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AN INVESTIGATION INTO THE POTENTIAL ROMANTIC APPEAL OF CONVICTED  
KILLERS

BY

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## **ABSTRACT**

It is not uncommon for convicted killers to receive letters and visits from women hoping to win their affection. This behavior is puzzling, as evolutionary theory would posit that attraction to murderers runs counter to people's survival instincts. To date, however, no research has been conducted to investigate this phenomenon. The goals of the present studies were to determine whether characteristics of killers that women have evolved to find attractive (i.e., fame and dominance) make them appealing to women, and whether women with certain personality characteristics are more likely to find a killer attractive. Results showed that fame was a characteristic that appealed to women, but that dominance was not. Also, women higher in sensation seeking and attachment avoidance with their fathers were more likely to find the killer attractive. Women higher in attachment anxiety with their fathers were less likely to find the killer attractive. Self-esteem, attachment avoidance with romantic partner, and attachment anxiety with romantic partner were not related to attraction.

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## CHAPTER 1: INTRODUCTION

Joran van der Sloot, the 22-year-old Aruban citizen long suspected in the disappearance of American teenager Natalee Holloway, was recently charged with the murder of another young woman, Stephany Flores. Details of van der Sloot's confession, in which he admitted to hitting Flores and strangling her to death, made national headlines. One may suspect that van der Sloot, currently residing in a jail cell in Peru, would be vilified by women around the world for his violent acts. However, instead of receiving letters from women disgusted by his evil deeds, van der Sloot is receiving something entirely different—marriage proposals (Sterling, 2010).

Van der Sloot is not the first killer to be courted by admiring woman. In the late 1800's, William Durant, also known as the "Demon of the Belfry," stood trial for the murders of two young women. During the trial, spectators noticed a mysterious young woman who arrived at the courthouse each day with a bouquet of flowers. She would have the flowers delivered to Durant and later made attempts to visit him in his cell. Despite being married, she clearly held some sort of fascination for the killer (Schechter, 2003).

More recently, Scott Peterson, convicted of murdering his pregnant wife and dumping her body in the ocean in 2004, received countless calls and letters from women seeking his affections (Erickson, 2005). He, like van der Sloot, also received marriage proposals (one of which was phoned in to the prison only an hour after he had been sentenced to death row) (Fimrite & Taylor, 2005). Robert Chambers, found guilty of murdering his girlfriend in Central Park in the late 1980's, had to be relocated to a new prison because so many women were attempting to visit his cell and smuggle him prohibited items (Erickson, 2005). An especially striking example of this phenomenon concerns Ted Bundy, one of the most famous serial killers of modern times. During his trial for the brutal attack on several young women in a Florida sorority house, Bundy's

former coworker Carole Ann Boone took the stand. Bundy, acting as his own lawyer and taking advantage of a law that states that any declaration of marriage made in a courthouse is valid, asked her to marry him. Despite the fact that he stood accused of raping and murdering the women, and was suspected in the violent deaths of close to thirty other young girls, Boone accepted his proposal and later bore his child (Rule, 1980).

It is clear that, despite their violent and aggressive acts, murderers hold appeal for some women. But why would women be attracted to a man who has raped, tortured, and killed? Attempts to explain this puzzling behavior are numerous, with theories ranging from the possibility that these women are simply mentally ill to the possibility that they are seeking fame and attention (Lohr, 2010). However, to date no scientific research has been conducted in an attempt to determine what characteristics of women may lead them to be attracted to a killer and what characteristics of the killers themselves make them so appealing.

The purpose of the present research is to investigate some of the potential reasons behind women's attraction to killers by focusing on several personality characteristics of women that may lead them to be more attracted to a killer and by focusing on characteristics of the killers that women may find attractive for evolutionary reasons. Specifically, I predict that women who are high in attachment avoidance, low in self-esteem, and high in sensation-seeking will find killers more attractive. Additionally, I predict that certain characteristics of the killers themselves—fame and dominance—make them appealing to women because these features are indicators of a man's ability to acquire resources or his genetic fitness. Although these characteristics are manifest in an extreme or unusual manner, the human mind might not differentiate the socially inappropriate manifestation of these indicators from more appropriate ones.

To begin, I will discuss the personality traits that may lead women to be more or less attracted to a killer. Next, I will provide a review of evolutionary research on mating strategies and preference. I will then discuss two qualities of killers that I believe women may find attractive for evolutionary reasons—the fame bestowed upon these men and the dominance they exhibit.

### **1.1 Personality characteristics of women who are attracted to killers**

At first glance, many of the women who have fallen in love with killers appear to be educated, well-adjusted, “normal” individuals. Sheila Isenberg (2000), a journalist who interviewed dozens of women in love with killers for her book *Women Who Love Men Who Kill*, noted the varying characteristics of these women. Their occupations included social worker, teacher, nurse, reporter, waitress, secretary, housewife, and even attorney. Some had children; others did not. The majority were in their thirties and forties. Most did not have a criminal past.

How did these women come into contact with their convicted killers? Some of the meetings occurred by chance. For instance, one woman served on a jury for a man suspected of a rape and murder. During the trial, she fell in love with the defendant and voted to spare him the death penalty. They are now married. Another woman served as the defense lawyer for a man accused of murder. She later assisted him in his escape. In another instance, a lawyer’s wife fell for the killer when she accompanied her husband to the jail cell for a meeting.

Some women actively sought out these men through personal ads the killers placed in local newspapers. Thanks to the Internet, however, convicted criminals now have an even wider range of advertising options: inmatesforyou.com, prisonpenpals.com, meet-an-inmate.com, and many more. They can have their picture posted, along with descriptions of their hobbies and

interests. Women simply can log on to these sites and conduct searches by such factors as age, location, and length of sentence. The very fact that so many of these sites exist testifies to the fact that these killers harbor some sort of fascination for many women.

But who are these women? As noted previously, on the surface they appear the same as the average woman, with common occupations and no obvious mental or physical defects. However, based upon Isenberg's (2000) interviews with women in love with killers, theories in social-personality and evolutionary psychology, and my own speculations, I hypothesize that certain personality characteristics may factor into women's fascination with killers. Specifically, I hypothesize that an insecure attachment orientation, low self-esteem, and high sensation seeking will correlate with women's attraction to murderers. These variables will be discussed in more depth below.

## **1.2 Attachment**

Consider the following statements made by a woman married to a convicted murderer regarding her upbringing.

[My father] was here for the boys, but not for me. He had no time for his daughter. There was a point in my life where I really turned off to him. He didn't care about nothing. He was just not there for me. (Isenberg, 2000, p. 77).

Based upon her interviews with this woman and numerous other women who have had romantic relationships with killers, Isenberg (2000) concluded that they are often "little girls lost, reared in dysfunctional families where they were victims of abuse at the hands of harsh, dictatorial fathers aided by passive mothers" (p. 223). She goes on to note that the fathers of

these women were generally missing in some way, whether they were dead, always working, or simply emotionally unavailable.

Findings from research conducted in the area of life history theory (Belsky, Steinberg, & Draper, 1991) provide support for the notion that a woman's early childhood experiences may impact her subsequent relationships. Life history theory posits that individuals' early affective experiences influence their future mating and child-rearing behavior in a way that maximizes reproductive success. For example, a girl who grows up in a more stable family environment is predicted to be more focused on the long-term benefits of a relationship and, importantly, adhere more closely to the modern norms of society. Contrarily, if a young girl grows up questioning the predictability of interpersonal relationships and resources, she may then view others as untrustworthy, engage in earlier sexual activity, and adopt a more short-term/less-invested mating strategy. Indeed, research has shown that girls who report strained relationships with their parents or who were raised in homes without a father present are more likely to begin puberty earlier (Ellis & Essex, 2007; Moffitt, Caspi, & Belsky, 1992; Steinberg, 1988) and to engage in sexual activity earlier (Jessor, Costa, Jessor, & Donovan, 1983; Quinlan, 2003) than girls not raised in these environments.

Given findings from life history theory (Belsky, Steinberg, & Draper, 1991), along with Isenberg's (2000) observations, it seems reasonable to assume that women's parental relationships (especially with their fathers) may in some way result in them turning to convicted murderers for love and affection. Attachment theory (Bowlby, 1982), which posits that the security versus insecurity of one's early relationships can impact the quality of relationships throughout one's life, may prove useful for exploring this idea.

Attachment theory was developed by Bowlby (1982) to explain the bond that develops between an infant and his or her caregiver. According to attachment theory, children instinctively form an attachment to their primary caregiver that helps to insure their survival. This attachment is evidenced by various behaviors that children exhibit, such as crying or clinging. Bowlby (1982) noted, however, that not all children reacted to their caregivers in a similar manner and that these differences appeared to be based upon how the caregiver responded to the children. For instance, if the caregiver was responsive to the child's needs, the child developed a sense of security (or a secure attachment style), whereas if the caregiver was unresponsive, the child learned to withdraw and not depend upon the caregiver (an insecure attachment style). Based upon these interactions, children were thought to develop a "working model" that then guided their behaviors in future interactions with the caregiver and others (Ainsworth, Blehar, Waters, & Wall, 1978).

Hazan and Shaver (1987) extended theory on attachment to adult romantic relationships when they noted that the same patterns of behavior observed between infants and caregivers also seemed to exist between romantic partners. For instance, some people seemed to have an easier time relying on their partners (a secure attachment style), while others appeared more anxious (an anxious attachment style) or withdrawn (an avoidant attachment style). Providing support for the notion of working models, research has shown that these differences in adults' attachment orientations tend to be a reflection of their attachment security in the past (e.g., Fraley, 2002; Roisman, Collins, Sroufe, & Egeland, 2005; Simpson, Collins, Tran, & Haydon, 2007).

Although Hazan and Shaver (1987) classified people's attachment styles into one of three categories, attachment, as it is studied among social and personality psychologists, is

currently assessed with respect to two theoretically independent dimensions: anxiety and avoidance (Brennan, Clark, & Shaver, 1998). Individuals who are high on anxiety tend to worry that their partner does not really love them or will abandon them. Individuals who score high on avoidance prefer not to open up to others and are uncomfortable being close to others. A secure individual is considered to be low on both these dimensions and, as such, comfortable with intimacy and trustful of his or her partners.

### **1.3 Attachment and attraction to killers**

I propose that women who are high in attachment avoidance with their fathers and romantic partners will be more likely to find killers attractive. A life history theory posits that women who grew up in strained relationships with their fathers are more likely to adopt a less invested mating strategy, it makes sense women who have avoidant relationships with their fathers may be more likely to find a killer appealing. Additionally, research has shown that avoidant individuals are uncomfortable with closeness and report less intimacy in their relationships (Tidwell, Reis, & Shaver, 1996). As such, they may prefer a partner with whom they do not need to interact with emotionally on a level that would occur if he were free. I make no specific prediction about women who are high in attachment anxiety. On the one hand, anxious individuals, by definition, are concerned that their loved ones may abandon them or do not really love them (Mikulincer & Shaver, 2003). If an anxious individual's partner is behind bars, however, the chances of him abandoning her are probably lower than if he were a free man able to interact with whomever he chose. Indeed, forensic consultant Dr. Park Dietz speculates, based upon his observations of women in love with killers, that many of these women experienced feelings of abandonment as young children due to unresponsive caregivers and that

this fear of abandonment may drive their attraction to men behind bars (Lohr, 2010). On the other hand, highly anxious individuals, who chronically worry that their partner does not love them, may find it unappealing to be involved with a man from whom they cannot constantly seek reassurance or be with whenever they desire.

