

PREDICTORS OF WOMEN'S ATTRACTION TO DARK TRIAD
TRAITS

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By
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CERTIFICATION OF APPROVAL

PREDICTORS OF WOMEN'S ATTRACTION TO DARK TRIAD TRAITS

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DEDICATION

To my friends and family who supported me on this journey, thank you.

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ABSTRACT

This study examined whether attraction to Dark Triad traits was associated with women's sociosexual orientation and levels of the Dark Triad traits. This study also examined whether attraction to the Dark Triad traits varied by short and long-term mating contexts. Women generally found the Dark Triad traits more attractive for short-term relationships and, specifically, women with unrestricted sociosexuality were more likely to be attracted to the traits for short-term mating. In regards to the individual traits of the Dark Triad, narcissism was found more attractive than Machiavellianism and psychopathy overall. Women high in Dark Triad traits themselves were more likely to rate the Dark Triad traits as more attractive in general. Furthermore, women high in Dark Triad traits rated Machiavellianism as the most attractive trait for both short and long-term contexts. Cumulatively, this study implies that mating context, sociosexuality and level of Dark Triad traits for women can influence their attraction to Dark Triad traits in a potential partner.

INTRODUCTION

The Dark Triad is a trio of personality traits that includes psychopathy, narcissism, and Machiavellianism (Jonason & Webster, 2010). Psychopathy is typically marked by high intelligence, anti-social behavior, and criminal activity (Furnham, Daoud, & Swami, 2009). Individuals with a narcissistic personality are shown to have a sense of entitlement and an ostentatious view of self (Back, Schmukle, & Egloff, 2010; Foster, McCain, Hibberts, Brunell, & Johnson, 2015). Those high in Machiavellianism are generally deceptive, manipulative, and partake in immoral behavior (Skinner, 1988). These personality traits are linked together based on their shared “dark” elements that are typically considered aversive, especially in the context of interpersonal and romantic relationships (Jones & Figueredo, 2013).

Research on the Dark Triad has increased in recent years. The Dark Triad has been linked to a preference for short-term mating, tumultuous relationships, and unrestricted sociosexuality (Ali & Chamorro-Premuzic, 2009; Jonason, Luevano, & Adams, 2012; Mouilso & Calhoun, 2012). Sociosexuality is an individual’s attitude towards sex outside of an emotionally committed relationship. Those at one end of the scale can be described as having a restricted sociosexuality, which is marked by a preference for low numbers of sexual partners and higher levels of commitment. On the opposite end of the scale, unrestricted individuals are more likely to have sexual fantasies that include someone other than their romantic partner, and agree that sex without love is okay (Simpson & Gangestad, 1991). Previous research has focused on

how the Dark Triad personalities choose partners and the manner in which they pursue potential mates, but few studies have been conducted in examining how attractive Dark Triad characteristics are to women. Furthermore, the sociosexuality of women and its influence on attraction to the Dark Triad lacks research. There may be women who are attracted to the Dark Triad traits, as research has shown reports of successful short-term relationships. Short-term mating is preferred by the Dark Triad traits as it allows for them to exploit another individual to get what they want, compared to a long-term relationship that would require more effort and time for those high in Dark Triad traits (Jonason et al., 2009; Jonason et al., 2012). Women with an unrestricted sociosexuality, specifically, may be more inclined to possess an attraction to these traits.

It is expected that the current study will give insight on the attraction to the Dark Triad traits for long and short-term relationships. The Dark Triad traits are generally undesirable, yet research has shown those high in these traits still manage to engage in romantic relationships. The purpose of this study is also to explore the extent to which women's sociosexuality, mating context, and women's own Dark Triad traits plays a role in attraction to Dark Triad personalities.

Relationship and Mating Styles of the Dark Triad

The Dark Triad personalities are known to manifest a manipulative and exploitative character (Jones & Figueredo, 2013) and, therefore, apply this style of interacting in intimate relationships as well. Those who score high in Dark Triad traits have been found to have love styles that are pragmatic and/or involve game playing

(Jonason & Kavanagh, 2010). Game playing may contribute a sense of thrill to the relationship and may also function as a way to prevent partner attachment. Taking a pragmatic stance in a relationship is a function that allows the Dark Triad personalities to examine how their partner can be of benefit to them (Jonason & Kavanagh, 2010). Those high in Dark Triad traits are found to lack affective empathy, meaning they are often unable to reciprocate a proper emotional response to others and do not care to. However, they are able to comprehend other's emotions in order to take advantage of them (Wai & Tiliopoulos, 2012). This lack of empathy and disregard for hurting others contributes to their self-serving mating style.

Those high in the Dark Triad tend to report low intimacy, passion, and commitment in relationships (Ali & Chamorro-Premuzic, 2009; Jonason et al., 2009). Additionally, promiscuity and risk taking are frequently found to be components in the relationship styles of the Dark Triad (Jonason & Kavanagh, 2010; Adams, Luevano, & Jonason, 2014). Adams et al. (2014) asked participants to indicate how much detection risk they would accept when engaging in various types of extra-pair relationships, i.e. sex with someone other than one's romantic partner. The amount of detection risk accepted was positively correlated with scores on psychopathy and narcissism, but negatively correlated with scores on Machiavellianism. Additionally, those high in psychopathy and narcissism tended to report more extra-pair relationships (Adams et al., 2014).

Short-term mating is common among the Dark Triad personalities (Jonason et al., 2009; Jonason et al., 2012). This type of mating style allows those high in Dark

Triad traits to utilize their exploitative traits with a partner. The negative egotistical and socially aversive traits are less apparent in the limited time-frame of a short-term mating relationship; thus, it may potentially be the best and most self-serving option for the romantic pursuits of Dark Triad personalities (Jonason et al., 2009). By participating in these types of short-term mating relationships, it indicates that the Dark Triad personalities have a preference for fleeting sexual encounters (Jonason et al., 2012). All the Dark Triad traits are associated with low commitment to partners, and low intimacy; however, those with Machiavellian and psychopathic personalities have reported lower intimacy than narcissistic individuals (Ali & Chamorro-Premuzic, 2009; Dussault, Hojjat, & Boone, 2013).

