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Bumbling in the Dark: The Effect of the Dark Triad, Online Dating, and Gender on Risky Sexual Behaviors

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Behaviors

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Abstract

The Dark Triad is used to describe three distinct yet related personality traits: psychopathy, narcissism, and Machiavellianism, which share several characteristics such as manipulation, exploitation, emotional coldness, and lack of empathy. The Dark Triad has been associated with several negative behaviors including infidelity and risky sexual behavior, however most of the current research focuses only on males high on the Dark Triad traits. The present study seeks to expand the literature by studying how the Dark Triad traits and online dating usage relate to the composite score of risky sexual behaviors. Further, we seek to examine if gender moderates this relationship. Participants consist of a community sample recruited from Amazon's Mechanical Turk. Participants were given an online survey that collected demographic information (age, gender, race, and sexual orientation), and measured the levels of the Dark Triad traits, online dating usage, and risky sexual behaviors. Results indicated that the Dark Triad traits and online dating were associated with more risky sexual behaviors. The implications will be discussed.

Keywords: personality, dark triad, psychopathy, narcissism, Machiavellianism, online dating, sex, sexual behavior, risky sexual behavior

Bumbling in the Dark: The Effect of the Dark Triad, Online Dating, and Gender on Risky Sexual

Behaviors

The Dark Triad is a term used to describe three socially undesirable personality traits: narcissism, psychopathy, and Machiavellianism (Fox & Rooney, 2015; Paulhus & Williams, 2002). Psychopathy is characterized by a pattern of callous manipulation, exploitation of others, superficial interpersonal relationships, and impulsive behavior (Hare, 1991; Hare, 2003); criteria largely based on Hervey Cleckley's influential monograph *The Mask of Sanity* (Cleckley, 1976; Pulhus & Williams, 2002). Narcissism, which has been widely studied as a personality disorder (American Psychiatric Association, 2013; Paulhus & Williams, 2002), has been characterized by dominance, exhibitionism, and exploitation as well as feelings of superiority and entitlement (Pulhus & Williams, 2002; Raskin & Terry, 1988). Machiavellianism refers to individual differences in manipulation, insincerity, and callousness (Christie & Geis, 1970; Pulhus & Williams, 2002). These three distinct personality traits have been shown to share several characteristics such as manipulation, exploitation, and lack of empathy (Brewer, Hunt, James, & Abell, 2015; Paulhus & Williams, 2002). Since the emergence of the Dark Triad concept, numerous studies have detailed more negative behavior associated with those who score high in Dark Triad traits than those who do not, including differences in infidelity (Jones & Weiser, 2013), friendship selection (Jonason and Schmitt, 2012), mating behavior (Jonason, Lyons, & Blanchard, 2014; Jonason, Valentine, Li, & Harbeson, 2011), casual sexual behavior (Jonason, Luevano, & Adams, 2012), and risky sexual behaviors (Atari & Chegeni, 2016; Jonason & Kavanagh, 2010), however gender differences have not been given this same focus. This current study will help strengthen this literature with a key extension: drawing the link between personality traits, Dark Triads traits, and risky sexual behaviors across gender. Research studying risky sexual behaviors has not converged on a concrete definition about what

constitutes risky sexual behavior. For consistency, the current study will employ an inclusive

definition defining risky sexual behavior as any sexual behaviors that increase the risk of

problematic outcomes, including promiscuity and limited use of birth control (see Miller,

Lynam, Zimmerman, Logan, Leukefeld, & Clayton, 2004).

Risky Sexual Behavior and Personality

The Dark Triad has been associated with a preference for casual, short-term sexual

behavior (Jonason et al., 2012), a behavior that was found to increase risky sexual behaviors

(Metzler, Noell, & Biglan, 1992; Scandell, Klinkenberg, Hawkes, & Spriggs, 2003).

Early research on risky sexual behaviors focused on the connections between personality traits

that can be associated with the Dark Triad, without focusing specifically on the Dark Triad traits.

For example, work by Paulhus & Williams (2002) found meaningful connections between Dark

Triad traits and low agreeableness and high impulsivity. Follow up research by Miller and

colleagues (2004) demonstrated that individuals possessing low agreeableness but high

extraversion, were more likely to engage in risky sexual behavior, particularly when combined

with impulsivity.