Another possible reason that attachment may predict attraction to killers concerns the fact that these killers are generally unavailable for sexual contact. Numerous studies have demonstrated that individuals of different attachment orientations differ in their desire for and comfortableness with physical interactions. For instance, secure individuals, compared to insecure, are more likely to prefer sex in committed, as opposed to noncommitted, relationships and report fewer one-night stands (Brennan & Shaver, 1995; Cooper, Shaver, & Collins, 1998). Avoidant individuals, on the other hand, tend to have a lower sex drive and report less enjoyment from sexual activity (Tracy, Shaver, Albino, & Cooper, 2003). Avoidant individuals also report more aversive sexual feelings and cognitions (Birnbaum, Reis, Mikulincer, Gillath, & Orpaz, 2006). Anxious individuals are more likely to report ambivalent feelings about sex (Birnbaum et al., 2006), to use sex as a means to avoid abandonment, and to report more dissatisfaction with their sexual encounters (Brennan, Wu, & Loev, 1998; Tracy et al., 2003).

Given the above findings, it seems possible that highly avoidant women may find a man behind bars appealing as they do not have to engage in a sexual relationship with him. Again, the expectation for highly anxious women is less clear: Although they report ambivalent feelings about sex, they also tend to use it as a way to prevent being abandoned.

In sum, I propose that attachment orientation will be one personality characteristic that influences women's attraction to killers. Highly avoidant women, possibly due to their fears of being abandoned, their dislike of closeness, or distaste for sexual relations, will find a man who

is behind bars more attractive than women of a more secure attachment orientation. The potential appeal of a convicted killer for highly anxious women is less clear. On the one hand, they may enjoy knowing that their significant other is unlikely to abandon them, as well as having the knowledge of where he is at all times. On the other hand, highly anxious women may find it unappealing to have to maintain a physical distance from their partners and to be unable to speak or see them whenever they desire. In sum, I plan to assess the quality of participants' attachment relationships with their fathers and romantic partners, as well as the presence versus absence of their fathers while growing up.

#### **1.4 Self-esteem**

Consider the following statement made by a woman currently married to a man convicted of beating an elderly man and trying to decapitate him with a saw.

[My ex husband] was always putting me down: "You're so ugly. You're so stupid." [He would tell our daughter] "you're nothing but a faker. You're nothing but a slut." (Isenberg, 2000, p. 114).

Isenberg (2000), who personally interviewed this woman, noted that this woman's ex-husband continually insulted her and her loved ones, wreaking havoc on her self-worth. Indeed, Isenberg (2000) states, based upon her interviews, that women who love killers are often suffering from extremely low levels of self-esteem. They seek out killers because they want something that society has also branded as unacceptable. The women then use this love as a way to boost their self-esteem. Popular true crime writer Diane Fanning, who has witnessed first hand the outpouring of love that serial killers receive, also speculates that self-esteem may be a factor. "[These women] believe that they don't deserve anything better than a social reject.

They look at someone who is hated by the world, and they can relate,” she says (Rufus, 2010). Isenberg and Fanning’s comments are based upon their own speculations as opposed to empirical data. However, research in life history theory (Belsky, Steinberg, & Draper ,1991) has found that individuals who report higher self-esteem also report more focus on a controlled, long-term, predictable mating strategy (Gladden, Figueredo, & Snyder, 2010), giving support to the notion that individuals of higher self-esteem may be less inclined to become involved in a relationship with a convicted killer.

Indeed, low self-esteem can impact the way people function in romantic relationships in numerous ways. Although people with high self-esteem tend to believe that their romantic partners see many valuable qualities in them, people with low self-esteem tend to believe that their partners see relatively few valuable qualities in them (even if this is incorrect) (Murray, Holmes, & Griffin, 2000). Individuals with low self-esteem tend to see signs of rejection where none exist and are more likely to worry that mundane problems in a relationship are a signal that their partner no longer feels the same level of affection for them and that they themselves are lacking in self-worth (Murray, Rose, Bellavia, Holmes, & Kusche, 2002). They need a partner’s acceptance in order to validate their shaky sense of self (Murray et al., 2000).

### **1.5 Self-esteem and attraction to killers**

The appeal of having a relationship with a convicted murderer for people with low self-esteem becomes more apparent when one considers the results of research that indicates people low in self-esteem seem to function better in relationships when they are able to think less of the other person. For instance, people low in self-esteem experience increases in trust in their partners’ love after pointing out the partners’ faults (Murray, Rose, Holmes, Podchaski,

Bellavia, et al., 2005). It seems reasonable to assume that, even if a woman is in partial denial as to whether the killer she loves actually committed the crime for which he has been convicted, she is still able to find more fault with him than with the average person and may consider him to be more on her level of worth. Additionally, research has shown that people place great importance on feeling irreplaceable in a relationship. People with low self-esteem, however, are more likely to feel easily replaceable in their romantic relationships (Murray, Leder, MacGregor, Holmes, Pinkus, & Harris, 2009). A woman dating a man who killed someone and is in prison likely realizes that he has less dating prospects than the average man and therefore may consider her more irreplaceable.

In sum, I propose that women with lower self-esteem will be more likely to be attracted to a killer. Low self-esteem may result in this increased attraction because women are searching for someone whom society deems as low in worth as well. It is possible that these women are able to find flaws in these men and perhaps also realize that they will be more irreplaceable to a convicted murderer compared to an average man who has more dating options.

## **1.6 Sensation seeking**

Consider the following statement made by a woman in love with a man who murdered another man during a knife fight:

College was so intense for me....[It] was like winding up in Disneyland. I went to a bar once, when I was eighteen, and came out when I was twenty-eight. All my friends were partying...(Isenberg, 2000, p. 184).

According to Isenberg (2000), women who fall in love with murderers often follow the above pattern. They “display an extreme need to find excitement, satisfaction, and fulfillment” (p. 125). She notes that many of the women believe they can get satisfaction from only one type of man: the crazy man, the risk-taker. They are attracted to a life on the edge and reject what is culturally endorsed. They want what is deviant for the excitement that it provides. According to Isenberg, the excitement and drama make life worthwhile for these women and the thrill makes them feel important.

The characteristic of sensation-seeking appears to have much in common with Isenberg’s description of these women. Sensation seeking is a trait defined by the “seeking of varied, novel, complex, and intense sensations and experiences and the willingness to take physical, social, legal, and financial risks for the sake of such experiences” (Zuckerman, 1994, p. 27). According to life history theory, women who engage in such risky and impulsive experiences also are more likely to have adopted a less-invested mating strategy (Figueredo, et al., 2006).

Zuckerman (1994) hypothesizes that sensation seeking represents a general sensitivity to reinforcement and that high sensation seekers experience a biological arousal in response to novel and dangerous situations. Research has provided support for Zuckerman’s reinforcement theory. For example, one study found that people low on sensation seeking displayed greater anxious arousal when expecting an aversive event (Lissek et al., 2005). The researchers argued that this sensory experience may deter low sensation seekers from participating in dangerous activities. In other words, people low in sensation seeking experience stronger anxiety in anticipation of and during risky activities, which may cause them to experience the activity aversely and therefore not want to participate in it again. Results from the study showed that high sensation seekers, on the other hand, did not experience this anxious arousal when faced with an

aversive event and therefore were generally left with mostly positive arousal during aversive experiences.

What other personality traits do sensation seekers tend to have and what types of behaviors do they tend to participate in? Research has shown that people high in sensation seeking tend to be more extraverted, impulsive, antisocial, and nonconformist (Zuckerman & Link, 1968). The trait is correlated with a wide variety of behaviors, including drug use (Newcomb & McGee, 1991; Zuckerman, Bone, Neary, Mangelsdorff, & Brustman, 1972), gambling and making risky financial decisions (Wong & Carducci, 1991), risky sexual behavior (Donohew, Zimmerman, Cupp, Novak, Colon, & Abell, 2000), parachuting (Hymbaugh & Garrett, 1974), and breaking the law (Arnett, 1996). People high in sensation also are more likely than those low in the trait to behave in socially unacceptable ways. For example, experimental studies demonstrated that when participants were presented with various sexual words and asked to free associate, participants high in sensation were more likely to give socially unacceptable responses compared to those low in sensation seeking (Larson, Johnson, & Easterbrooks, 1979). In terms of entertainment interests, females who score high in sensation seeking are more likely than those who score low to express a preference for movies that center around alcohol or sexually explicit themes (Schierman & Rowland, 1985).

### **1.7 Sensation seeking and attraction to killers**

Why would sensation seeking predict attraction to killers? Given that corresponding with or dating a convicted murderer is socially unacceptable and risky, it seems reasonable to assume that this sort of behavior may appeal to women who are higher in sensation seeking. One study that specifically examined sensation seeking in relation to death-related and sexual events sheds

light on the appeal of the socially unacceptable for women high in this trait (Zuckerman & Litle, 1986). Results of the study showed that women high in sensation seeking scored higher on the Curiosity about Morbid Events scale, which concerned interest and enjoyment in watching death on TV or in the real world. Women high in sensation seeking also scored higher on the Curiosity about Sexual Events scale, which reflects attitudes toward pornography and witnessing sexual acts of others in real life. These women also reported more frequent attendance at horror and X-rated movies (Zuckerman & Litle, 1986). Although dating a convicted killer is not the same as witnessing death or watching violent sexual acts, it is not difficult to see an association between death, sex, and killers.

In sum, I propose that women who score high on the trait of sensation seeking will find convicted killers more attractive. People high in sensation seeking are attracted to dangerous, socially unaccepted, and risky activities. Corresponding with and potentially visiting or dating a convicted killer certainly falls into these categories.

### **1.8 Characteristics that women may find attractive in killers**

Thus far, the proposed research has focused exclusively on characteristics of women that may lead them to be attracted to killers. However, it seems reasonable to assume that some characteristics of killers themselves may be appealing. As there has been no prior research in this area, I intend to explore several possible characteristics that may be relevant based upon my own intuitions, comments made by women who love killers, and evolutionary research on mate preferences. Below, I will summarize prior research on mating strategies and preferences to help illustrate why women may be attracted to certain characteristics of the opposite sex. I will then discuss several specific characteristics that I believe may make killers attractive to some women.

## 1.9 Mating strategies and preferences

According to evolutionary psychology, humans seek mates with specific qualities in order to solve adaptive problems faced by their ancestors (Buss & Schmitt, 1993). In other words, human mate preferences have been influenced by the pressures that were experienced in our hunter-gatherer past. Men and women did not always face the same difficulties, however, especially with respect to reproduction. For instance, women had to invest significant time and energy into pregnancy and nursing. Because of these higher demands, women were constrained in the number of offspring they could produce. Men, on the other hand, did not have this burden. Because of these differences in reproduction, men and women are thought to have evolved different mating preferences and strategies (Buss, 1994; Buss & Schmitt, 1993; Trivers, 1972). For instance, it has been suggested that women should be more selective when choosing a mating partner, whereas men can afford to be less discriminating (Trivers, 1972). This sex difference in mating selectivity was first observed in dozens of animal species (Trivers, 1985) and later found to exist in humans as well (Buss & Schmitt, 1993; Clark & Hatfield, 1989; Kenrick, Sadalla, Groth, & Trost, 1990; Woodward & Richards, 2005).