Sexual aggression is another feature positively correlated with the Dark Triad. Sexual aggression, in a study by Mouilso and Calhoun (2012), is defined as committing sexual assault by the use of power, threats, pressure, or substances that cause impairments. Past research found aggressive sexual actions to be common among people high in narcissism and psychopathy both in and out of the prison system (Mouilso & Calhoun, 2012).

Women with an unrestricted sociosexuality tend to favor aggressive mating strategies in potential partners (Hall & Canterberry, 2011). They have been found to prefer men who exert sexual power and dominance. Such examples include using teasing insults, making comments about what he will sexually do to her, and not giving up after being rejected (Hall & Canterberry, 2011). Aggressive behavior is already associated with the Dark Triad personalities, but research shows this

characteristic carries over into relationship contexts (Jonason et al., 2009). A male's mating strategy that involves sexual aggression can help women pick out dominant and powerful partners. This type of mating style also allows for the Dark Triad personalities to make the most of their exploitative disposition because their sexual aggression is firstly viewed or disguised as loving and protective instead of possessive and dangerous (Hall & Canterbury, 2012; Jonason et al., 2009).

Perceived Attractiveness of the Dark Triad

Research has shown those high in the Dark Triad to be rated as attractive based on their characteristics and physical appearance (Carter, Campbell, & Muncer, 2013; Holtzman & Strube, 2012). Appearance is a principal component in initial attraction, and those high in the Dark Triad often manipulate their appearance to appear attractive. Effective adornment, or the use of products to enhance appearance, is significantly correlated with high scores on the three Dark Triad personalities (Holtzman & Strube, 2012). Creating an attractive façade allows those high in the Dark Triad to entice mates without difficulty because they suppress their traits upfront.

Of the Dark Triad personalities, narcissism has been found to be the most appealing. Back et al. (2010), found that narcissists were perceived as being popular by strangers at their initial meeting. Body movements, what they said, and how they looked were cues used by participants to assess the popularity of the narcissists. Furthermore, narcissists are favored more than psychopaths and Machiavellians based only on descriptions. In a study conducted by Rauthmann and Kolar (2012),

participants rated the attractiveness of narcissists, Machiavellianists, and psychopaths after reading vignettes describing an individual with associated Dark Triad traits. Narcissists were associated with more positive traits such as charisma, confidence, and qualities of leadership, while individuals high in Machiavellianism and psychopathy were viewed by participants as sharing the qualities of antagonistic and exploitative behavior, and lacking remorse (Rauthmann & Kolar, 2012). While the Dark Triad personalities share enough of the same qualities to be linked together (Jones & Figueredo, 2013), they are still separate traits that may have different effects on attractiveness (Rauthmann & Kolar, 2013).

Facial masculinity is another trait shared by the Dark Triad characters. A recent study found that women can tell the differences between faces that are high and low in psychopathy, narcissism, and Machiavellianism (Lyons, Marcinkowska, Helle, & McGrath, 2015). This study designed facial morph prototypes by morphing 10 faces of individuals who scored low and high on measures for narcissism, psychopathy, and Machiavellianism to create composite faces. Using these facial morph prototypes, women were asked to assess each face by rating them for masculinity. A masculine face can be defined by having a more prominent brow bone, jaw, and cheekbones. Although the three traits were found to be overall masculine individually, it was discovered that women rate narcissism and psychopathy composite faces as more masculine than Machiavellianism. Preference for masculine faces is also related to preference for those with highly narcissistic faces (Lyons et al., 2015).

There is a significant difference between women with unrestricted and restricted sociosexuality in preference for facial masculinity. Women with restricted sociosexuality are more interested in long-term relationships with men who rated low in facial masculinity, while unrestricted women are inclined towards short-term relationships with highly masculine men (Provost et al., 2006). Facial masculinity can possibly be an important factor in perceived attractiveness of the Dark Triad personalities. While the Dark Triad all share this characteristic, each trait has an influence on observed masculinity and women's choice in partner and attractiveness ratings.

It is unknown whether attractiveness of the Dark Triad traits is based on female choice or the ability of individuals high in these traits to exploit and manipulate others. Research that focused on the Dark Triad personality traits and not physical appearance found those high in narcissism, psychopathy, and Machiavellianism to be rated as more attractive. When participants rated vignettes based on the Dark Triad personalities versus a control, the Dark Triad personality descriptions were rated as significantly more attractive. The control group description matched that of the description for the Dark Triad; however, it left out any of the dark characteristics that were drawn from the Dirty Dozen measure. Participants were drawn from a college population and rated the attractiveness of the two vignettes (Carter et al., 2013).

Assortative Mating in the Dark Triad

Personality is an important factor in mate selection, and researchers have discovered that those with similar personalities are more likely to be interested in one another as potential partners (Campbell, 2013; Jonason, Lyons, & Blanchard, 2015). Those high in psychopathy and Machiavellianism rated each other as attractive and had a significant preference for one another for involvement in a short-term relationship. This was determined in the study by having participants answer a questionnaire assessing for Dark Triad traits. Once sorted into one of the three personalities they most identified with based on the questionnaire, they read corresponding vignettes designed to represent Dark Triad personalities and then rated them on attractiveness. Individuals high in psychopathy rated one another as desirable for long-term relationships. Individuals with psychopathic and Machiavellian personalities showed an attraction to those with similar personalities; however, highly narcissistic individuals have a low preference for one another (Jonason et al., 2015). The Dark Triad personalities take advantage of the short-term to engage with a partner who they perceive to be beneficial to their needs; however, while the partner may initiate the relationship based on similar personality characteristics, the mutual attraction fades as the darker and more disagreeable traits become evident in both partners. The higher the individual is in Dark Triad traits, the less satisfied and committed they are in their relationship with a partner also high in Dark Triad traits (Smith et al., 2014).