Impulsivity has been linked to the Dark Triad traits (Malesza & Ostaszewski, 2016),

primarily psychopathy and narcissism. Research has also demonstrated that impulsivity is a

contributing factor to risky sexual behavior; Deckman and DeWall (2011) studied various facets

of impulsivity and how they relate to risky sexual behavior. The authors argued that when

exploring a link between impulsivity and risky sexual behavior, impulsivity needs to be broken

down into five facets: sensation seeking (a tendency to engage in exciting and arousing

activities), negative urgency (engaging in impulsive behaviors on the basis of experiencing

strong negative emotions), positive urgency (engaging in impulsive behaviors on the basis of

experiencing strong positive emotions), lack of premeditation (a lack of forethought and

planning skills), and lack of perseverance (represents a person who has difficulty following a task through from beginning to end). They found that negative urgency and sensation seeking are the facets that predicted whether an individual engaged in risky sexual behavior. In other words, individuals who were quick to react to negative emotions or participated in high sensation activities were more likely to engage in higher levels of risky sexual behavior.

When considering the sensation seeking aspect of impulsivity, Fulton, Marcus, and Payne (2010) found that psychopathic personality traits influence how an individual reflects on participation in risky sexual behavior. The authors found that students who scored high on the levels of self-centered impulsivity (a factor of a predominant psychopathy measure – the Psychopathic Personality Inventory-Revised) were more likely to engage in risky sexual behavior. Interestingly, the students in this study reported higher levels of self-esteem and less guilt after an encounter of risky sexual behavior. Those with low levels of empathy and high levels of narcissism were found to be less likely to experience guilt and more likely to have an increase in positive self-esteem after a situation involving risky sexual behaviors occurs. The study by Fulton and colleagues suggests that individuals who were more impulsive were more likely to engage in risky sexual behaviors; however, those individuals who were more confident, as evidenced by high self-esteem and narcissism, were less likely to experience guilt.

Several impulsive behavior styles and personality traits have also been associated with risky sexual behavior, including reactivity, self-centered impulsivity, and sensation seeking. One Dark Triad personality type that is often associated with these types of impulsivity is psychopathy. The factors of psychopathy are groups of psychopathic traits that hold together across most psychopathy assessment instruments. One popular instrument, the Psychopathic Personality Inventory-Revised (PPI-R), computes a total score in addition to two factor scores: Fearless Dominance (FD) and Self-Centered Impulsivity (SCI, Benning, Patrick, Blonigen,

Hicks, & Iacono, 2005; Benning, Patrick, Hicks, Blonigen, & Krueger, 2003; Falkenbach, Poythress, & Creevy, 2008). The FD facet describes a person who appears charming, grandiose, and eager to take risks with little regard for consequences and absence of anxiety. Those high on SCI typically have a reckless disregard for safety for self or others, exhibit reactive aggression and impulsive behaviors, blame others for their misfortunes, and use others ruthlessly for their own gain. Although the impulsivity of SCI is often associated with reactive aggression (Falkenbach, 2004), it may also be applied to risky sexual behavior. Kastner and Sellbom (2012) used an undergraduate population to see what facets of psychopathy map onto risky sexual behavior and found that both facets offer a unique prediction of hypersexuality; SCI was generally a stronger predictor than FD. However, for risky sexual behavior in particular, an interaction effect for the factors was significant; suggesting that scoring high on both facets was a stronger predictor of hypersexuality than either factor individually. The authors go on to explain that individuals who are fearless, interpersonally assertive, egocentric, exploitative, and impulsive are especially prone to engaging in sexual behavior with potentially harmful consequences.