The ability of a woman to survive pregnancy (and, in turn, ensure the survival of her offspring) depends in part on her acquisition of resources, such as food, water, and shelter. Women, being both physically weaker than men and burdened by investment in the offspring, would have needed to rely upon a man to provide these resources. As such, it is important for women to find a mate who is able and willing to acquire these resources to devote to them and their offspring. As men have the ability to mate indiscriminately with as many women as possible, they face the difficulty of “paternal uncertainty”—not knowing for certain if the child

they are raising is truly their biological child. It is important that they do not invest in offspring that do not carry their genetic material, as they cannot risk providing resources to a son or daughter who may not be their own (or to partners who are unfaithful).

Numerous behavioral sex differences are hypothesized to have developed from these different adaptive problems faced by men and women. For instance, research has indicated that men experience more distress than women when imagining their partners having sexual intercourse with another man (i.e., potentially becoming pregnant with another man's child), whereas women are more distressed when imagining their partner having an emotional relationship with another woman (i.e., potentially providing limited resources to this other woman instead of herself) (Buss, Larsen, Semmelroth, & Weston 1992).

Given that men and women have different sexual strategies, differences have arisen in terms of what triggers conflict, negative emotions, and jealousy. Women are more likely to complain that men do not spend enough time with them or are irresponsible, whereas men are more likely to complain that a woman is too possessive. When it comes to deception, women are more likely to deceive potential mates as to their sexual interests (in order to acquire "resources," such as a free dinner), whereas men are more likely to deceive potential mates concerning their willingness to commit (Buss, 1994). Additionally, men are more likely than women to assume sexual interest when it is not present (Buss, 1994).

Evolutionary theory also predicts sex differences in the characteristics people seek out in potential mates. For instance, women value good financial prospects in a mate nearly twice as much as do men (Buss, 1989). Women indicate they desire a man's earning capacity to be in at least the 70th percentile, whereas men consider a woman's earning capacity to be much less important (Kenrick, Sadalla, Groth, & Trost, 1990). Other characteristics that women, more than

men, consider to be more important in a mate include status, prestige, position, and power (Langhorne & Secord, 1955). Characteristics that indicate a man has the ability to acquire resources, such as good study habits and ambition, are also important (Buss, 1994).

Men, compared to women, express greater interest in having a mate younger than themselves. As youth indicates greater fertility, it is no surprise that men are more concerned with the age of their partners than are women. In fact, in a survey of 37 cultures, men from all 37 expressed a desire for a partner younger than themselves (Buss, 1994). The appeal of physical attractiveness also differs between the sexes—men consider beauty to be more important in a partner than do women (Buss & Barnes, 1986). Beauty is, of course, another indicator of health and fertility. Men find features such as clear and smooth skin attractive, as well as facial symmetry (which indicates the individual has experienced less environmental pressures and exposure to parasites) (Gangestad, Thornhill, & Yeo, 1994).

In sum, evolutionary psychology posits that men and women have developed different mechanisms of mate selection because of the different reproductive burdens they experience. Because women have to devote more time and energy into carrying offspring, they are concerned about their potential mates' ability to acquire resources. Men, because of the issue of paternity uncertainty, are concerned with ensuring that the children their partners are carrying are truly their own. Various mating preferences (e.g., women's emphasis on indicators of men's resources, differences in triggers of jealousy) are thought to have evolved due to these differences in reproductive adaptive problems.

### **1.10 Fame and dominance**

Evolutionary research on mate preferences clearly indicates that women place value on the ability of a man to acquire resources and provide protection, which thereby helps to insure her and her offspring's survival. It therefore seems possible that indicators of resources and the ability to provide protection may partially explain women's attraction to killers. Specifically, I hypothesize that the characteristics of fame and dominance, which killers often possess to an extreme level and which research has shown women tend to find attractive in potential mates, may play a role in this attraction.

### **1.11 Fame and attraction to killers**

Although some killers are arrested, tried, and jailed for their crimes without attracting the notice of anyone other than those most directly affected, other killers are thrust into the limelight. For some killers, this fame may begin before they are even caught if the crimes are shocking and mysterious enough to warrant the attention of national newspapers and television crime shows. For instance, the Zodiac Killer, suspected of murdering at least seven people in the late 1960's, has been the focus of numerous books and movies although he has never been identified. The media began reporting in the 1980's that a serial killer was disposing of bodies in Washington's Green River. Shortly thereafter, the mysterious "Green River Killer" became the star of several books and countless media reports. After his arrest in 2001, the killer (Gary Ridgeway) reached his height of fame when popular writer Ann Rule published her best-selling "true crime" book *Green River, Running Red* (Rule, 2004).

It is clear that many killers attain a high level of fame, whether it be through true crime books, newspaper accounts of their crimes, Hollywood movies, websites (a Google search for

“serial killer website” returns over 1,000,000 entries), or crime based television shows (e.g., Dateline Crime and Punishment). Is it possible that the attention these killers receive is another characteristic that makes them appealing to women?

Although much research has focused on the motivations behind people’s desire to become famous (e.g., Maltby et al., 2008), little attention has been paid to people’s interest and attraction to those individuals who have managed to attain fame and celebrity. One of the few exceptions is a study that suggested that an intense focus on celebrities is a normal part of identity-development in adolescents (Giles & Maltby, 2004). Another study identified various stages of celebrity worship, ranging from simply liking a celebrity because of his or her ability to entertain to having a more extreme, pathological obsession (McCutcheon, Lange, & Houran, 2002). The specific reasons behind this interest in the famous have not been identified. However, an investigation into the appeal of a similar characteristic—status—may provide some insight. The similarity between status and fame is apparent when one considers a common definition ascribed to individuals having high status: they have greater access to resources and typically are not resisted by people underneath them in the social hierarchy (Henrich & Gil-White, 2001). Many celebrities fit this definition well, as movie and music stars are often portrayed on television and in tabloids as having an excess of money and being given special treatment over the average person.

Evolutionary psychology provides some insight the appeal of status (and, as such, fame). A hierarchy, in which some members of a community reside over others, has been observed in both human and non-human primates. Chimpanzees, for instance, often strive to attain high status even at the risk of serious injury (de Waal, 1989). Importantly, the benefits received by high status male chimps include increased access to food and mating opportunities. For instance,

in one chimpanzee community, nearly 75% of all mating instances that occurred were between female subordinates and the alpha male (de Waal, 1989). It is important to note that these types of hierarchies are only observed in primate communities in which there is competition for food, providing further evidence that the fight for and appeal of status is linked with resources.

Attraction to the characteristic of high status is evident in humans as well (Langhorne & Secord, 1955; Townsend & Levy, 1990). For example, in one study researchers asked male and female participants to view characteristics of several target individuals in order to help determine if they would find these targets desirable as a date (Li, Bailey, Kenrick, & Linsenmeier, 2002). Participants were told that these target individuals had been placed into one of three levels for several different categories. In other words, the target was either classified as being in the top third for, say, physical attractiveness, the bottom third, or in the middle. Similar ranks were made for social status, creativity, kindness, and liveliness. Participants were then forced to select the specific categories for each target in order to learn where the target fell in the ranking. The variable of interest was the number of times out of 30 trials a specific category was chosen first. Results showed that out of the five categories, women checked the man's social status first on an average of 10 out of 30 trials, making it the most popular category. Men most often selected physical attractiveness first (13 out of 30 trials). In other words, women were more interested in learning about a potential date's social status than about his attractiveness, creativity, kindness, or liveliness.

In another series of studies investigating the appeal of status, researchers (DeWall, 2008) exposed participants to arrays of photos in which some of the targets displayed cues of high status (e.g., were wearing business suits), whereas others did not. Some of the participants were allowed only a limited amount of time to look at the photos. Participants were then asked to

estimate the percentage of targets that were of high social status. Results showed that women in the limited-time condition estimated a greater percentage of high status men compared to women who were given a longer period of time to study the photos. This result indicated that the high status men captured the women's interest. As expected, this effect was not observed for male participants who looked at female photos. A second study in which an eyetracker was used to assess attention found similar results in that women fixated longer on targets who displayed cues of high status (DeWall, 2008).

The relation between fame and status is complicated. As a general rule, fame and status are confounded. That is, someone who has a lot of resources and who is held in high regard is likely to be well known in his or her community. Killers are an interesting case because they provide a way to dissociate these two characteristics. Although killers may become well known in society, they are not necessarily of high status. Regardless, it seems unlikely that the human mind evolved in a manner that would dissociate these traits. As such, it is possible that one reason women find killers attractive is that they are famous (an indicator of resources), even if those killers do not, in fact, possess the resources that typically accompany such fame.

It is also possible that a woman may become involved with a famous murderer because of the potential for her to become famous herself. Although some women who love killers prefer to keep their love hidden from the media (perhaps in fear of how such information would affect their careers or children), others readily give interviews for books and television shows. Isenberg speculates that one reason women form relationships with famous killers is because of the social significance they then receive—the fame of these killers gives women a boost in their quest to be known (2000).

### **1.12 Dominance and attraction to killers**

Research has indicated another feature that women find attractive in a potential mate—dominance (Sadalla, Kenrick, & Vershure, 1987). Murderers clearly exemplify the characteristic by the simple fact that they have killed another person. According to Buss (2005), there are numerous evolutionary advantages for murder, especially in terms of a man killing another man. Not only will the murderer never have to compete with the victim for women or resources again, the victim's partner (if he had one) then becomes eligible as a mate. Additionally, the victim's children, who carry his genes, are at a greater risk of death as the victim can no longer offer resources or protection. This serves to even further decrease competition in favor of the killer and his own children. As discussed previously, women desire a man who can protect them and provide them with necessary resources. Someone who has killed clearly possesses the means and desire to overcome potential threats to his, his partner, or his offspring's well-being. As such, it is possible that the appeal of murderers resides in their high displays of dominant behavior.

Although dominance is closely related to status, in that dominant individuals are typically considered to be of high rank in the social hierarchy (Sadalla, Kenrick, & Vershure, 1987), researchers typically consider dominance to refer more to the personality traits and types of behaviors that tend to put one in position of authority over another. For instance, when researchers study status, they typically define it as having been acquired through respectful, nonviolent means (such as in the case of a famous movie star). Dominant individuals, while still considered to have status over another person, are generally described as having used force, coercion, or antagonism to attain their position (Henrich & Gil-White, 2001). Researchers also have defined dominance as a measure of one's ability to prevail over another in a face to face physical setting (Ellis, 1992). As another example, terms such as competitive, assertive, bold,

talkative, verbal, powerful, and authoritative have all been used in research studies to imply dominance (Jensen-Campbell, Graziano, & West, 1995; Sadalla, Kenrick, & Vershure, 1987). Additionally, cues such as posture (sitting relaxed with legs crossed), leaning slightly back in a chair, and speaking in a loud, rapid manner have also been used as indicators that a man is dominant.