While similar personalities play a role in mate selection, an individual's perception of mutual attraction was not found to be mutual in reality. In one study, speed dating was used to examine the reciprocity of mate choice (Back, Penke, Schumukle, Sachse, Borkenau, & Asendorpf, 2011). Men with unrestricted sociosexual orientations were selected less often as a potential partner. Sociosexuality negatively predicted mate selection for men, but no effect was observed for women's sociosexuality. When analyzing interactions between two specific people, there was a small effect of mate choice being reciprocal for those who share similar perceptions about their mate value.

The Dark Triad personalities are significantly correlated with aggressive mating strategies (Hall & Canterberry, 2011; Mouilso & Calhoun, 2012), facial masculinity (Lyons et al., 2015), an unrestricted sociosexuality (Ali & Chamorro-Premuzic, 2009), as well as a preference for, and experience with, short-term relationships (Jonason et al., 2009). Studies have shown women with unrestricted sociosexuality are interested in short-term mating (Jonason et al., 2009), are attracted to aggressive mating (Provost et al., 2006) and masculine faces (Lyons et al., 2015). Sociosexuality is a factor that has not yet been widely researched in relation to the attraction to Dark Triad personalities. Although women with unrestricted sociosexuality prefer many characteristics associated with those high in the Dark Triad traits, it is unknown whether sociosexual orientation is related to a specific preference for Dark Triad personalities. Research indicates sociosexuality can predict a woman's choice in partner and mating styles (Provost et al., 2006; Lyons et al.,

2015). Because of unrestricted women's preference for characteristics associated with the Dark Triad, sociosexuality may also be a predictor for attraction to Dark Triad personalities.

The Current Study

The goal of the current study is to examine whether attraction to the Dark Triad is associated with women's sociosexual orientation and levels of the Dark Triad traits, as well as whether attraction to the Dark Triad traits varies by mating context.

This study will test the following hypotheses:

1. We expect a main effect of context, such that women will prefer the Dark Triad traits more for short-term relationships than for long-term relationships.
2. We expect a main effect of target traits, such that narcissism will be rated as more attractive than the other Dark Triad traits.
3. We expect a main effect of sociosexuality, such that there will be a positive correlation between sociosexuality and attractiveness ratings, in which women with unrestricted sociosexuality will rate the Dark Triad traits as more attractive than restricted women.
4. We expect a main effect of participant traits, such that women who score higher in Dark Triad traits will rate the Dark Triad traits for potential partners as more attractive.

METHODS

Participants

A sample of 172 women was recruited from Amazon Mechanical Turk (MTurk). Those who participated through MTurk were compensated with one dollar through MTurk's online payment service. Participants had to have an account with Amazon, be at least 18 years old, female, and be living in the United States. Age of participants in this study ranged from 18 to 84, $M = 34.72$, $SD = 10.33$.

The sexual orientations of the participants consisted of 86% heterosexual, 4.1% lesbian, 8.2% bisexual, 0.6% pansexual, and 1.2% Other. Participants also provided information about their ethnicities in which 8.7% were Black/African American, 61.6% were Caucasian, 9.3% were Hispanic/Latino, 12.8% were Asian American, 1.7% were Native Hawaiian/Pacific Islander, and 5.8% were Other. Participants' education level was reported as 0.6% some high school/no diploma, 4.7% high school graduate/diploma/GED, 20.3% some college/no degree, 2.9% trade/technical/vocational training, 10.5% Associate degree, 47.1% Bachelor's degree, 13.4% Master's degree, and 0.6% professional degree. The income level of participants were 18.6% earning less than \$20,000, 22.1% earning \$20,000-\$34,999, 11.0% earning \$35,000-\$49,999, 26.7% earning \$50,000-\$74,999, 12.2% earning \$75,000-\$99,999, 5.8% earning \$100,000-\$149,999, and 3.5% earning \$150,000 or more.

Information about the participants' relationship history was collected. 94.8% reported having been in a serious relationship (a relationship lasting more than 3 months); 5.2% reported they had not. The participants (75% of the sample) who were currently in a relationship reported the length of time they had been with their partner. This ranged from 1 month to 43 years. 59.7% of participants described their current relationship as married, 7% as engaged to be married, 28.7% as dating exclusively, 2.3% as dating casually, and 2.3% as Other. Of the participants currently in a relationship, 97.70% reported being committed to their current partner while 2.30% did not, and 94.6% reported being monogamous, while 5.4% did not.

Measures

Four questionnaires were used in this study. First, a demographic questionnaire was used to measure age, gender, education level, income, and if participants were currently in a committed, monogamous relationship, (see Appendix B).

The Revised Sociosexual Orientation Inventory (SOI-R) assessed sociosexuality. It is a 9-item questionnaire with a 9-point response scale. This measure can be used as a general measure of sociosexual orientation, or split into three subscales: behavior, attitude, and desire (Penke & Asendorpf, 2008). Higher scores show a more unrestricted sociosexual orientation. The SOI-R has evidence of strong predictive and discriminative validity through correlations with established traits of sociosexuality. This measure also has good internal consistency ($\alpha = .84$) for women in this study. Sample items are statements such as "How often do you have

fantasies about having sex with someone you are not in a committed romantic relationship with?” and “With how many different partners have you had sex within the past 12 months?” (see Appendix C).