Online Dating, Risky Sexual Behavior, and Personality

With the normalization of online dating websites (e.g. eHarmony, Match.com, etc.) and mobile applications (e.g. Tinder, Grindr, etc.), the attitudes toward short-term sexual behavior have shifted resulting in more individuals finding both serious and casual sexual partners online (Bhattacharya, 2015; Jankowiak & Escasa-Dorne, 2016; O'Sullivan, 2014; Rosenbaum, Daunt, & Jiang, 2013). Engaging in sexual relationships from online dating platforms has resulted in people engaging in more risky sexual behaviors (Couch & Liamputtong, 2008). Bhattacharya (2015) mentioned that public health officials are blaming the use of online dating apps for the increase in Sexually Transmitted Infections. They go on to say that research is starting to explore

the idea that this technology makes individuals more likely change their behavior. O'Sullivan (2014) reported that interactions in cyberspace lower our inhibitions, accelerate intimacy, and produce an identity that may not correspond with the self we present in person. These studies demonstrate the public health concerns with online dating usage and possible increased promiscuity.

The advent of online dating and the increased availability of risky sexual encounters are particularly important for populations high in Dark Triad traits. Previous research has identified clear links between Dark Triad traits and relationship behaviors. Those high in Dark Triad traits reflect an orientation to the world that favors short-term, immediate gain over long-term gain (Jonason & Kavanagh, 2010); this behavior is most evident in long-term relationships. Tactics, such as deception (Carter, Montanaro, Linney, & Campbell, 2014; Carter, Campbell, & Muncer, 2013) and infidelity (Jones & Weiser, 2013), associated with Dark Triad traits are likely to lead to the breakdown of long-term relationships. Those higher in Dark Triad traits have also been shown to favor short-term sexual relationships. Indeed, Jonason, Luevano, and Adams (2012) looked at the subtypes of casual, short-term, sexual behavior compared with serious long-term romantic relationships. The authors expanded short-term sexual behavior into three subtypes: one-night stands or "hook-ups", "booty-calls" (i.e.,, relationships where there is solicitation from a non-long-term partner for the explicit or implicit intent of engaging in sexual activity; Jonason, Li, & Cason, 2009; Jonason, Li, & Richardson, 2010; Wentland & Reissing, 2011), and "friends with benefits" (i.e.,, relationships between friends in which the friends engage in sexual activity, but do not define their relationship as romantic; Epstein, Calzo, Smiler, & Ward, 2009; Wentland & Reissing, 2011). They found that psychopathy was significantly correlated with a preference for booty-calls, potentially due to the exploitive nature of this type of relationship. Narcissism and psychopathy were negatively correlated with preference for serious relationships (Jonason,

Luevano, & Adams, 2012). Conversely, Machiavellianism was positively correlated with a preference for serious romantic relationships, in addition to one-night stands and friends with benefits. The concerns that are being addressed with accelerated intimacy and online dating are amplified in populations high in the Dark Triad traits. While there are several public health concerns revolving around online dating and risky sexual behavior, there is no research to date relating this behavior to the Dark Triad.

 Gender Differences Among Dark Triad Traits and Relationship Behaviors

Interestingly, one study found that risky sexual online behavior tends to be higher among males, though in this sample, this finding was only significant for the middle adult age group (30-50). This study also found that across the lifespan, women had constant engagement in risky sexual behaviors, however, for males, engagement in risky sexual behavior increased between early and late adolescence before stabilizing (Baumgartner, Valkenburg, & Peter 2010). The authors go on to say that one reason for the relative stability of engagement in risky sexual online behavior may be that engagement in risky sexual online behavior reflects stable personality characteristics that are only slightly age-dependent (Baumgartner, Valkenburg, & Peter 2010; Giambra, Camp & Grodsky, 1992).

Similarly to risky sexual behaviors, research has demonstrated that several personality traits (e.g., borderline, antisocial personality disorder, etc.) have gendered presentations (Forouzan & Cooke, 2005). While the cause for the difference in gendered presentation is unknown, research has suggested it may be related to differences in effect and symptom expression (Falkenbach, 2008; Falkenbach, Reinhard, Larson, 2017; Verona & Vitale, 2006). These differences are important for understanding differences in risky sexual behavior. Much of the current research is specific to the presentation of impulsivity and psychopathy, demonstrating a need for analysis of the other traits.