The appeal of this characteristic to females was first observed in numerous primate species, including baboons (Saayman, 1971) and chimpanzees (Goodall, 1968). In one of the first sets of studies to investigate the appeal of dominance in humans, researchers exposed both men and women to dominant or nondominant behavior by a member of the opposite sex and assessed how this characteristic influenced their attraction (Sadalla, Kenrick, & Vershure, 1987). In Study 1, male and female participants were shown several silent videos that depicted an individual acting in a dominant or nondominant manner toward another, same-sex individual in an office setting. Participants then indicated how sexually attractive they found the target individual. Results indicated that women gave the dominant man higher ratings of attractiveness compared to the nondominant man. (Men showed no preference for dominant versus nondominant women). In Study 2, the researchers replicated the key findings using a narrative in which a man or woman was described as dominant or not during a tennis game. In study 3, researchers investigated whether attraction would decrease if a man was dominant over a woman or vice versa. Results indicated that dominance over the opposite sex did not affect attractiveness ratings and that women remained attracted to the more dominant man.

The researchers (Sadalla, Kenrick, & Vershure, 1987) theorized that women find dominance attractive for numerous reasons. For instance, a woman who mates with a dominant man gains the advantage of the additional resources he can provide to her and her offspring

through his ability to overcome male competitors. Additionally, he could protect his mate from predators, both human and nonhuman. Another advantage to mating with a dominant man concerns the fact that the woman could potentially pass along his genes to her male offspring. In other words, her son would also have the ability to overcome other men in the quest for food, shelter, and women, ensuring the further survival of the genes.

Additional research sheds further light on the intricacies of the role of dominance in women's attraction (Jensen-Campbell, Graziano, & West, 1995). Specifically, researchers investigated whether altruistic behavior (which may indicate a man's willingness to invest in offspring) may interact with dominance to influence attraction. In other words, it is possible that when dominance is linked with altruistic behavior, it is considered attractive, but when it is linked to more competitive, selfish behavior, it is unattractive. In two studies, female participants viewed interactions between two male confederates. In one study, the researchers found no effect for the appeal of dominance but noted various methodological concerns (e.g., the confederate who was not the target had a position of authority over the supposedly dominant-behaving target, which may have lessened the strength of the manipulation). In Study 2, the researchers remedied the concerns by employing a slightly different design. Results showed that dominance interacted with agreeableness, such that dominance had no effect on the attractiveness of men who were low in agreeableness, but increased attractiveness for men who were high in agreeableness. In Study 3, researchers had female participants rate the attractiveness of men based upon a series of descriptive adjectives. Results showed that women found the men described by dominant adjectives to be more attractive than the men described by nondominant adjectives. Also, dominance increased attraction even more so when the men were also described as agreeable

versus not. In sum, there is some evidence that dominance may play the largest role in attraction when it is in conjunction with altruistic, agreeable behavior.

In an attempt to investigate whether the context of dominant behavior (e.g., a physical competition versus peer relations) influences its appeal, researchers presented female participants with vignettes that described a man behaving dominantly in an athletic competition or while in competition for a leadership position amongst peers during a group meeting. Results indicated that women found the high-dominant man to be more attractive than the low-dominant man in the context of the athletic competition, but the low-dominant man to be more attractive than the high-dominant man in the nonathletic competition (Snyder, Kirkpatrick, & Barrett, 2008). The researchers speculated that the appeal of dominance in the athletic competition reflected a woman's desire for a man who can successfully overcome another man in terms of providing resources and protecting her from predators. Although the researchers did not find dominance to be more attractive in the group-meeting setting, it is important to note that Sadall et al.'s (1987) study found the exact opposite. Differences in methods used across researchers and studies make it difficult to draw a final conclusion as to how context may influence the appeal of dominant behavior. However, findings are consistent that women find dominant (as opposed to nondominant) behavior in a physical interaction to be most attractive. This finding is relevant when one considers that the dominance displayed by killers is certainly of the physical type.

One potential limitation of the above studies concerns the lack of neutral control condition. While one of the targets always behaves or is described in a clearly dominant manner, the other target is portrayed in a nondominant, as opposed to neutral, manner. For instance, the nondominant target in Sadalla and colleagues (1987) study displayed such behaviors as looking at the floor and keeping his head bowed. To address this limitation, researchers (Burger & Cosby,

1999) presented participants with two of the scenarios used previously (in which a person is described as dominant or not) along with a third scenario, in which the individual is described in a neutral manner. As found in the previous studies, participants rated the dominant man as more attractive than the nondominant man. However, the neutral target was given the highest rating. This finding still indicates that dominance has an appeal for women, but when women are given more options, dominance may not be the most absolute appealing option.

In short, research on dominant behavior has found conflicting results. Although some studies have found no relation between attraction and dominance, the majority have found dominance to be appealing. Differences in methodology only serve to complicate the issue. However, given that numerous studies have, in fact, shown that women are attracted to dominance, and because dominance is a characteristic that is arguably inherent in all murderers by the simple fact that they have overcome and killed another human being, it seems a worthwhile characteristic to investigate. It is important to note that many of the killers who receive letters from admiring women are in prison not for killing other men, but rather for killing women. It is possible that our unconscious minds do not make such a fine distinction between these displays of dominance, and that any demonstration of violent behavior is found attractive because of the potential benefits it conveys. In fact, previous research demonstrated that women were equally attracted to dominant behavior whether the recipient was a woman or man (Jensen-Campbell, Graziano, & West, 1995; Sadalla, Kenrick, & Vershure, 1987). Along the same lines, it is also important to note that even though resorting to violence in order to acquire food generally is not necessary in modern times, countless studies have demonstrated that adaptations that helped to solve problems faced in our ancestral past are still with us today. In other words,

perhaps even at a subconscious level, women still find dominance attractive even if it is displayed in an extreme manner that is condoned by society.

### **1.13 Overview of the present research**

In the present studies, participants completed several personality measures and then received information about a killer. In Study 1, participants were randomly assigned to watch one of two videos. In one video, the killer was described as famous whereas in the other video, the information regarding fame was omitted. I hypothesize that women will be more attracted to a famous killer versus a nonfamous killer and that women who are high in attachment avoidance with their fathers and romantic partners, low in self-esteem, and high in sensation seeking will find the killer more attractive regardless of condition. In Study 2, participants were randomly assigned to read one of three stories about a criminal. In one story, the criminal was described as highly dominant killer (e.g., tied up his victims). In the second story (also about a killer), the details intended to imply dominance were omitted. In the third story, the criminal was described as a bank robber who did not commit murder. I hypothesize that women will find the bank robber more attractive than the killers. Additionally, I hypothesize that women will find a highly dominant killer to be more attractive than a less dominant killer. Finally, I hypothesize that women who are high in attachment avoidance, low in self-esteem, and high in sensation seeking will be more likely than women not possessing these levels to find the killers attractive (but not necessarily more so than the bank robber). Based on power analyses, a minimum of 85 participants would be needed in order to observe a correlation of .30 or higher with 80% power. As such, a minimum of 85 participants were run for each study.

## CHAPTER 2: STUDY 1

The purpose of Study 1 was to investigate whether women find fame attraction in killers and whether women with certain personality characteristics are more likely to find killers attractive.

### 2.1 Method

Participants were 241 female undergraduates who participated in exchange for course credit. The median age was 19 ( $M = 19.03$ ,  $SD = 1.19$ ). Fifty-four percent of the participants were Caucasian; 15% were Chinese. The remaining participants indicated other ethnicities.

Participants completed several questionnaires. The order of the questionnaires was randomized, as was the order of items within each questionnaire. They completed the Relationship Structures (ECR-RS) questionnaire, which is designed to assess attachment-related anxiety and avoidance in four relationships: relationships with mother, father, romantic partners, and friends (Fraley, Heffernan, Vicary, & Brumbaugh, 2011). The measure has 36 items (9 identical items for each relationship). The domains of father and romantic partner will be focused on in this study. An example of an avoidance item is “I prefer not to show this person how I feel deep down.” An example of an anxiety item is “I’m afraid this person may abandon me.” Participants responded on a scale ranging from 1 (strongly disagree) to 7 (strongly agree). In the present sample, Cronbach’s alpha was .91 for avoidance with father, .89 for avoidance with partner, .87 for anxiety with father, and .89 for anxiety with partner.

Participants also completed the Rosenberg Self-Esteem Scale (Rosenberg, 1965), which assesses global self-esteem using 10 items. Items include “I take a positive attitude to myself” and “I am able to do things as well as most other people.” Participants responded on a scale

ranging from 1 (strongly disagree) to 4 (strongly agree). In the present sample, Cronbach's alpha was .89.

Participants also completed the 11-item Sensation Seeking scale of the Zuckerman-Kuhlman Personality Questionnaire (ZKPQ) (Zuckerman, Kuhlman, Joireman, Teta, & Kraft, 1993). Items include "I sometimes like to do things that are a little frightening" and "I'll try anything once." Participants indicate whether each item is "true" or false." Their score represents the number of items for which they indicated "true." In the present sample, Cronbach's alpha was .74. See Table 1 for mean responses for the personality questionnaires.

In addition to the personality questionnaires, participants completed a basic demographics questionnaire that asked about their age, ethnicity, and religious affiliation. They also answered questions regarding the presence of their parental figures (e.g., "Are your parents divorced?"). They also completed a subscale of the Attachment History Questionnaire (Pottharst, 1990a) that concerned the discipline they received as a child. The 17-item measure included questions such as "How often did your parents hit or physically hurt you?" and "How often did your parents yell, shout, or curse at you?" Participants responded on a 1 (never) to 7 (always) scale. Mean response was 2.57 ( $SD = .94$ ). In the present sample, Cronbach's alpha was .86.

After completing these measures, participants viewed one of two short videos on the computer. The videos appeared to be from a news broadcast. They both featured the same individual (a male in his late 20's) starring as the serial killer. During the video, a "newscaster" described the man as having murdered two women on different occasions. In one condition (the "fame" condition) the broadcaster also made note that the killer made headlines around the country and had been the focus of three true crime books and one made-for-TV movie. The other video did not include this information. In other words, all details and images shown in the videos

were exactly the same with the exception of the added information about fame. The killer's mug shot was shown an equal number of times in each video.

Following this video, participants filled out a questionnaire with the following items (in random order). Responses were recorded on a 1-7 scale, with 1 being "not very" and 7 being "very much." The killer's picture was at the top of the questionnaire so as to remind participants what he looked like.

1. How attractive do you find this person based upon physical appearance only—ignoring the details of his crimes?
2. How interested would you be in writing to this person while he is in prison?
3. How attractive would you find this person for a short term relationship while he is in prison?
4. If you were open to the idea of one night stands and this person were released from prison, how interested would you be in having a one night stand if you knew you would not be harmed?
5. If this person were released from prison, how interested would you be in going on a date with him if you knew you would not be harmed?
6. If this person were released from prison, how interested would you be in potentially dating him for just a few weeks if you knew you would not be harmed?
7. How interested would you be in meeting this person while he is in prison?
8. How attractive would you find this person for a long term relationship while he is in prison?
9. If this person were released from prison, how interested would you be in potentially having a long term relationship with him if you knew you would not be harmed?

Participants also were asked to rate (on a 1-7 scale) how famous they found the killer.

Finally, participants were debriefed. Specifically, they were told that the individual shown in the video was not an actual serial killer and that the details of the crimes were fictional.

## 2.2 Results

A principal axis factor analysis of the attraction items (items 1-9 above) revealed two factors with eigenvalues over 1.0. Specifically, one factor had an eigenvalue of 3.86, explaining 43% of the variance, and the second factor had an eigenvalue of 1.32, explaining 15% of the variance. As the items that loaded on the second factor were strongly correlated with the items on the first factor, a composite measure consisting of the average of all 9 items is used in the below analyses. Cronbach's alpha for this scale was .76. The mean response was 1.60 ( $SD = .61$ ). (See Table 1 for correlations between the composite attraction measure and the personality variables of interest and Table 2 for correlations between the individual attraction items and the personality variables of interest).

