARTNER in terms of how each item accurately describes your FORMER PARTNER from your previous relationship. Think of your FORMER PARTNER as you perceived him or her when your relationship was ongoing.

{Choose one}

() Not at all like my partner

() Moderately unlike my partner

() Unlike my partner

() Neutral

() Like my partner

() Moderately like my partner

() Very much like my partner

1. Understanding

2. Supportive

3. Kind

4. Considerate

5. Good listener

6. Sensitive

7. Nice body

8. Outgoing

9. Sexy

10. Adventurous

11. Attractive appearance

12. Good lover

13. Good job

14. Financially secure

15. Nice house or apartment

16. Successful

17. Dresses well

APPENDIX D

CONSISTENCY BETWEEN PARTNER PERCEPTIONS

AND IDEAL STANDARDS SCALE-SHORT FORM

Instructions: Please compare your FORMER partner with expectations regarding your IDEAL partner. Please rate each item to the degree to which you feel your former partner matches your ideal partner. Think of your FORMER PARTNER as you perceived him or her when your relationship was ongoing.

{Choose one}

- () Does Not Match My Ideal At All
- () Does Not Match My Ideal Moderately
- () Does Not Match My Ideal
- () Neutral
- () Matches My Ideal
- () Moderately Matches My Ideal
- () Completely Matches My Ideal
- 1. Understanding
- 2. Supportive
- 3. Kind
- 4. Considerate
- 5. Good listener
- 6. Sensitive
- 7. Nice body
- 8. Outgoing
- 9. Sexy
- 10. Adventurous
- 11. Attractive appearance
- 12. Good lover
- 13. Good job
- 14. Financially secure
- 15. Nice house or apartment

16. Successful

17. Dresses well

APPENDIX E

IDEAL-PERCEPTION CONSISTENCY

Instructions: Considering all of the qualities that are really important to you, and thinking of your partner as they were when your relationships was ongoing, please complete the following sentence:

My former partner is _____% of what I would ideally want in a partner. {Enter text answer} []

APPENDIX F

EXPERIENCES IN CLOSE RELATIONSHIPS SCALE

Instructions: The following statements concern how you feel in romantic 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 indicating how much you agree or disagree with it.

Rate your responses for each item.

{Choose one}
() Disagree Strongly
() Disagree
() Neutral/Mixed
() Agree
() Agree Strongly

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 too close to my partner.

8. I do not often worry about being abandoned.

9. I usually discuss my problems and concerns with my partners.

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 G

NEUROTICISM SCALE

Instructions: Describe yourself as you generally are now, not as you wish to be in the future. Describe yourself as you honestly see yourself, in relation to other people you know of the same sex as you are, and roughly your same age. So that you can describe yourself in an honest manner, your responses will be completely anonymous. Please read each statement carefully, and then pick the response that best describes how you truly feel.

{Choose one}

- () Very Inaccurate
- () Moderately Inaccurate
- () Neither Inaccurate nor Accurate
- () Moderately Accurate
- () Very Accurate

1. Often feel blue.

- 2. Dislike myself.
- 3. Am often down in the dumps.
- 4. Have frequent mood swings.
- 5. Panic easily.
- 6. Rarely get irritated.
- 7. Seldom feel blue.
- 8. Feel comfortable with myself.
- 9. Am not easily bothered by things.
- 10. Am very pleased with myself.

APPENDIX H

SELF-ESTEEM SCALE

Instructions: Please read the following statements and indicate the degree to which you agree or disagree.

{Choose one}

- () Strongly Agree
- () Agree

() Disagree

() Strongly Disagree

1. I feel that I am a person of worth, at least on an equal basis as others.

2. I feel that I have a number of good qualities.

3. All in all, I am inclined to feel that I am a failure.

4. I am able to do things as well as most other people.

5. I feel I do not have much to be proud of.

6. I take a positive attitude toward myself.

7. On the whole, I am satisfied with myself.

8. I wish I could have more respect for myself.

9. I certainly feel useless at time.

10. At times, I feel I am no good.

APPENDIX I

MULTIDIMENSIONAL JEALOUSY SCALE

Instructions: Throughout this section of the survey, we will refer to the former partner you had difficulty letting go as "X." Think of your FORMER PARTNER as you perceived him or her when your relationship was ongoing.

How often did you have the following thoughts about "X," your former partner?

{Choose one}
{() Never
() Very Rarely
() Rarely
() Sometimes
() Often
() Very Often
() All the Time
1. I suspected that X was secretly seeing someone of the opposite sex.

2. I was worried that some member of the opposite sex may have been chasing after X.

3. I suspected that X may have been attracted to someone else.

4. I suspected that X may have been physically intimate with another member of the opposite sex behind my back.

5. I think that some members of the opposite sex may have been romantically interested in X.

6. I was worried that someone of the opposite sex was trying to seduce X.

7. I think that X was secretly developing an intimate relationship with someone of the opposite sex.

8. I suspect that X was crazy about members of the opposite sex.

How would you have emotionally reacted to the following situations?