Psychopathy. The research regarding gender differences in psychopathy is mixed. Typically, research suggests that men report higher PPI-Total (Falkenbach, Barese, Balash, Reinhard, & Hughs, 2015; Wall, Sellbom, & Goodwin, 2013), PPI-I (Falkenbach, Reinhard, & Larson, 2017), and PPI-II scores (Lilienfeld & Hess, 2001). However, Hecht, Berg, Lilienfeld, and Latzman (2016) found that the behavioral manifestation of psychopathy may vary between men and women, specifically that women exhibit higher levels of the impulsive and behavioral dimension of psychopathy. However, Falkenbach and colleagues (2015) found women demonstrated more Fearless Dominance traits and Issa, Falkenbach, Trupp, Campregher, and Lap (2017) found women scored higher than men on Stress Immunity and. Researchers have even directly criticized the measurements of psychopathy as an explanation for the gender differences (Cale & Lilienfeld, 2002; Falkenbach, 2008, Vitale & Newman, 2001). Women high in psychopathy are likely to present as less superior and less arrogant than their male counterparts, who are reported to show more anger and intensity of pride (Brebner, 2003; Forouzan & Cooke, 2005). Women were also found to demonstrate fewer antisocial behaviors, like juvenile delinquency or childhood behavioral problems (Silverthorn, Frick, & Reynolds, 2001). Additionally, women high in psychopathy reported negative effects (anger, fear, guilt) more frequently and intensely than men high in psychopathy.

A large body of research concludes that women high in psychopathy tend to be more involved in risky sexual behavior (Cale & Lilienfeld, 2002; Falkenbach, 2008; Silverthorn et al., 2001; Vitale & Newman, 2001), specifically promiscuity (O'Connor, 2003) and infidelity (Jones & Weiser, 2013). Fulton, Marcus, and Payne (2010) found that both psychopathy factor scales were better predictors of risky sexual behaviors for men than for women. Impulsive Antisociality was associated with risky sexual behaviors in both men and women, whereas Fearless Dominance was only associated with risky sexual behaviors in men. It is not surprising that a

personality factor that includes impulsivity, thrill-seeking, and a tendency to engage in antisocial behaviors would be associated with risky sexual behaviors. Individuals with lower trait self-control or whose self-control strength has been depleted have greater difficulty restraining their sexual behavior (Gailliot & Baumeister, 2007). Interestingly, socially dominant men who are capable of manipulating others and who experience low levels of fear and anxiety also reported higher composite score of risky sexual behaviors, whereas women with similar personality traits did not. This may be due to the fact that women higher in the Fearless Dominance traits may be more capable of refusing offers to engage in risky sexual behaviors.

Narcissism. Similar to psychopathy, gender differences in narcissism have been the focus of recent research. A meta-analysis by Grijalva and colleagues (2015) identified key differences between men and women. Men are characterized as being more assertive, having a motivation to lead and desire for power or authority over others. However, men and women were equally likely to endorse characteristics consistent with vanity, exhibitionism, and self-absorption. This analysis also demonstrated that the gender gap between men and women has remained constant between 1990 and 2013, suggesting that even with the evolving behaviors of society, there has not been an impact in the expression of narcissism.

Blinkhorn, Lyons, and Almond (2015) focused on narcissism and sexual coercion in men and women. They found that when narcissism was investigated in relation to sexually coercive tactics, it was found that narcissistic females were just as likely to engage in serious and aggressive sexually coercive behavior. In addition, sexual coercion in males related to more socially desirable aspects of narcissism (leadership, authority), whereas in females, sexual coercion was associated with socially toxic components of the construct (entitlement and exploitation). Aspects of narcissism, such as entitlement and exploitation, in women have been linked to sexual coercion and aggression (Lamkin, Lavner, & Shaffer, 2016; Ryan, Weikel, &

Sprechini, 2008) and women being sexually coercive also endorsed greater relationship problems. Lamkin, Lavner, and Shaffer (2016) found that women during newlywed years were found to exhibit greater disagreeableness in interactions with romantic partners and more quarrelsome behaviors in conflict tasks.