The Short Dark Triad (SD3) measures Dark Triad personality traits. It is a 27-item questionnaire where participants rate how much they agree with the items on a scale of 1 (strongly disagree) to 5 (strongly disagree) (Jones & Paulhus, 2014). In the current study, the directions on how to complete the questionnaire were modified. Participants rated the attractiveness of each statement if it were to be true for a potential partner. High internal consistency ($\alpha = .94$) was demonstrated in this study. There is evidence for this measure having good validity as well by supporting convergence with the Big Five and other measures assessing Dark Triad traits (Boyle, Saklofske, & Matthews, 2014). Sample items include: “Most people can be manipulated,” and “It’s not wise to tell your secrets” (see Appendix E).

Lastly, the Dirty Dozen, a 12-item questionnaire with a 5-point response scale, was used to assess the participants for each of the Dark Triad traits. Response anchors ranged from 1 (strongly disagree) to 9 (strongly agree) (Jonason & Webster, 2010). Evidence for reliability and validity has been shown for each individual trait measured. This measure had high internal consistency for this study ($\alpha = .90$). “I tend to seek prestige or status,” and “I have used flattery to get my way,” are examples of items from the Dirty Dozen (see Appendix D).

Design

The current study was a non-experimental design in which correlational relationships were examined. The predictor variables were sociosexuality, which is on a continuous scale; levels of the Dark Triad, which are also on a continuous scale; and mating context, which is dichotomous (short-term and long-term). Mating context was measured as a within-subjects variable since participants rated the attractiveness of the traits in both contexts. The outcome variables for this study were the attractiveness ratings for each of the Dark Triad traits, which are on continuous scales.

Procedure

Participants responded to a post for the study on MTurk. A consent form (see Appendix A) was presented first and those who clicked “yes” agreed to participate in the study and were directed to the demographics questionnaire (see Appendix B). Following the demographic questionnaire, participants answered all items for the SOI-R (see Appendix C), then the Dirty Dozen (see Appendix D), and lastly the modified SD3 (see Appendix E) for long and short-term relationships. Participants rated the Dark Triad personality traits for both mating contexts at the same time. A description of what constitutes a long and short-term relationship was included for participants for clarity. Lastly, participants were debriefed with a short description about the current study thanked for their time, and received payment through MTurk’s online services (see Appendix F).

RESULTS

A repeated measures ANCOVA [target trait (3) X mating context (2) X SOI X DT] was used to examine all hypotheses in this study. Attractiveness was the dependent variable in this study with two continuous predictors being sociosexuality and participant Dark Triad traits. Target traits and context were repeated factors. The main effects of the statistical analysis determined if women with unrestricted sociosexuality, and women with higher scores on Dark Triad traits, rated partners high in Dark Triad traits as more attractive, whether women rated the Dark Triad traits as more attractive for short-term versus long-term relationships, and revealed any particular differences in attractiveness between the Dark Triad personalities (See Table 1).

Table 1

Descriptive Statistics of Scores

| Measures | <i>M</i> | <i>SD</i> | Actual Range | Possible Range |
|------------------|----------|-----------|--------------|----------------|
| SOI | 3.23 | 1.08 | 1.00 - 5.89 | 1 - 9 |
| DD | 3.07 | 1.56 | 1.00 - 8.75 | 1 - 9 |
| Narcissism | 3.76 | 0.90 | 1.00 - 6.06 | 1 - 7 |
| Machiavellianism | 3.07 | 1.21 | 1.00 - 6.28 | 1 - 7 |
| Psychopathy | 2.36 | 1.02 | 1.00 - 5.44 | 1 - 7 |

Note 1. Table includes scores for the DD: Dirty Dozen (participant traits), SOI: Sociosexual Orientation Inventory, and the attractiveness ratings of Dark Triad traits.

Main Effects

As hypothesized, results showed a main effect of context, $F(1,326) = 17.69$, $p < .001$, $\eta_p^2 = .098$, in which women rated the Dark Triad traits as more attractive for a

short-term mating context ($M = 3.16$, $SE = 0.05$) than a long-term mating context ($M = 2.97$, $SE = 0.06$) (See Figure 1). The results also showed a main effect of target traits, $F(2,326) = 172.24$, $p < .001$, $\eta_p^2 = .514$. Narcissism ($M = 3.76$, $SE = 0.06$) was found to be more attractive than Machiavellianism ($M = 3.07$, $SE = 0.07$) and psychopathy ($M = 2.36$, $SE = 0.06$). Specifically, the traits differed from one another with p values each being less than .001.

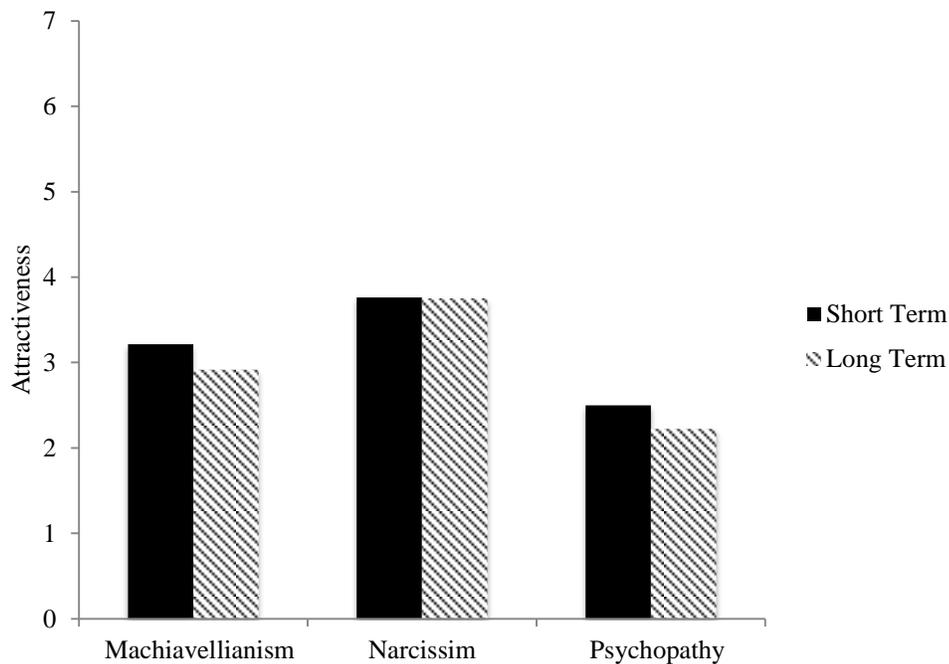


Figure 1. Mean attractiveness ratings of each Dark Triad trait for both mating contexts.