To determine whether condition (i.e., fame versus control), personality (i.e., self-esteem, sensation seeking, attachment), or the interaction between these variables influenced attraction, a hierarchical multiple regression analysis was conducted. The personality variables were centered in relation to their means and condition was dummy coded such that the fame condition was coded as 1 and the control condition was coded as -1. In Step 1, the attraction score was regressed on condition. In Step 2, self-esteem, sensation seeking, avoidance with father, avoidance with partner, anxiety with father, and anxiety with partner were entered. In Step 3, the interactions between these variables and condition were entered.

The regression model was not statistically significant at Step 1 ( $R^2 = .00$ ). Specifically, there was no relation between condition and attraction to the killer,  $\beta = -.01$ ,  $t(235) = -.22$ , *ns*. However, the addition of the personality variables resulted in a significant change in  $R^2$  ( $\Delta R^2 = .08$ ,  $F_{\text{change}}(6, 229) = 3.23$ ,  $p = .005$ ). Specifically, there was a main effect for sensation seeking,  $\beta$

= .18,  $t(229) = 2.75$ ,  $p = .006$ , such that women higher in sensation seeking were more likely to find the killer attractive. There was also a main effect for avoidance with father,  $\beta = .17$ ,  $t(229) = 2.03$ ,  $p = .044$ , such that women who reported higher attachment avoidance with their father were more likely to find the killer attractive. There was no significant relationship between self esteem, avoidance with partner, or anxiety with father or partner and attraction to the killer. The addition of the interaction variables did not result in a significant change in  $R^2$  ( $\Delta R^2 = .03$ ,  $F_{\text{change}}(6, 223) = 1.13$ ,  $ns$ ). See Table 3 for more details.

As stated above, the results of the regression analysis revealed no effect of condition on attraction. In other words, participants who viewed the video of the famous killer did not report higher ratings of attraction compared to participants who viewed the control video. A correlational analysis revealed that the manipulation was valid; participants who viewed the video in which the killer was depicted as famous rated him as being more famous ( $r = .33$ ,  $p < .05$ ). However, it is important to note that there was a correlation between participants' perceptions of fame (i.e., their answer to the question "How famous do you consider the killer to be?") and their ratings of attraction. Namely, participants who considered the killer to be more famous rated him as more attractive regardless of condition ( $r = .19$ ,  $p < .05$ ). One possible explanation for the discrepancy in results may be the fact that more information is available in the continuous ratings. In other words, although the manipulation appeared to alter perceptions of fame, the manipulation may not have been strong enough to reveal subtle influences of fame on attraction. If fame did not influence attraction at all, a correlation would not exist between the ratings of fame and ratings of attraction. This finding will be returned to in the Discussion.

### 2.3 Auxiliary analyses

As noted earlier, researchers have found support for the notion that women's reproductive strategies may change based upon whether their father is present or absent in the home (e.g., Quinlan, 2003). As such, an analysis was performed to determine whether women whose parents were divorced (and who reported living with their mothers instead of their fathers) or whose fathers were deceased reported more attraction to the killer (15% of participants fell into one of the categories). Results indicated that women whose fathers were absent ( $M = 1.70$ ,  $SD = .75$ ) were not more likely than women whose fathers were present ( $M = 1.58$ ,  $SD = .59$ ) to find the killer attractive,  $t(238) = 1.09$ ,  $ns$ ,  $d = .18$ .

A one-way ANOVA was conducted to determine whether women of different ethnicities found the killer more attractive. Results revealed no relation between ethnicity and attraction,  $F(7, 223) = 1.74$ ,  $ns$ ,  $\eta^2_p = .05$ . A one-way ANOVA also revealed no differences in attraction amongst women of different religious affiliations,  $F(5, 205) = 1.59$ ,  $ns$ ,  $\eta^2_p = .04$ . It is important to note that the majority of the sample was Caucasian (54%) and Catholic/Christian (61%) and that very few participants were members of other ethnic or religious groups. Thus, I also compared the most frequent ethnicity (Caucasian) to all others. This analysis revealed no differences in ratings of attraction ( $M$  for Caucasian = 1.55,  $SD = .52$ ;  $M$  for other ethnicities = 1.65,  $SD = .70$ ),  $t(238) = -1.32$ ,  $ns$ ,  $d = -.16$ . When comparing the most frequent religion (Christian or Catholic) to all others, results revealed no differences in ratings of attraction ( $M$  for Christian/Catholic = 1.54,  $SD = .56$ ;  $M$  for other religions = 1.68,  $SD = .68$ ),  $t(238) = -1.68$ ,  $ns$ ,  $d = -.22$ .

Life history theory posits that parents become more impatient and physically abusive toward their children as financial resources become scarcer. Therefore, girls who grow up in an

abusive environment are likely experiencing unpredictability in many areas and, as such, are more likely to develop a less-invested mating strategy (Belsky, Steinberg, & Draper, 1991). Additionally, many anecdotes suggest that women who are attracted to killers suffered abuse as children. In fact, women in the present study who reported receiving more discipline as a child (e.g., parents yelled at them; parents refused to let them see their friends) were more attracted to the killer, regardless of condition ( $\beta = .14, t(225) = 2.07, p = .04$ ). Results concerning the question involving physical abuse (i.e., “How often did your parents hit or physically hurt you?”) also showed that women who reported more abuse found the killer more attractive, ( $\beta = .22, t(235) = 3.51, p = .001$ ).

## **2.4 Summary**

Results concerning the appeal of fame were not entirely clear. There were no differences in ratings of attraction between women who viewed the famous video versus the control video. However, there was a correlation, such that women who considered the killer to be more famous found him more attractive.

Women who were higher in sensation seeking and attachment avoidance with their fathers found the killer more attractive, regardless of condition. There was no effect of self-esteem, attachment avoidance with partner, attachment anxiety with father, or attachment anxiety with partner on ratings of attraction. Additionally, none of the interactions were significant. In other words, it was not the case that women higher in certain personality characteristics were more or less likely to find the famous killer attractive.

Finally, neither the presence versus absence of one's father, ethnicity, nor religious affiliation influenced attraction ratings. However, women who suffered more abuse as a child found the killer more attractive.

## CHAPTER 3: STUDY 2

The purpose of Study 2 was to investigate whether women find dominance attractive in killers and whether women with certain personality characteristics are more likely to find killers attractive.

### 3.1 Method

Participants were 190 female undergraduates who participated in exchange for course credit. The median age was 19 ( $M = 19.32$ ,  $SD = 1.09$ ). Sixty-three percent of the participants were Caucasian; 11% were Chinese. The remaining participants indicated other ethnicities.

Participants completed the same questionnaires as in Study 1. For the ECR-RS, Cronbach's alpha was .90 for avoidance with father, .83 for avoidance with partner, .89 for anxiety with father, and .89 for anxiety with partner. Cronbach's alpha for the Rosenberg Self-Esteem scale was .91. Cronbach's alpha for the Sensation Seeking scale was .74. See Table 4 for means and standard deviations.

After completing these measures, participants read one of three stories on the computer. The stories appeared to be from a site called *True Crime Library*. All three stories were similar in length (approximately 20 paragraphs). All three featured a photograph of the same criminal (the same individual who appeared in Study 1). In the "dominant" condition, the individual was described as a 6'2", 210 pound killer who murdered three young women. The first two girls had been "mutilated" and "stabbed repeatedly." They had been "tortured" and their bodies showed signs of "bruises and strangulation." It also was mentioned that the killer tied up the women with rope. During the third murder, the killer nearly cut off the woman's head. In the "less dominant" condition, all components of the story were held constant with the exception that the killer was

described as being 5'9", 160 pounds and having used a gun to shoot the victims. No mention was made of stabbing, ropes, or injuries to the bodies beyond the gunshot wounds. In the "bank robber" condition, the individual was described as being 6'2", 210 pounds and having robbed several banks. During one robbery, he held a gun to a woman's head and yelled at the employees. During another robbery, he shot a woman in the foot; however, he did not kill anyone. The purpose of including the third condition was to determine whether women with certainly personality characteristics may be more or less attracted to someone who has killed versus a criminal who has not killed.

Following the story, participants answered the same nine questions regarding attraction that were used in Study 1. Additionally, participants answered, on a scale ranging from 1 (very little) to 7 (very much), the following questions:

1. How exciting would it be to go on a date with him?
2. How exciting would it be to have sex with him?
3. How exciting would it be to get a letter from him?
4. How exciting would it be to visit him in prison?
5. How exciting would it be to marry him if he got out of prison?
6. How disgusting would it be to kiss him? (reverse scored)
7. How boring would it be to talk to him on the phone? (reverse scored)

The purpose of the above questions was to evaluate participants' feelings toward the killer without specifically asking about their behaviors as in the first questionnaire (e.g., "How exciting would it be..." versus "How interested would you be in..."). In other words, by focusing on the potential excitement or thrill of dating a killer as opposed to whether one would

actually partake in the behavior, these questions may reduce tendency for socially desirable responding.

Participants also were asked to rate (on a 1-7 scale) how dominant and famous they found the individual. Finally, participants were debriefed and told that the stories were fictional.

### 3.2 Results

A composite measure consisting of the average of all 9 attraction items was used in the analyses reported below. Cronbach's alpha for this scale was .81. The mean response was 1.62 ( $SD = .62$ ). See Table 4 for correlations between the composite attraction measure and the personality variables of interest and Table 5 for correlations between the individual attraction items and the personality variables of interest.

A one-way ANOVA indicated that attraction ratings did not vary as a function of condition,  $F(2,175) = 2.37, ns, \eta^2_p = .03$ . In other words, participants did not vary in their attraction ratings for the dominant killer versus the lesser dominant killer versus the bank robber.

Next a manipulation check was performed to ensure that participants did, in fact, view one killer as more dominant than the other. Results revealed that women considered the killer who stabbed ( $M = 6.16, SD = 1.60$ ) as more dominant than the killer who used a gun ( $M = 5.40, SD = 1.72$ ),  $t(123) = 2.55, p = .01, d = .45$ . To determine whether condition (i.e., dominant versus lesser dominant killer), personality (i.e., self-esteem, sensation seeking, attachment), or the interaction between these variables influenced attraction, a hierarchical multiple regression analysis was conducted. The personality variables were centered in relation to their means and condition was dummy coded such that the dominant condition was coded as 1 and the lesser dominant condition was coded as -1. In Step 1, the attraction score was regressed on condition.

In Step 2, self-esteem, sensation seeking, avoidance with father, avoidance with partner, anxiety with father, and anxiety with partner were entered. In Step 3, the interactions between these variables and condition were entered.

The regression model was not statistically significant at Step 1 ( $R^2=.02$ ). Specifically, there was no relation between condition and attraction to the killer,  $\beta = -.13, t(113) = -1.43, ns$ . In other words, women were not more or less attracted to the more dominant killer. The addition of the personality variables did not result in a significant change in  $R^2$  ( $\Delta R^2=.06, ns$ ), nor did the addition of the interaction variables ( $\Delta R^2=.06, ns$ ). See Table 6 for more details.