Machiavellianism. Of the three constructs of the Dark Triad, Machiavellianism has seen the least focused research. Interestingly, Czibor and colleagues (2017) found that women higher in Machiavellianism tended to be more harm avoidant, anxious, vulnerable, and hypersensitive. Men, however, were found to be more risk-taking, confident, non-sentimental, impatient, and have an opportunistic worldview. The study found that the Machiavellian attitude was similar between men and women; however, the development of the attitudes resulted from different psychological processes. Due to this, those high in Machiavellianism tend to exhibit gendered strategies, resulting in the differences previously described. The presence of the other Dark Triad traits, such as psychopathy, has been found to increase these behaviors. For example, men high in Machiavellianism and psychopathy were found to enact a more risky lifestyle. Women with more anxious, harm avoidant, or socially sensitive characteristics used Machiavellian strategies as a tool to decrease their vulnerability to avoid potential exploitation. Consistently, various devices of manipulation were used by men and women.

Brewer and Abell (2014) looked exclusively at sexual behavior and Machiavellianism. They found that those with high levels of Machiavellianism appeared willing to deceive romantic, sexual partners. Men and women with high levels of Machiavellianism are more likely to employ deceptive mating strategies, though for women this relationship is moderated by previous sexual history (Dussault, Hojjat, & Boone, 2013). Women tended to retain romantic partners to increase access to valuable resources (Brewer & Abell, 2014). Men were more likely to engage in mate copying to increase their sexual opportunities by appearing more attractive to

targeted individuals by deceiving them into thinking they were engaged in another sexual

relationship (Brewer & Abell, 2014). Machiavellianism predicted the use of each form of sexual

deception investigated: blatant lying (in order to engage in sexual activity with a current or

prospective partner), self-serving (i.e.,, engaging in sexual behavior to obtain specific resources)

and avoiding confrontation (with a partner). This is consistent with the greater use of deceptive

mating strategies reported by Machiavellian men and women (Brewer & Abell, 2014; Dussault et

al., 2013).

Looking at Dark Triad traits as a whole, men high in Dark Triad traits have been found to

have lower standards for sexual partners compared to men low in Dark Triad traits (Jonason et

al., 2014). The same was found for women; however, women as a whole had higher standards

than men. Women high in psychopathy considered men high in Dark Triad traits more physically

attractive, and more desirable for both one-night stands and as a potential future husband

(Jonason et al., 2014). Similarly, men high in psychopathy reported they were attracted to

psychopathy in women that could potentially mother their children, suggesting that high Dark

Triad individuals are more likely to be attracted to each other. This may also explain why women

low in Dark Triad traits were not attracted to the men said to be high in these traits (Lyon et al.,

2014). However, Jonason, Lyons, and Blanchard (2014) found that when manipulating the levels

of a dating advertisement, people felt those high in psychopathy and Machiavellianism were less

attractive than those low in the traits. That being said, individuals high in psychopathy and

Machiavellianism are high on superficial charm; therefore a dating profile may not have been the

best way to evaluate the attractiveness of those high in these traits. Evolutionary theory supports

the adaptive need for numerous short-term relationships for men, but not for women, suggesting

that women are less likely to engage in this behavior (Carter et al., 2013). Women engaging in

short-term sexual behavior were found to be highly competitive, both generally and sexually

(Carter et al., 2014). When looking at mating styles of individuals high in Dark Triad traits, Jonason and colleagues (2014) found that while individuals low in Dark Triad traits were preferred for long-term partners, individuals high in Dark Triad traits were preferred for one-night stands, which was consistent with the previous research done by Jonason, Luevano, and Adams (2012).

Present Study

Research indicates that women high on the personality traits associated with the Dark Triad, primarily psychopathy and narcissism, are more promiscuous and impulsive than women low on these traits (Hecht et al., 2016; Jonason and Schmitt, 2012). Previous literature on the Dark Triad and sexual behaviors have focused primarily on short-term sexual behavior in men (Carter et al., 2014; Jonason, Li, Webster, & Schmitt, 2009; Jonason, Li, & Teicher, 2010). The attitudes of women have shifted, resulting in more women choosing to engage in short-term sexual behaviors than in previous years (Petersen & Hyde, 2011). By engaging in short-term sexual behaviors more frequently, individuals are exposing themselves to riskier sexual behaviors. The use of online dating platforms has assisted in this upward shift towards short-term sexual behaviors (Bhattacharya, 2015; Jankowiak & Escasa-Dorne, 2016; O'Sullivan, 2014; Rosenbaum, Daunt, & Jiang, 2013) and the accessibility of these platforms provide a unique opportunity to study short-term sexual behaviors. Forty million Americans reported using an online dating website, 48% of whom were female, and the use of online dating amongst young adults has nearly tripled since 2013 (Statistics Brain Research Institute, 2016; Smith & Anderson, 2016). Engaging in sexual relationships from online dating platforms has resulted in more risky sexual behaviors (Couch & Liamputtong, 2008), although there is no research to date relating this behavior to the Dark Triad.