It was hypothesized that there would be a main effect of sociosexuality. Although the main effect was not significant, $F(1,163) = 0.10$, $p = .75$, $\eta_p^2 = .001$, there was a small, but significant, positive zero-order correlation between sociosexuality and the mean attractiveness ratings across traits and context, $r(164) = .23$, $p = .03$. Women with unrestricted sociosexuality were more likely to rate the

Dark Triad traits as attractive than women with restricted sociosexuality. The hypothesized main effect of participant traits was significant, $F(1,163) = 159.79, p < .001, \eta_p^2 = .495$. Scores on the Dirty Dozen were positively and significantly correlated with attraction ratings of the Dark Triad traits, $r(164) = .72, p < .001$. Women that scored higher in Dark Triad traits themselves, rated the Dark Triad traits for potential partners as more attractive.

Exploratory Analyses

No predictions were made about interactions in this study; however, further exploratory analyses were run to examine data (See Table 2).

Table 2

Significant and Nonsignificant Interactions Between All Variables

| <u>Interaction</u> | <u>F</u> | <u>η_p^2</u> |
|-----------------------|----------|------------------------------|
| Trait x Context | 16.75** | .093 |
| Trait x DD | 12.43** | .071 |
| Trait x SOI | 1.78 | .011 |
| Context x DD | 0.53 | .003 |
| Context x SOI | 1.37 | .008 |
| Trait x Context x DD | 3.26* | .020 |
| Trait x Context x SOI | 3.85* | .023 |

Note 2. *Significant at the $p < .05$ level. ** Significant at the $p < .001$ level. DD: Dirty Dozen, SOI: Sociosexual Orientation Inventory, Context: Short and long-term, Trait: Dark Triad traits.

A significant interaction was found between target traits and context (Trait x Context). When participants rated the attractiveness of narcissism for both mating contexts, the trait was rated as the most attractive for short-term ($M = 3.76, SE = .063, p < .001$), and most attractive for long-term ($M = 3.75, SE = .065, p < .001$). Narcissism was reported to be just as attractive for either context, thus no effect

because the trait was found attractive for both long and short-term mating.

Machiavellianism was found to be more attractive for the short-term mating context ($M = 3.22$, $SE = .074$), $p < .001$, as compared to long-term ($M = 2.92$, $SE = .083$), $p < .001$. Psychopathy was rated as a more attractive partner trait for a short-term relationship ($M = 2.50$, $SE = .063$), $p < .001$, compared to a long-term mating context ($M = 2.22$, $SE = .069$), $p < .001$. An effect of context was found for Machiavellianism and psychopathy due to these traits being rated as more attractive for short-term mating.

There was an interaction between target traits, context, and sociosexuality (Trait x Context x SOI) (See Figure 2). An unrestricted sociosexuality was positively associated with preferences for each Dark Triad trait in a short-term mating context and to preferences for narcissism and psychopathy in a long-term context. No effect was found for Machiavellianism as it was rated equally attractive to restricted and unrestricted women for a long-term mating context.

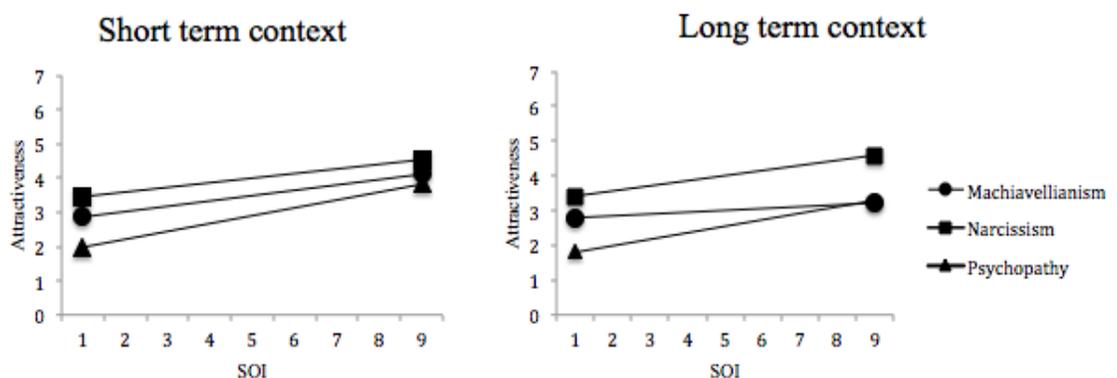


Figure 2. Regression lines showing the relationship between SOI scores and attractiveness ratings by mating context.

An additional interaction between target traits, context, and participant traits (Trait x Context x DD) resulted from this study (See Figure 3). Women higher in Dark Triad traits find all the personalities attractive for both mating contexts. Among the women higher in Dark Triad traits, there was a more of a difference in attractiveness between narcissism and psychopathy for a long-term context. Women high in Dark Triad traits found narcissism more attractive than psychopathy in the long-term; however Machiavellianism was rated as the most attractive overall. A significant interaction was found in the current study between target traits and participant traits (Trait x DD). Results indicate that Machiavellianism was the most attractive trait for women higher in Dark Triad traits themselves. Women that were low in Dark Triad traits rated narcissism as the most attractive trait for both contexts.