- {Choose one}
- () Very pleased
- () Moderately pleased
- () Slightly pleased
- () Neither pleased nor upset
- () Slightly upset
- () Moderately upset
- () Very upset

1. X comments to you on how great looking a particular member of the opposite sex is.

2. X shows a great deal of interest or excitement in talking to someone of the opposite sex.

3. X smiles in a very friendly manner to someone of the opposite sex.

4. A member of the opposite sex is trying to get close to X all the time.

5. X is flirting with someone of the opposite sex.

6. Someone of the opposite sex is dating X.

7. X hugs and kisses someone of the opposite sex.

8. X works very closely with a member of the opposite sex (in school or office).

How often did you engage in the following behaviors relating to your former partner?

{Choose one} () Never () Very Rarely () Rarely () Sometimes () Often () Very Often () All the Time

1. I looked through X's drawers, handbags, or pockets.

2. I called X unexpectedly, just to see if he or she was there.

3. I questioned X about previous or present romantic relationships.

4. I said something nasty about someone of the opposite sex if X showed an interest in that person.

5. I questioned X about his or her telephone calls.

6. I questioned X about his or her whereabouts.

7. I joined in whenever I saw X talking to a member of the opposite sex.

8. I paid X a surprise visit just to see who was with him or her.

APPENDIX J

RELATIONAL PURSUIT- PURSUER SHORT FORM

In a relationship that is difficult to end, such as the one you are reporting on, a person may refuse to let go. Thinking about this relationship, we are interested in finding out if you ever persistently pursued this relationship partner in any of the following ways, and if so to what extent. Remember that your responses are completely anonymous. Your honest answers are very important.

Referring to the relationship you are reporting on, how often if at all, have you persistently pursued your former partner over a period of time for the purpose of reestablishing an intimate relationship that your former partner expressly claimed NOT to want? That is...

Have you ever persistently pursued your former partner who did not want to be pursued by...

{Choose one} () Never () Only once () 2 to 3 times () 4 to 5 times () Over 5 times

1. Leaving unwanted gifts (e.g., flowers, stuffed animals, photographs, jewelry, etc.)

2. Leaving unwanted messages (e.g., romantically-oriented notes, cards, letters, voice-mail, email, messages with friends, etc.)

3. Making exaggerated expressions of affection (e.g., saying "I love you" after limited interaction, doing large and unsolicited favors for the person, etc.)

4. Following the person around (e.g., following the person to and from work, school, home, gym, daily activities, etc.)

5. Watching the person (e.g., driving by home or work, watching him/her from a distance, gazing at the person in public places, etc.)

6. Intruding uninvited into the person's interactions (e.g., "hover" around the person's conversations, offer unsolicited advice, initiate conversations when the person is busy, etc.)

7. **Invading the person's personal space** (e.g., getting too close to the person in conversation, touching him/her, etc.)

8. Involving the person in activities in unwanted ways (e.g., enrolling the person in programs, putting him/her on mailing lists, using the person's name as a reference, etc.)

9. Invading the person's personal property (e.g., handling the person's possessions, breaking and entering into his/her home, showing up at the person's door or car, etc.)

10. Intruding upon the person's friends, family, or coworkers (e.g., trying to befriend the person's friends, family, or coworkers; seeking to be invited to social events, seeking employment at his/her work, etc.)

11. **Monitoring the person or her/his behavior** (e.g., calling at all hours to check on the person's whereabouts, checking up on him/her through mutual friends, etc.)

12. Approaching or surprising the person in public places (e.g., showing up at places such as stores, work, gym; lying in wait around corners, etc.)

13. Covertly obtaining private information (e.g., listening to the person's answering machine, taking photos of person without her/his knowledge, stealing her/his mail or email, etc.)

14. **Invading the person's property** (e.g., breaking and entering in the person's home, car, desk, backpack or briefcase, etc.)

15. Leaving unwanted threatening messages (e.g., hang-up calls; notes, cards, letters, voice-mail, e-mail, messages with friends, implying harm or potential, etc.)

16. **Physically restraining the person** (e.g., grabbing the person's arm, blocking his/her progress, holding the person's car door while she/he is in the car, etc.)

17. Engaging in regulatory harassment (e.g., filing official complaints, spreading false rumors to officials-boss, instructor, etc., obtaining a restraining order on the person, etc.)

18. Stealing or damaging valued possessions (e.g., vandalized the person's property; took, damaged or hurt this person's possessions that only you had access to, such as prior gifts, pets, etc.)

19. Threatening to hurt yourself (e.g., vague threats that something bad will happen to you, threatening to commit suicide, etc.)

20. Threatening others the person cares about (e.g., threatening to harm to or making vague warnings about the person's romantic partners, friends, family, pets, etc.)

21. Verbally threatening the person personally (e.g., threats or vague warnings that something bad will happen to the person, threatening personally to hurt the person, etc.)

22. Leaving or sending the person threatening objects (e.g., marked up photographs of the person, took photographs of the person without his/her knowledge, sent her/him pornography, weapons, etc.)