Similar regression analyses were conducted in which an average of the seven items concerning the potential excitement of dating a killer (e.g., “How exciting would it be to have sex with him?”) served as the dependent variable (the correlation between this measure and the 9-item attraction measure was .57). The regression model was statistically significant at Step 1 ( $R^2=.04, F(1, 112) = 4.92, p = .03$ ). Specifically, women found the lesser dominant killer to be more exciting than the dominant killer,  $\beta = -.21, t(112) = -2.22, p = .03$ . The addition of the personality variables resulted in a marginally significant change in  $R^2$  ( $\Delta R^2=.09, F_{\text{change}}(6, 106) = 1.89, p = .09$ ). Specifically, there was a main effect for avoidance with father,  $\beta = .33, t(106) = 2.79, p = .006$ , such that women higher in avoidance with their fathers were more likely to find the killer exciting. There was also a main effect for anxiety with father,  $\beta = -.28, t(106) = -2.41, p = .02$ , such that women higher in anxiety with their father were less likely to find the killer exciting. The addition of the interaction variables did not result in a significant change in  $R^2$  ( $\Delta R^2=.06, ns$ ). See Table 7 for more details. Additionally, in a separate analysis, there was no correlation between perceptions of dominance and ratings of attraction using the 9-item attraction scale ( $r = .12, ns$ ) or the 7-item excitement scale ( $r = -.04, ns$ ). See Table 4 for

correlations between the 9-item composite attraction measure, the 7-item composite excitement measure, perceptions of dominance, and personality variables.

To investigate whether personality influences attraction to killers versus other criminals (i.e., a bank robber) (and whether personality relates to attraction to criminals in general, regardless of whether they have killed), another hierarchical multiple regression analysis was conducted in the same manner as described above, with the exception that condition was coded such that the killer condition (both dominant and lesser dominant killer) was coded as 1 and the bank robber condition was coded as -1. The dependent variable was the original 9-item attraction measure. The regression model was statistically significant at Step 1 ( $R^2=.03$ ). Specifically, women were more attracted to the bank robber than the killer,  $\beta = -.17$ ,  $t(164) = -2.15$ ,  $p = .03$ . The addition of the personality variables did not result in a significant change in  $R^2$  ( $\Delta R^2=.04$ , *ns*), nor did the addition of the interaction variables ( $\Delta R^2=.04$ , *ns*). See Table 8 for more details.

A similar regression analyses was performed in which the dependent variable was the 7-item excitement measure. Again, the regression model was statistically significant at Step 1 ( $R^2=.08$ ). Specifically, women considered potential interactions with the bank robber to be more exciting than with the killer,  $\beta = -.28$ ,  $t(163) = -3.76$ ,  $p < .001$ . The addition of the personality variables resulted in significant change in  $R^2$  ( $\Delta R^2=.08$ ,  $F_{\text{change}}(6, 157) = 2.36$ ,  $p = .03$ ). Specifically, there was a main effect for avoidance with father,  $\beta = .30$ ,  $t(157) = 3.11$ ,  $p = .002$ , such that women higher in avoidance with their fathers found a relationship with the target individual to be more exciting. There was a trend such that women higher in anxiety with father found the target less exciting,  $\beta = -.18$ ,  $t(157) = -1.86$ ,  $p = .07$ . There were no other significant relationships between personality and attraction. The addition of the interaction variables did not result in a significant change in  $R^2$  ( $\Delta R^2=.03$ ,  $F_{\text{change}}(6, 151) = .78$ , *ns*). See Table 9 for more details.

### 3.3 Auxiliary analyses

For the purposes of comparison to Study 1, the below analyses concern just the conditions in which the target individual was described as a killer.

Because participants also answered the question, “How famous do you consider the killer to be?” it is possible to investigate the relation between fame and attraction in this study as well. Considering only the killer conditions, results revealed a positive correlation between perceptions of fame and both the 9-item attraction measure ( $r = .27, p < .05$ ) and the 7-item excitement measure ( $r = .22, p < .05$ ). In other words, participants who rated the killer as more famous also rated him as more attractive.

An analysis was performed to determine whether women whose parents were divorced (and who reported living with their mothers instead of their fathers) or whose fathers were deceased reported more attraction to the killer (17% of participants fell into one of the categories). Results indicated that women whose fathers were absent ( $M = 1.40, SD = .36$ ) were not more likely than women whose fathers were present ( $M = 1.55, SD = .60$ ) to find the killer attractive,  $t(114) = -1.10, ns, d = -.30$ .

A one-way ANOVA was conducted to determine whether women of different ethnicities found the killer more attractive. Results revealed no relation between ethnicity and attraction,  $F(7, 107) = 1.89, ns, \eta^2_p = .11$ . A one-way ANOVA also revealed no differences in attraction amongst women of different religious affiliations,  $F(6, 106) = .31, ns, \eta^2_p = .02$ . It is important to note that the majority of the sample was Caucasian (59%) and Catholic/Christian (66%) and that very few participants were members of other ethnic or religious groups. As such, this analysis may have been underpowered. Thus, I also compared the most frequent ethnicity (Caucasian) to

all others. Results revealed no differences in ratings of attraction ( $M$  for Caucasian = 1.51,  $SD$  = .49;  $M$  for other ethnicities = 1.59,  $SD$  = .70),  $t(113) = -.75$ ,  $ns$ ,  $d = -.13$ . When comparing the most frequent religion (Christian or Catholic) to all others, results revealed no differences in ratings of attraction, ( $M$  for Christian/Catholic = 1.53,  $SD$  = .54;  $M$  for other religions = 1.49,  $SD$  = .51),  $t(111) = .38$ ,  $ns$ ,  $d = .08$ .

There was no relation between amount of discipline received as a child and attraction to the killer ( $\beta = -.06$ ,  $t(109) = -.68$ ,  $ns$ ). There also was no relation between frequency of physical abuse (i.e., “How often did your parents hit or physically hurt you?”) and attraction ratings, ( $\beta = .00$ ,  $t(113) = -.01$ ,  $ns$ ).

### 3.4 Summary

Overall, women found the bank robber to be more attractive than the killers. Additionally, dominance does not appear to be a characteristic that women find attractive. When considering the 9-item measure of attraction, women did not differ in their attraction to the dominant versus lesser dominant killer. Using the 7-item measure of excitement, women found thoughts of a relationship with the lesser dominant killer to be more exciting.

Self-esteem and sensation seeking do not appear to influence attraction or feelings of excitement toward a killer or criminals in general. However, attachment avoidance with one’s father *does* appear to influence the appeal of the killers, potentially as well as criminals more generally. For the analysis in which just the killers were considered, as well as the analysis which included the bank robber, women who reported higher avoidance with their fathers also reported higher evaluations of excitement concerning potential interactions with the individual. Although relations between attachment avoidance and the 9-item attraction measure did not reach

significance, the beta weight for the analysis in which all criminals were considered was in the same direction (i.e.,  $\beta = .11$ ). Additionally, it appears that anxiety with father influences attraction as well, although in the opposite direction: Women who reported more anxiety with their fathers tended to report less attraction or excitement for the individual, although not all effects reached significance ( $\beta$ s =  $-.28, -.28, -.21, -.18$ ).

Women who reported finding the killer more famous also reported more attraction and excitement for him. Women whose fathers were deceased or whose parents were divorced, women of different ethnicities, and women of different religious affiliations did not report more attraction or excitement for the killer. Finally, the amount of discipline received as a child was not related to attraction or excitement for the killer.

## CHAPTER 4: COMBINED ANALYSES

Given that the same attraction measure was used as the dependent variable in Study 1 and Study 2, it is possible to combine the results from both studies to obtain a better understanding of the effects of interest (only the conditions from Study 2 in which the target individual was a killer are considered in the below analyses).

The mean correlation between perceptions of fame and attraction ratings (computed using Fisher's  $r$  to  $Z$  transformation) was  $.22$  ( $p < .05$ ). In other words, participants who considered the killer to be more famous also rated him as more attractive. There was no relationship between self-esteem and attraction ( $r = -.08, ns$ ). There was a relationship between sensation seeking and attraction, such that participants who were higher in sensation seeking rated the killer as more attractive ( $r = .13, p < .05$ ). There was no relationship between avoidance with father and attraction ( $r = .08, ns$ ), avoidance with partner and attraction ( $r = -.04, ns$ ) or anxiety with partner and attraction ( $r = .05, ns$ ). However, there was a relationship between anxiety with father and attraction, such that women higher in anxiety with their fathers reported less attraction to the killer ( $r = -.11, p < .05$ ). There was no relationship between frequency of discipline received in childhood and attraction ( $r = .07, ns$ ).

## CHAPTER 5: GENERAL DISCUSSION

Less than one year ago, convicted killer Justin Boulay made headlines across the country for the second time in his 33 years. The first time was in 1998, when the Eastern Illinois University student strangled his ex-girlfriend to death with a phone cord. The second time was in November, 2010, when he was released on parole and moved to Hawaii with the bride he married while in prison. The public reacted, prompting media headlines such as the Daily Herald's "Who would marry a killer?" (Constable, 2010). To date, the answer to this question has relied on speculation from journalists, forensic psychologists, and the general public. The present research represents the first attempt to empirically investigate whether certain characteristics of convicted killers make them attractive to women, and whether women of certain personality dispositions are more likely to find these men attractive.

### 5.1 Characteristics of killers

The first characteristic investigated in the present studies was the level of celebrity that many killers attain. Evolutionary theory posits that women will find indicators of resources attractive (e.g., Buss, 1994) and research has found that women are attracted to men who possess indicators of high status (e.g., DeWall, 2008). As such, it may be the case that fame is a characteristic that draws women toward killers.

Participants in Study 1 watched a video in which a killer was described as having been the star of numerous true crime books and a movie or watched a video in which this information was omitted. The results from the study were not entirely clear. On the one hand, participants who viewed the video of the famous killer did not rate him as more attractive than did participants in the control condition. On the other hand, correlational analyses showed that

women who considered the killer to be more famous, regardless of condition, rated him as more attractive. One explanation for this discrepancy concerns potential limitations in the experimental stimuli. Although participants who viewed the video in which the killer was described as famous did, in fact, rate him as being more famous, the effect was not large ( $r = .33$ ). It may be the case that participants who viewed the control video considered the killer to have attained some level of fame simply because a video existed concerning his crimes. It also may be the case that, even though one killer was described as being extraordinarily well known across the country, the fact that participants were not previously aware of him may have resulted in lower ratings of fame for the experimental condition. Regardless, there simply may not have been enough strength in the manipulation to actually impact ratings of attraction. Despite the discrepancy in the results from the manipulation vs. the continuous ratings, the “big picture” seems to suggest that fame might play a role in women’s attraction to killers. If fame is unrelated to attraction or potentially inversely related to attraction, it would be difficult to explain why perceptions of fame and attraction (mean  $r = .22$  across studies) were found with the continuous ratings.

It is important to note, however, that there may be limitations inherent in the ratings of fame. Perhaps it is the case that perceptions of fame can be attributed partially to a more general positive evaluation of an individual and that these positive evaluations correlate with the attraction measures (given that, according to prior research, fame is considered to be a positive characteristic). In other words, if participants think more highly of the individual, they may be more inclined to give him a higher rating of fame. Results from Study 2 cast doubt on that possibility, however, as participants were asked how kind they considered the killer. There was not a significant relationship between ratings of kindness and fame ( $r = .09, ns$ ). Given that

kindness is also a positive evaluation and does not correlate with ratings of fame, it seems unlikely that the fame ratings simply capture a general positive regard.