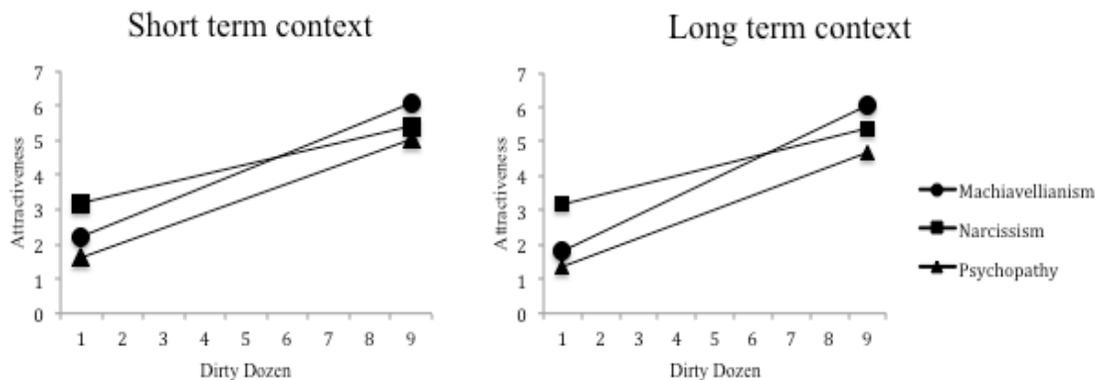


Figure 3. Regression lines showing the relationship between Dirty Dozen scores and attractiveness ratings by mating context.

Interactions between Dark triad traits and sociosexuality (Trait x SOI), context and participant traits (Context x DD), and context and sociosexuality (Context x SOI) were found to be non-significant.

DISCUSSION

All hypotheses in this study, except for a main effect of sociosexuality, were supported by results. The hypothesis of finding a main effect for context was supported. Data showed that the Dark Triad traits were found to be more attractive for short-term mating. An expected main effect for target traits was supported by results in which narcissism was the trait found to be more attractive than Machiavellianism and psychopathy. The main effect of sociosexuality was found to be non-significant; however, the data partially supports this hypothesis. A significant small, zero-order correlation showed that the more unrestricted a woman is, the more likely she is to find Dark Triad traits attractive. The hypothesis of finding a main effect of participant traits was supported by results. Data indicates that women higher in Dark Triad traits themselves find the Dark Triad traits more attractive than women who are low in these traits.

The current study examined whether women would find the Dark Triad traits more attractive for long-term or short-term relationships. Results showed a main effect of context such that women were more attracted to Dark Triad traits for short-term relationships rather than long-term. Short-term mating is a feature common among those high in Dark Triad traits. This characteristic allows for individuals high in Dark Triad traits to engage in self-serving relationships because it makes any unpleasant traits less apparent within a short time frame (Jonason et al., 2009). It appears that, when given the choice, women find these traits more attractive for brief

romantic or sexual encounters. This could possibly be due to the fact that the Dark Triad traits are associated with power, confidence, and dominance (Hall & Canterberry, 2011), which may be attractive to women, but could be eventually seen as unsatisfactory traits for longer term relationships. Past research has also found that individuals higher in Dark Triad traits are less satisfied and committed in their relationships and prefer short-term mating (Smith et al., 2014; Jonason et al., 2012). This lack of commitment might make someone a worse candidate for a long-term relationship.

Consistent with past research, narcissism was found to be the more attractive trait. There was a significant main effect of target traits, indicating that there was a difference in attractiveness between each trait. Narcissism was found to be more attractive than both psychopathy and Machiavellianism, and Machiavellianism was reported as more attractive than psychopathy. Although narcissism was found to be more attractive than the others, this trait overall was not found to be attractive in general. All Dark Triad traits were found unattractive to participants; however, narcissism was found to be the least unattractive. Research has shown that the perceived attractiveness of the Dark Triad traits differs among narcissism, psychopathy, and Machiavellianism. Narcissism has been rated as more attractive than psychopathy and Machiavellianism (Back et al., 2010; Rauthmann & Kolar, 2012). One unexpected finding in this study however was women high in Dark Triad traits themselves rated Machiavellianism as the most attractive trait for both contexts.

Few participants scored on the higher end for Dark Triad traits, thus this finding may be a result of outliers in the sample.

The present study found the main effect of sociosexuality to be not significant; however, there was a small significant relationship between attractiveness ratings and sociosexuality. Women with unrestricted sociosexuality are slightly more inclined to be attracted to Dark Triad traits. There was a positive association found in which those with unrestricted sociosexuality rated the Dark Triad traits as more attractive. Although individuals high in Dark Triad traits have been found to have a great deal of aversive personality characteristics, women with unrestricted sociosexuality find Dark Triad traits attractive (Jonason et al., 2009; Provost et al., 2006; Lyons et al., 2015). Furthermore, sociosexuality can be a predictor of a woman's choice in regards to a potential mate (Provost et al., 2006; Lyons et al., 2015). Sociosexuality, therefore, could potentially play a role in attraction to Dark Triad characteristics due to women with unrestricted sociosexualities showing attraction to characteristics associated with the Dark Triad traits.

A significant effect of participant traits was found, such that the Dark Triad traits were reported as more attractive by women who scored higher in Dark Triad traits. There was a strong correlation between participant traits and attractiveness ratings. These results support past research in which individuals high in the individual Dark Triad personalities rated the corresponding personalities as attractive, particularly for short-term relationships (Jonason et al., 2015). Research shows that individuals with similar personality traits are more likely to be attracted to one

another (Campbell, 2013; Jonason et al., 2015). Contrary to the popular saying “opposites attract” it appears that individuals who share similar characterological traits are more likely to be attracted to one another even when the traits are negative.

Limitations

There were a few limitations that may have affected data in this study. The use of self-report measurements has its limitations due to it being solely based upon individual responses. Participant variables, such as religious or cultural beliefs and family values, also could have an added effect on how the participants perceived their attraction to the Dark Triad traits. Another limitation is that this study had few participants who scored on the extreme end for Dark Triad traits and sociosexuality. Future research might focus on gathering a larger sample by targeting participants who score higher in Dark Triad traits and score on the unrestricted end for sociosexuality to make results more generalizable.