This study will expand on the previous literature by focusing on risky sexual behaviors in

individuals with high levels of the Dark Triad traits, paying particular attention to differences by gender. Specifically, this study will identify the relationships between risky sexual behaviors, Dark Triad personality traits (narcissism, psychopathy, Machiavellianism), and online dating. The moderating effects of gender will also be assessed.

For this study, online dating is defined as any website or mobile application that can be used to acquire a romantic or sexual partner. Risky sexual behavior is defined as any sexual behavior that results in unwanted outcomes, such as pregnancy or contracting an STI. Risky sexual behavior is being measured by a composite score comprised of measures of laddish behavior, sexual deception, attitudes towards promiscuity, contraception use, communication, and instrumentality, and whether the participant has contracted an STI within the last year.

Hypotheses

H1a. Men will use online dating platforms, engage in risky sexual behaviors, and display more Dark triad traits, including psychopathy, narcissism, and Machiavellianism than women.

H2a. Those participants who use online dating will be more likely to engage in risky sexual behaviors than those who do not.

H2b. Gender will moderate the relationship between risky sexual behavior and using online dating platforms. In other words, women who use online dating platforms will display more risky sexual behaviors than those who do not use online dating platforms; however, men who use online dating platforms will display more risky sexual behaviors than women who use online dating platforms.

H3a. Participants with high scores on the Dark Triad personality traits (i.e.,, psychopathy, narcissism, and Machiavellianism) will be more likely to use online dating platforms than those with low scores

H3b. Gender will moderate the relationship between online dating use and Dark Triad scores.

Women with higher Dark Triad scores will use online dating platforms more than both women and men with low Dark Triad scores, and about the same amount as men with high Dark Triad scores.

H4a. High scores on the Dark Triad personality traits will predict a higher composite score of risky sexual behaviors.

H4b. Gender will moderate the relationship between risky sexual behavior and the Dark Triad traits. Women with higher Dark Triad scores will display more risky sexual behaviors than both women and men with low Dark Triad scores, and about the same amount as men with high Dark Triad scores.

Methods

Participants

Three hundred and eighty participants were recruited through Amazon's Mechanical Turk, where participants are able to choose which surveys they want to complete, and researchers are able to control the screening for the sample as needed. The title "Personality, Online Dating, and Sexual Behavior" was displayed and each participant was compensated $1 for their participation. Participants were excluded if they were under 18 or if they could not speak English fluently.

After cleaning out incomplete (missing one or more measure) and invalid (not correctly answering any of the attention checks) responses, 241 participants remained (41.1% female [n = 99], 58.1% male [n = 140], .16% identifying with another gender identity [trans man, n=1; nonbinary/gender fluid, n=1]) ranging from 18 to over 60 in age, with a majority of participants between 24 and 35 years old (67.6%, n=163). Participants were majority Caucasian (58.9%, n=142) and Asian (34.0%, n=82). Other racial groups included African American (4.1%, n=10), American Indian or Alaska Native (2.1%, n=5), and .8% of participants (n=2) identified as

another racial group. Twenty-five participants (10.4%) also identified as Hispanic, Latinx, or of Spanish origin. Most of the participants were married (53.9%) or single (40.7%) and an overwhelming majority of the participants identified as heterosexual or straight (79.7%). Ninety-four (39%) participants reported using an online dating website or mobile application in the last 12 months. Of those participants 23.4% reported using a website, 48.9% reported using a mobile application, and 27.7% reported using both. A majority of participants (37.2%, n=35) who used an online dating platform report using it several times a week. For those who use online dating platforms, 67.0% used this platform to find romantic partners and 63.8% used this platform to find sexual partners. Furthermore, 6.7% of participants say they always use this platform to find their sexual partners, 23.3% say they use this platform most of the time, 38.3% say they use this platform about half of the time, and 31.7% say they use this platform sometimes to find sexual partners.