The appeal of dominance was investigated in Study 2. Evolutionary theory posits that women should find indicators of a man's ability to provide protection attractive (Buss, 1994) and previous research has suggested that women find dominance appealing (e.g., Sadalla, Kenrick, & Vershure, 1987). However, results of Study 2 revealed that participants who read a story about a killer who tied up, stabbed, and mutilated his victims (the highly dominant condition) versus participants who read a story about a killer who shot his victims (the lesser dominant condition) did not report differences in their ratings of attraction for the killer. Additionally, participants reported lesser excitement (using the 7-item measure) for the highly dominant killer. Finally, there was not a significant relationship between participants' perceptions of dominance and their ratings of attraction ( $r = .12$ ) or excitement ( $r = -.04$ ) for the killer. In sum, it is likely the case that dominance is not a characteristic that draws women toward killers and may, in fact, be unappealing in violent men. Indeed, previous research (e.g., Jensen-Campbell, Graziano, & West, 1995) has suggested that dominance may be most appealing when it is in conjunction with altruistic, agreeable behavior. As such, perhaps it is simply the case that when men display dominance in a violent, dangerous manner, it is unattractive, as opposed to when dominance is exhibited in a non-threatening manner, such as speaking up in a work meeting or winning an athletic competition (e.g., Sadalla, Kenrick, & Vershure, 1987).

## **5.2 Characteristics of women**

The mean correlation across studies indicated no significant relationship between self-esteem and attraction to the killer. Additionally, results from Study 2 revealed no relationship

between self-esteem and excitement for the killer. This lack of relationship is noteworthy, as public commentators on the phenomenon often state that women who love killers are suffering from low self-esteem. Indeed, Isenberg (2000) devotes a specific section in her best-selling book to the concept of low-self esteem, stating that “women who love killers take low self-esteem to its further reaches” (p. 179). Although people may speculate that women turn to convicted killers because these women have no self-worth and believe that the only men who could love them are the ones society has deemed unacceptable, it appears that is not the case. Results from both studies show that women lower in self-esteem are not more likely than women higher in self-esteem to find killers attractive.

The mean correlation between sensation seeking and attraction revealed that women who were higher in sensation seeking found the killer more attractive. Given that previous studies have indicated that people higher in sensation seeking are also more interested in topics such as death, horror movies, and pornography (Zuckerman & Litle, 1986), it is perhaps not surprising that they would be more inclined to find a serial killer attractive. It also may be the case that women higher in sensation seeking are attempting to enhance their own fame by becoming involved with a killer. Surprisingly, results from Study 2 revealed no relationship between sensation seeking and feelings of excitement for the killer. Given that the relationship between sensation seeking and the attraction measure was stronger in Study 1 than in Study 2, the differences in experimental stimuli may be the reason. In other words, perhaps the more live-action, dramatic account of the crimes used in Study 1 was more appealing to women high in sensation seeking compared to the narratives used in Study 2. Regardless, it appears to be the case that women higher in sensation seeking are, in fact, more attracted to serial killers.

When considering the mean correlation across studies, there was not a significant relationship between avoidance with father and attraction to the killer ( $r = .08, ns$ ). However, there was a significant relationship between avoidance with father and excitement felt for the killer ( $r = .33$ ). Given that the relationship between avoidance and attraction in Study 1 was significant and in the same direction ( $\beta = .17$ ), it is probably safe to assume that a relationship exists such that women higher in avoidance with their fathers tend to find killers more appealing. This finding supports anecdotal evidence that women in love with killers have often experienced emotionally distant relationships with their fathers (Isenberg, 2000). Of course, it may be the case that women who have avoidant relationships with their fathers are more inclined to find any man attractive. As most previous research in attachment theory has not considered attachment in a relationship-specific manner, it is not possible to know for sure. However, by definition individuals higher in avoidance generally are less likely to desire or to seek out romantic relationships. Additionally, research has shown they tend to report a greater desire for self-reliance and distance from others (Rom & Mikulincer, 2003; Mikulincer, 1998). As such, it seems to go against the norm that they, compared to individuals lower in avoidance, would express more interest or be more excited about a potential relationship with an individual. Research that has shown that avoidant individuals place more emphasis on control in their relationships (Mikulincer, 1998) may provide some insight into why an avoidant woman would find a convicted killer attractive—she can control how often they see each other and, according to many anecdotes, it would not be uncommon for her to take control of his financial and legal situation as well. Finally, life history theory (Belsky, Steinberg, & Draper, 1991) posits that women who have been raised with unsupportive fathers will be more inclined to seek out less-invested mating strategies. The fact that the present studies showed that women who have highly

avoidant relationships with their fathers are more interested in a dangerous killer who is serving a life term in prison provides support for the notion that a negative relationship with one's father may influence one's mating strategy. It is unclear why a relationship was not found between avoidance and attraction in Study 2. Finally, there was no relationship between avoidance with one's romantic partner and one's attraction to the killer, suggesting that avoidant attachment with a father plays a larger factor in this situation than avoidant attachment with romantic partners.

The mean correlation between anxiety with father and attraction was significant, such that women higher in anxiety with their fathers reported less attraction to the killer ( $r = -.11, p < .05$ ). The regression analyses from Study 2, in which the 7-item excitement variable was used as the dependent variable, also revealed a significant relationship such that women higher in anxiety with their fathers were less excited about the killer ( $\beta = -.28$ ). As such, it appears that anxiety with one's father plays a role in attraction to killers. As anxious individuals need frequent reassurance concerning their relationships and tend to stress the importance of being close to their romantic partner (Locke, 2008), it is perhaps not surprising that an individual behind bars would be unappealing. However, there was no relation between anxiety with one's romantic partner and attraction to the killer, suggesting that, as with avoidance, attachment with one's father plays a larger role in this situation than attachment with romantic partners.

It is interesting to note that the presence versus absence of one's father (whether due to death or divorce) did not influence attraction—only the quality of the relationship with one's father was important. While research in life history theory has found support for the idea that both presence of a father and quality support from a father are influential in a girl's dating, sexual, and marital life, the current study only found support for the notion that the quality of relationship was important.

Childhood abuse also has been suggested as a factor influencing a woman's mating style (Belsky, Steinberg, & Draper, 1991). Anecdotes concerning women who have dated killers also suggest that childhood abuse may be a factor that leads women to adopt a less-invested mating strategy. However, the mean correlation revealed no relationships between childhood abuse and attraction to the killer.

### **5.3 Broader implications**

Little research has been conducted concerning the romantic appeal of men who possess what many people would consider to be “undesirable” traits (i.e., the “bad boy” phenomenon). The exception concerns research on the Dark Triad of personality traits—Machiavellianism, narcissism, and psychopathy (Paulhus & Williams, 2002). These traits are linked to numerous negative outcomes and are generally considered to be maladaptive (Kowalski, 2001). Machiavellian individuals tend to be manipulative (Christie & Geis, 1970), narcissists tend to have a sense of dominance and superiority (Raskin & Hall, 1979), and psychopaths tend to be low in empathy (Lilienfeld, & Andrews, 1996). Each of the traits is related to social malevolence, emotional coldness, duplicity, and aggression (Paulhus & Williams, 2002). Although research has not been conducted as to whether convicted killers possess this Dark Triad, it is not difficult to imagine that many of them do.

It is interesting to note, however, that men who possess these traits tend to be sexually successful. For instance, they report having more sexual partners (Jonason, Li, Webster, & Schmitt, 2009) and are more likely to poach mates from others (and be poached themselves) (Jonason, Li, & Buss, 2010). It seems that, despite society's negative view of these traits, at least some women find men who possess them appealing.

It is possible that the present research may help to shed light on the more general appeal of men with maladaptive characteristics. In other words, a woman's attraction to a convicted killer may very well be an extreme example of a more common phenomenon. Future research should attempt to determine whether women who are high in attachment avoidance with their fathers (or lower in attachment anxiety) are more likely to find men who possess these "negative" traits attractive. In sum, the findings from the present studies may very well provide insight into less extreme (and more common) forms of attraction to "bad boys."

#### **5.4 Limitations and future directions**

Although the present studies represent the first empirical attempt to investigate the romantic appeal of killers, there are several limitations worth noting. First, most anecdotes concerning prisoner relationships mention that the women are often 30-40 years of age. The participants in the present study were, on average, 19 years old. It is possible that, as women get older and their mate options diminish, they become more open to ulterior mate possibilities (e.g., a convicted killer) that would not be considered at a younger age. Although the characteristics of the killers and the personality characteristics of women investigated in the present studies likely would still play a role in attraction for the current participants, it may be the case that some of the variables become more relevant as a woman ages. For instance, perhaps self-esteem is not related to attraction to killers in late teens, but as a woman ages and her options diminish, it exerts a greater influence on her mating choices. As such, future research should attempt to assess older women as well.

Future research also should attempt to investigate further the appeal of fame by using different experimental stimuli. Perhaps a longer video with more emphasis on the killer's fame

would be more effective at influencing participants' attraction ratings. Another possible manipulation would be to present participants in the control condition with a police report regarding a killer so that they will not be given the impression he has any level of fame (as a video or online story might convey). It also may be advisable to collect personality data from women who have engaged in relationships with killers or who visit online criminal dating sites. A comparison of responses from these women and women who have not sought relationships with a convicted murderer would provide even more insight into the personality characteristics of women that lead them to seek out a relationship with a killer.

Finally, it may be of interest to conduct a study similar to the ones presented here, but with real serial killers as the targets. Perhaps there is something inherent in real killers that is not being conveyed by the fictional information and individual presented. Also, conducting a systematic analysis of the available information (e.g., anecdotes in books or online) regarding women who have engaged in relationships with convicted killers may provide insight into common motives behind their perusal of such a relationship, as well as their common personality characteristics.

## **5.5 Conclusion**

Two middle-aged Australian sisters, Avril and Rose, became bored with their respective marriages and left their husbands to marry convicted criminals. A week after one of the men was released from prison, he beat to death his new wife, Avril, with a hammer. The other man eventually was released as well. He didn't last long on the outside, however—he was convicted of trying to cut off Rose's ear and pull out her teeth with pliers (Mina, 2003).

Despite accounts such as these, not all relationships with convicted killers end in misery. Indeed, author Angela Devlin, in her book *Cellmates/Soulmates* (2002), profiles many successful accounts of women who have fallen in love with prisoners and continued to have successful relationships with them, both while the men were in prison and once released. Regardless of whether these relationships end in murder or marriage, more understanding is needed as to why women would find such men attractive. The present studies represent the first steps in attempting to understand the characteristics of these men that make them appealing and the characteristics of the women themselves that lead them to be attracted to convicted killers.