Future Research

Attraction is a complex phenomenon and supplementary research can perhaps lead to a better understanding. Future research can improve upon the gathering and measurement of data so that extraneous variables affecting attraction can be accounted for. The use of other instruments to measure attractiveness can be useful in assessing different aspects that are involved in attraction to potential partners. Future studies could examine variables such as physical attractiveness of those high in Dark Triad traits. Studying differing age groups could yield additional information on how the Dark Triad traits are perceived by varying generations. Big Five personality traits

and attachment styles, which play factors in relationships, could additionally be interesting variables to include in future research. Another important factor to examine is how men are attracted to the Dark Triad traits. The current study focused on women; however, it would be valuable to see how men who score high in Dark Triad traits, or with unrestricted sociosexuality, perceive the Dark Triad traits. The current study gives insight on what some individuals are attracted to. Gaining a better understanding of personality traits and what is attractive to certain individuals can help couples learn about their relationship. Further research could yield data that may be useful in a clinical setting for couples counseling. It can additionally shed light on the types of traits in a relationship that an individual may want to be aware of in order to avoid harm, abuse, or manipulation, which are common among the Dark Triad traits. Empirical research can be largely beneficial in furthering the study of attraction to Dark Triad traits so that the disconnection of findings in past research can be narrowed.

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APPENDICES

APPENDIX A

PARTICIPANT CONSENT FORM

1. **Summary:** This research study will examine factors that are associated with what personality traits people find attractive. If you agree to participate, you will be asked to answer survey questions that ask about your preference for long and short-term relationships with an individual with the identified traits, and personality questions about yourself.
2. **Your right to withdraw/discontinue:** You are free to discontinue your participation at any time without penalty. You may also skip any survey questions that make you feel uncomfortable. Even if you withdraw from the study, you will receive any entitlements that have been promised to you in exchange for your participation.
3. **Benefits:** Participation in this research study does not guarantee any benefits to you. However, possible benefits include the fact that you may learn something about how research studies are conducted and you may learn something about this area of research (i.e., factors that are related to attraction).
4. **Additional information:** You will be given additional information about the study after your participation is complete.
5. **Time commitment:** If you agree to participate in the study, it may take up to 30 minutes to complete the survey.
6. **Guarantee of Confidentiality:** All data from this study will be kept from inappropriate disclosure and will be accessible only to the researcher and her faculty advisor. Data collected online will be stored on a password-protected website and de-identified for analyses. The researchers are not interested in anyone's individual responses, only the average responses of everyone in the study.
7. **Risks:** The present research is designed to reduce the possibility of any negative experiences as a result of participation. Risks to participants are kept to a minimum. However, if your participation in this study causes you any concerns, anxiety, or distress, please use <https://therapists.psychologytoday.com> to find a counselor in your area to help you.
8. **Researcher Contact Information:** This research study is being conducted by Andromeda Boria. The faculty supervisor is Dr. Victor Luevano, Associate

Professor, Department of Psychology and Child Development, California State University, Stanislaus. If you have questions or concerns about your participation in this study, you may contact the researcher through email at aboria@csustan.edu, or the faculty advisor at vluviano@csustan.edu.

9. **Results of the Study:** You may obtain information about the outcome of the study at the end of the academic year by contacting Andromeda Boria.
10. **Psychology Institutional Review Board Contact Information:** If you have any questions about your rights as a research participant, you may contact the Chair of the Psychology Institutional Review Board of California State University Stanislaus, Dr. Kelly Cotter, at kcotter@csustan.edu or (209) 513-9432.
11. **Personal Copy of Consent Form:** You may print a blank, unsigned copy of this consent form at the beginning of the study.
12. **Verification of Adult Age:** By clicking “I Agree” below, you attest that you are 18 years old or older.
13. **Verification of Informed Consent:** By clicking “I Agree” below, you are indicating that you have freely consented to participate in this research study.

PARTICIPANT’S SIGNATURE: _____

DATE: _____

APPENDIX B

DEMOGRAPHICS QUESTIONNAIRE

Respond to these questions about yourself to the best of your knowledge.

1. Age (in years): _____

2. Sex:

___ Male

___ Female

___ Other, please specify: _____

3. Which of the following best describes your ethnicity?

___ Caucasian (White/Non-Hispanic)

___ Black/African American

___ Hispanic/Latino

___ Asian American

___ American Indian/Alaska Native

___ Native Hawaiian/Pacific Islander

___ Other, please specify: _____

4. What is your sexual orientation?

___ Heterosexual

___ Gay

___ Lesbian

___ Bisexual

___ Pansexual

___ Other, please specify: _____

5. What is the highest degree or level of schooling you have completed?

___ Elementary school to 8th grade

- Some high school, no diploma
- High school graduate, diploma, or GED
- Some college, no degree
- Trade/technical/vocational training
- Associate Degree
- Bachelor's Degree
- Master's Degree
- Professional Degree
- Doctorate Degree

6. What is your household income?

- Less than \$20,000
- \$20,000 - \$34,999
- \$35,000 - \$49,999
- \$50,000 - \$74,999
- \$75,000 - \$99,999
- \$100,000 - \$149,999
- \$150,000 or More

7. Have you ever been in a serious relationship (meaning, a relationship lasting more than three months)?

- Yes
- No

8. Are you currently in a relationship?

- Yes
- No

If you answered yes to question 8, please answer the following questions:

9. How long have you been with your current partner?

10. Which of the following best describes your current relationship?

Married

Engaged to be married

Dating exclusively

Dating casually

Other (Please describe): _____

11. Are you committed?

Yes

No

12. Are you monogamous?

Yes

No

13. Is it a casual relationship, such that it is noncommittal and nonexclusive?

Yes

No

5. I can imagine myself being comfortable and enjoying "casual" sex with different partners.

1 2 3 4 5 6 7 8 9

Strongly disagree

Strongly
agree

6. I do *not* want to have sex with a person until I am sure that we will have a long-term, serious relationship.

1 2 3 4 5 6 7 8 9

Strongly disagree

Strongly
agree

7. How often do you have fantasies about having sex with someone you are *not* in a committed romantic relationship with?