23. Showing up at places in threatening ways (e.g., showing up at class, office, or work, from behind a corner, staring from across a street, being inside the person's home, etc.)

24. Sexually coercing him/her (e.g., forcefully attempted/succeeded in kissing, feeling, or disrobing the person, exposed yourself to him/her, forced the person to engage sexual behavior, etc.)

25. **Physically threatening the person** (e.g., throwing something at the person, acting as if you will hit the person, running a finger across your neck implying slitting his/her throat, etc.)

26. **Physically hurting the person** (e.g., pushing, shoving, or slapping the person, hitting him/her with a fist, hitting the person with an object, etc.)

27. **Kidnapping or physically constraining the person** (e.g., by force or threat of force, trapped the person in a car or room; bound the person; took him/her places against his/her will; etc.)

28. Physically endangering the person's life (e.g., trying to run the person off the road, displaying a weapon in front of the person, using a weapon to subdue her/him, etc.)

APPENDIX K

BACKGROUND QUESTIONS

Instructions: For this questionnaire, please remember thoughts/feelings about the relationship when it was ongoing. Please focus on your experiences specific to ONE former partner that you pursued after the relationship ended. Please choose the answer that best describes you:

1. I am a: {Choose one} () Male () Female

2. My racial background is:

{Choose one}

() Caucasian not of Hispanic origin

() Hispanic

() African-American/Black not of Hispanic origin

() Asian or Pacific Islander

() Other

3. My age is:

{Choose one}

() 18-21

- () 22-25
- () 26-35
- () 36-50
- () 51 or over

4. Length of previous romantic relationship you are describing: {Choose one}

() Less than 2 months

- () 2 6 months
- () 6 12 months

() Over 1 year - 3 years

- () 3 5 years
- () 6 10 years
- () 11 14 years
- () Over 15 years

5. How long has it been since your relationship ended: {Choose one}

- () Less than a week
- () 1-2 weeks
- () 2 3 weeks
- () 4 6 weeks
- () 6 8 weeks

6. How did the past romantic relationship end? {Choose one}

() I broke if off

() Partner broke it off

() Mutual agreement for breakup

7. The nature of the relationship you are describing:

{Choose one}

() Dated

() Lived together

() Engaged

() Married

() Long-term relationship, not living together

8. The former romantic partner I am describing is:

{Choose one}

() Male

() Female

9. My former partner and I had broken up prior to this most recent break up.

{Choose one}

() Yes

() No

10. How many times had you and your former partner reconciled PRIOR to the final breakup? If this was your first and only breakup, mark 0. Please choose number. {Choose one}

()0 ()1 ()2 ()3 ()4 ()5 ()6 ()7 ()8 ()9 ()10+

11. The typical period of time between each breakup was: {Choose one}

() There were no previous breakups

() < 1 month

() 1-3 months

() 4-6 months
() 6-9 months
() 9-12 months
() Over 12 months

THANK YOU FOR YOUR TIME AND PARTICIPATION.

If this survey caused you moderate or severe distress, please call the Office of Counseling Services at 757-683-4401 or visit a counselor at 1526 Webb Center.

VITA

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Education

August 2009	Doctor of Psychology, Clinical Psychology
	The Virginia Consortium Program in Clinical Psychology
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May 2000 Bachelor of Arts, Psychology Major Emory University Atlanta, Georgia

Relevant Work Experiences

9/06-4/07	Psychometrist for Hamlin Psychological Services. Conducted diagnostic
	interviews; administered, scored, interpreted, and wrote psychological batteries;
	discussed evaluation results with clients. Population included children,
	adolescents, and adults with axis I-III disorders in a private practice setting.
9/05-8/06	Intern for University of Tennessee Health Science Center. Conducted psycho-
	educational, psychosexual, custody, and forensic evaluations; provided
	individual, couples, and group therapy; provided Crisis Intervention Team (CIT)
	training for Memphis Police Department, created and implemented behavioral
	management and treatment plans. Population included children, adolescents, and
	adults with Axis I, II, and III disorders in settings such as community mental
	health center, hospital inpatient and outpatient, and child development center.
8/04-5/05	Student Therapist for Norfolk State University Counseling Center. Conducted
	intake evaluations; created and implemented treatment plans; provided individual
	therapy and crisis intervention; developed and implemented outreach programs;
	completed administrative and clinical paperwork. Population included outpatient
	undergraduate and graduate students with Axis I and Axis III disorders.
8/00-6/02	Certified Special Education Teacher for Gwinnett County Schools. Managed and
	taught a classroom of 8-10 children and adolescents; created lesson plans and
	behavioral management plans; wrote and developed individualized education
	plans (IEPs); conducted IEP meetings; provided affective training; structured
	community skills outings; wrote daily and weekly progress notes; participated in
	case management of transitioning students; coordinated parent-teacher meetings;
	Population included children and adolescents with mental retardation comorbid
	with learning, emotional, behavioral, sexual disorders.