## TABLES

Table 1

*Summary statistics and correlations between variables in Study 1*

	<i>M</i>	<i>SD</i>	<i>Correlations</i>							
			1.00	2.00	3.00	4.00	5.00	6.00	7.00	
Attraction composite (1)	1.60	.61	.76							
Self-esteem (2)	3.25	.59	-.12	.89						
Sensation seeking (3)	6.25	2.82	.19*	.07	.74					
Avoidance-Father (4)	3.11	1.59	.16*	-.30*	.07	.91				
Avoidance-Partner (5)	2.19	1.09	-.06	-.28*	-.01	.13	.89			
Anxiety-Father (6)	1.66	1.35	.06	-.35*	-.01	.61*	.09	.87		
Anxiety-Partner (7)	3.37	1.82	.05	-.38*	.05	.24*	.50*	.27*	.89	
Fame perception (8)	2.68	1.54	.19*	-.10	.03	-.07	.02	.01	.05	.85

\* $p < .05$

Cronbach's alpha appears on the diagonals.

Table 2

*Correlations between individual attraction items and personality variables in Study 1*

	<i>Correlations</i>						
	Fame per.	SE	SS	Avoid-F	Avoid-P	Anx-F	Anx-P
<i>Attraction Questions</i>							
Physical appearance only	.10	-.12	.06	.11	-.06	.07	.10
Writing to person	.14*	-.05	.16*	.16*	.00	.09	.00
Short term-in prison	.09	-.04	.09	.10	.01	.01	.03
One night stand	.23*	-.04	.11	.12	-.02	-.01	.07
One date	.17*	-.04	.13	.05	-.04	.01	.05
Date for few weeks	.13	-.08	.06	.09	-.02	.03	.02
Meeting in prison	.02	-.07	.23*	.07	-.11	.00	-.06
Long term-in prison	.12	-.06	.03	.08	.00	.04	.05
Long term-out of prison	.14*	-.09	.07	.05	.04	.01	.10

\* $p < .05$ 

Note. See text for full attraction items. SE = self-esteem; SS = sensation seeking; Fame per. = fame perception; Avoid-F = avoidance with father; Avoid-P = avoidance with partner; Anx-F = anxiety with father; Anx-P = anxiety with partner.

Table 3

*Summary of Regression Analyses: Predicting attraction to killer as a function of condition and personality variables in Study 1.*

Effect	<i>B</i>	<i>SE B</i>	$\beta$	$\Delta R^2$
<i>Step 1</i>				
Condition	-.01	.04	-.01	
				.08*
<i>Step 2</i>				
Condition	-.01	.04	-.01	
Self esteem	-.08	.05	-.13	
Sensation seeking	.11	.04	.18*	
Avoidance-Father	.10	.05	.17*	
Avoidance-Partner	-.08	.05	-.12	
Anxiety-Father	-.06	.05	-.09	
Anxiety-Partner	.02	.05	.04	
				.03
<i>Step 3</i>				
Condition	-.01	.04	-.01	
Self esteem	-.09	.05	-.15	
Sensation seeking	.12	.04	.19*	
Avoidance-Father	.08	.05	.14	
Avoidance-Partner	-.08	.05	-.12	
Anxiety-Father	-.05	.05	-.08	
Anxiety-Partner	.01	.05	.01	
Condition × Self-esteem	.02	.05	.04	
Condition × Sens.seek.	-.06	.04	-.09	
Condition × Avoid-F	.10	.05	.16	
Condition × Avoid-P	-.02	.05	-.04	
Condition × Anx-F	-.05	.05	-.08	
Condition × Anx-P	.06	.05	.10	

\* $p < .05$

Table 4

*Summary statistics and correlations between variables in Study 2*

	M	SD	Correlations							
			1.00	2.00	3.00	4.00	5.00	6.00	7.00	8.00
1. Attraction composite	1.62	.62	.81							
2. Self-esteem	3.30	.61	.00	.91						
3. Sensation seeking	5.88	2.91	.03	.15	.74					
4. Avoidance-Father	3.28	1.63	-.09	.36*	.02	.90				
5. Avoidance-Partner	2.16	1.03	.01	-.26*	.06	.22*	.83			
6. Anxiety-Father	1.59	1.22	-.21*	-.35*	-.07	.62*	.12	.89		
7. Anxiety-Partner	3.37	1.82	.05	-.49*	.06	.25*	.58*	.19*	.89	
8. Excitement composite	2.16	1.07	.57*	-.10	-.01	.21*	.08	-.05	.12	.80
9. Dominance perception	5.78	1.55	.12	.20*	.23*	-.05	-.04	-.09	-.12	-.04

\* $p < .05$

Cronbach's alpha appears on the diagonals.

Note. For purposes of comparison to Study 1, correlations are for the killer conditions only (bank robber condition is excluded).

Table 5

*Correlations between individual attraction items and personality variables in Study 2*

	<i>Correlations</i>						
	Dom per.	SE	SS	Avoid-F	Avoid-P	Anx-F	Anx-P
<i>Attraction Questions</i>							
Physical appearance only	.17	.16	.06	-.17	.05	-.29*	.03
Writing to person	.00	-.14	.04	.01	-.10	-.12	-.05
Short term-in prison	.03	.06	-.06	-.06	-.04	-.11	-.07
One night stand	.08	-.09	-.05	-.06	-.05	-.10	-.09
One date	.10	.06	.03	-.05	.02	-.11	.10
Date for few weeks	.05	.04	-.07	-.15	.02	-.11	.12
Meeting in prison	.07	-.14	.05	.11	-.05	-.01	.13
Long term-in prison	.06	.02	-.03	-.08	-.07	-.09	-.14
Long term-out of prison	.01	-.05	.11	-.05	.03	-.10	.05

\* $p < .05$ 

Note. For purposes of comparison to Study 1, correlations are for the killer conditions only (excluding bank robber).

See text for full attraction items.

Dom per. = dominance perceptions; SE = self-esteem; SS = sensation seeking; Avoid-F = avoidance with father; Avoid-P = avoidance with partner; Anx-F = anxiety with father; Anx-P = anxiety with partner.

Table 6

*Summary of Regression Analyses: Predicting attraction to killer as a function of condition (dominant versus less dominant) and personality variables in Study 2.*

Effect	<i>B</i>	<i>SE B</i>	$\beta$	$\Delta R^2$
<i>Step 1</i>				
Condition	-.08	.05	-.13	
				.06
<i>Step 2</i>				
Condition	-.08	.05	-.14	
Self esteem	-.03	.07	-.06	
Sensation seeking	.01	.06	.02	
Avoidance-Father	.01	.07	.02	
Avoidance-Partner	-.01	.07	-.03	
Anxiety-Father	-.14	.07	-.25*	
Anxiety-Partner	.05	.07	.08	
				.06
<i>Step 3</i>				
Condition	-.07	.05	-.12	
Self esteem	.00	.07	.00	
Sensation seeking	.01	.06	.01	
Avoidance-Father	.00	.08	.00	
Avoidance-Partner	.01	.07	.01	
Anxiety-Father	-.13	.08	.22	
Anxiety-Partner	.04	.08	.07	
Condition × Self-esteem	-.04	.07	-.07	
Condition × Sens.seek.	-.07	.06	-.12	
Condition × Avoid-F	-.09	.08	-.15	
Condition × Avoid-P	.07	.07	.11	
Condition × Anx-F	.08	.08	.15	
Condition × Anx-P	.03	.08	.06	

\* $p < .05$

Note. Dependent variable is the 9-item attraction measure.

Table 7

*Summary of Regression Analyses: Predicting excitement for killer as a function of condition (dominant versus less dominant) and personality variables in Study 2.*

Effect	<i>B</i>	<i>SE B</i>	$\beta$	$\Delta R^2$
<i>Step 1</i>				
Condition	-.20	.09	-.21*	
				.09
<i>Step 2</i>				
Condition	-.18	.09	-.18	
Self esteem	-.04	.12	-.04	
Sensation seeking	-.02	.09	-.02	
Avoidance-Father	.34	.12	.33*	
Avoidance-Partner	-.01	.11	-.01	
Anxiety-Father	-.28	.12	-.28*	
Anxiety-Partner	.09	.12	.09	
				.06
<i>Step 3</i>				
Condition	-.15	.09	-.15	
Self esteem	.02	.12	.02	
Sensation seeking	-.04	.10	-.04	
Avoidance-Father	.32	.13	.32*	
Avoidance-Partner	.02	.12	.02	
Anxiety-Father	-.28	.13	-.28	
Anxiety-Partner	.10	.13	.11	
Condition × Self-esteem	-.15	.12	-.14	
Condition × Sens.seek.	-.04	.10	-.04	
Condition × Avoid-F	-.21	.13	-.21	
Condition × Avoid-P	.17	.12	.16	
Condition × Anx-F	.19	.13	.19	
Condition × Anx-P	-.08	.13	-.04	

\* $p < .05$

Note. Dependent variable is the 7-item excitement measure.

Table 8

*Summary of Regression Analyses: Predicting attraction to criminal as a function of condition (killer versus bank robber) and personality variables in Study 2.*

Effect	<i>B</i>	<i>SE B</i>	$\beta$	$\Delta R^2$
<i>Step 1</i>				
Condition	-.11	.05	-.17*	
				.04
<i>Step 2</i>				
Condition	-.10	.05	-.16	
Self esteem	-.06	.06	-.10	
Sensation seeking	-.03	.05	-.04	
Avoidance-Father	.07	.06	.11	
Avoidance-Partner	-.00	.06	.02	
Anxiety-Father	-.13	.06	-.21*	
Anxiety-Partner	.03	.06	.05	
				.04
<i>Step 3</i>				
Condition	-.10	.05	-.14	
Self esteem	-.09	.06	-.14	
Sensation seeking	-.05	.05	-.08	
Avoidance-Father	.09	.07	.16	
Avoidance-Partner	-.01	.06	-.02	
Anxiety-Father	-.12	.07	-.19	
Anxiety-Partner	.03	.06	.05	
Condition × Self-esteem	.06	.06	.09	
Condition × Sens.seek.	.06	.05	.09	
Condition × Avoid-F	-.07	.07	-.11	
Condition × Avoid-P	-.01	.06	-.01	
Condition × Anx-F	-.03	.07	-.05	
Condition × Anx-P	.01	.06	.02	

\* $p < .05$

Note. Dependent variable is the 9-item attraction measure.

Table 9

*Summary of Regression Analyses: Predicting excitement for killer as a function of condition (killer versus bank robber) and personality variables in Study 2.*

Effect	<i>B</i>	<i>SE B</i>	$\beta$	$\Delta R^2$
<i>Step 1</i>				
Condition	-.32	.09	-.28*	
				.08*
<i>Step 2</i>				
Condition	-.33	.09	-.29*	
Self esteem	-.07	.10	-.07	
Sensation seeking	.04	.08	.03	
Avoidance-Father	.32	.10	.30*	
Avoidance-Partner	.03	.09	.03	
Anxiety-Father	-.19	.10	-.18	
Anxiety-Partner	.03	.10	.03	
				.03
<i>Step 3</i>				
Condition	-.35	.09	-.30*	
Self esteem	-.06	.10	-.06	
Sensation seeking	.08	.09	.08	
Avoidance-Father	.28	.11	.26*	
Avoidance-Partner	.05	.10	.05	
Anxiety-Father	-.10	.12	-.10	
Anxiety-Partner	.02	.10	.02	
Condition × Self-esteem	.03	.10	.02	
Condition × Sens.seek.	-.12	.09	-.11	
Condition × Avoid-F	.09	.11	.08	
Condition × Avoid-P	-.06	.10	-.06	
Condition × Anx-F	-.19	.12	.18	
Condition × Anx-P	.06	.10	.06	

\* $p < .05$

Note. Dependent variable is the 7-item excitement measure.

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