- 1 – never
- 2 – very seldom
- 3 – about once every two or three months
- 4 – about once a month
- 5 – about once every two weeks
- 6 – about once a week
- 7 – several times per week
- 8 – nearly every day
- 9 – at least once a day

8. How often do you experience sexual arousal when you are in contact with someone you are *not* in a committed romantic relationship with?

- 1 – never

- 2 – very seldom
- 3 – about once every two or three months
- 4 – about once a month
- 5 – about once every two weeks
- 6 – about once a week
- 7 – several times per week
- 8 – nearly every day
- 9 – at least once a day

9. In everyday life, how often do you have spontaneous fantasies about having sex with someone you have just met?

- 1 – never
- 2 – very seldom
- 3 – about once every two or three months
- 4 – about once a month
- 5 – about once every two weeks
- 6 – about once a week
- 7 – several times per week
- 8 – nearly every day
- 9 – at least once a day

APPENDIX D

THE DIRTY DOZEN

Please rate your agreement with the items below using the response anchors ranging from *strongly disagree* (1) to *strongly agree* (9).

1. I tend to manipulate others to get my way.
2. I have used deceit or lied to get my way.
3. I have used flattery to get my way.
4. I tend to exploit others towards my own end.
5. I tend to lack remorse.
6. I tend to be unconcerned with the morality of my actions.
7. I tend to be callous or insensitive.
8. I tend to be cynical.
9. I tend to want others to admire me.
10. I tend to want others to pay attention to me.
11. I tend to seek prestige or status.
12. I tend to expect special favors from others.

APPENDIX E

THE SHORT DARK TRIAD (SD3.1.1) – 27 Items

Please rate the attractiveness of each statement if it were to honestly and truthfully describe the way a potential partner thinks.

For each statement, you will rate the desirability for a potential partner in a long-term relationship and a short-term relationship. Thus, you will be providing two ratings for each statement.

A short-term relationship is defined as an open-ended dating relationship, such as, but not limited to one-night stands, booty-calls, or friends with benefits situations.

A long-term relationship is defined as a serious committed relationship that could potentially lead to marriage, or marriage-like relationship.

| | |
|----------|--|
| 1 | Very Unattractive |
| 2 | Unattractive |
| 3 | Somewhat Unattractive |
| 4 | Neither Attractive Nor Unattractive |
| 5 | Somewhat Attractive |
| 6 | Attractive |
| 7 | Very Attractive |

Machiavellianism subscale

1. It's not wise to tell your secrets.
2. I like to use clever manipulation to get my way.
3. Whatever it takes, you must get the important people on your side.
4. Avoid direct conflict with others because they may be useful in the future.
5. It's wise to keep track of information that you can use against people later.

6. You should wait for the right time to get back at people.
7. There are things you should hide from other people because they don't need to know.
8. Make sure your plans benefit you, not others.
9. Most people can be manipulated.

Narcissism subscale

1. People see me as a natural leader.
2. I hate being the center of attention. (R)
3. Many group activities tend to be dull without me.
4. I know that I am special because everyone keeps telling me so.
5. I like to get acquainted with important people.
6. I feel embarrassed if someone compliments me. (R)
7. I have been compared to famous people.
8. I am an average person. (R)
9. I insist on getting the respect I deserve.

Psychopathy

1. I like to get revenge on authorities.
2. I avoid dangerous situations. (R)
3. Payback needs to be quick and nasty.
4. People often say I'm out of control.
5. It's true that I can be mean to others.
6. People who mess with me always regret it.
7. I have never gotten into trouble with the law. (R)
8. I enjoy having sex with people I hardly know
9. I'll say anything to get what I want.

APPENDIX F

DEBRIEFING SHEET

Thank you for participating in this study! We are interested in understanding whether some people are attracted to what are often called the Dark Triad personality traits. These three traits (narcissism, psychopathy, and Machiavellianism) are generally viewed negatively. Even so, those high in these traits tend to report high levels of mating success. In this study, we are looking to see whether these traits are preferred more in the context of a short-term relationship than a long-term relationship. Additionally, we are looking at whether those who are more open to sex outside of an emotionally committed relationship, or those high in the Dark Triad traits themselves, are generally more attracted to the Dark Triad traits.

All the information collected in this study will be kept safe from inappropriate disclosure, and there will be no way of identifying your responses in the data archive. We are not interested in anyone's individual responses; rather, we want to look at the general patterns that emerge when all of the participants' responses are put together. We ask that you do not discuss the nature of the study with others who may later participate in it, as this could affect the validity of our research conclusions.

If you have any questions about the study or would like to learn about the results of the study, you may contact the researcher, Andromeda Boria, at aboria@csustan.edu, or the research advisor, Dr. Victor Luevano, at vluevano@csustan.edu. If you have questions about your rights as a research participant, you may contact the Chair of the Psychology Institutional Review Board of California State University Stanislaus, Dr. Kelly Cotter, at kcotter@csustan.edu or (209) 513-9432. If participation in the study caused you any concern, anxiety, or distress, please use <https://therapists.psychologytoday.com> to find a counselor in your area to help you.

If you would like to learn more about this research topic, we suggest the following references:

Carter, G. L., Campbell, A. C., & Muncer, S. (2013). The Dark Triad personality: Attractiveness to women. *Personality and Individual Differences*, 56, 57-61. doi:10.1016/j.paid.2013.08.021

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