Materials

      Dark Triad.

      Psychopathic Personality Inventory-Revised (PPI-R; Lilienfeld & Andrews, 1996). The PPI-R is a 154-item self-report measure of psychopathy using a four-point Likert scale (mostly false to mostly true). Items are rated on a 4-point scale (mostly false, false, true, mostly true). The PPI-R contains eight subscales: Machiavellian egocentricity (e.g. "I always look out for my own interest before worrying about those of the other guy."), social influence (e.g. "Even when others are upset with me, I can usually win them over with my charm."), coldheartedness (e.g. "I have had "crushes" on people that were so intense that they were painful."), carefree nonplanfulness (e.g. "I often make the same errors in judgment over and over again."), fearlessness (e.g. "Making a parachute jump would really frighten me."), blame externalization (e.g. "I usually feel that people give me the credit I deserve."), rebellious nonconformity (e.g. "I

sometimes question authority figures "just for the hell of it."""), and stress immunity (I can remain calm in situations that would make many other people panic.") that can be grouped into two factors: Fearless Dominance (FD) and Self-Centered Impulsivity (SCI). A manual is provided to inform the researcher which items are reversed coded and which ones are not. Internal consistency for this study was high (α = .91).

Mach-IV (Christie & Geis, 1970). The Mach-IV is a 20-item measure of Machiavellianism. Items are rated on a 5-point Likert scale (1 = strongly disagree to 5 = strongly agree). Questions assess interactions with others, morality, and cynicism; examples include "Anyone who completely trusts anyone else is asking for trouble." Ten of the items are reversed coded. Internal consistency for this study was high (α = .79)

Narcissistic Personality Inventory - 40 (NPI-40; Raskin & Terry, 1988). Developed using the DSM-III criteria for narcissistic personality disorder, the NPI-40 is a 40-item questionnaire that uses a dichotomous format. Questions are asked as follows, "A. I have a natural talent for influencing people. B. I am not good at influencing people." The participant would select the letter (A or B) that is most true for them. Narcissistic responses are coded as 1 and non-narcissistic responses are coded as 0. A score above 30 is considered to be indicative of a narcissistic individual. Internal consistency for this study was high (α = .90)

Risky Sexual Behavior.

Laddish Behavior Inventory (LBI; Muncer & Campbell, Jervis, & Lewis, 2012). The LBI was designed to assess boisterous behavior associated with laddish culture. The 19-itemed measure is rated on a 5-point scale (never to very often) and includes questions such as "I prefer sex to romance" and "I have cheated on a boyfriend/girlfriend." Internal consistency for this study was high (α = .93)

Sexual Deception Scale (SDS; Marelich, Lundquist, Painter, & Mechanic, 2008). The

SDS is a 19-item scale that uses a dichotomous "yes/no" scale. Questions can be grouped into

three distinct subscales: blatant lying (i.e., "Have you ever told someone "I love you" but really

didn't just to have sex with them?"), self-serving (i.e., "Have you ever had sex with someone in

order to get resources from them [e.g. money, clothes, companionship]), and avoiding

confrontation (i.e., "Have you ever had sex with someone even though you didn't want to?).

Internal consistency for this study was high (α = .86)

       The Brief Sexual Attitude Scale (BSAS; Hendrick, Hendrick, & Reich, 2006). The

BSAS is a 23-item scale that is a shortened version of the 43-item Sexual Attitudes Scale

developed by Hedrick and Hedrick (1987). When developing the shortened scale, the authors

found that the subscale intercorrelations and correlations were consistent for both versions of the

scale. Questions on the BSAS are measured on a Likert scale (A-E or Strongly Disagree to

Strongly Agree, determined by the researcher's preference) and contain questions in four distinct

areas: permissiveness (i.e., I do not need to be committed to a person to have sex with him/her; α

= .91), birth control (i.e., Birth control is part of responsible sexuality; α = .74), communion (i.e.,

Sex is the closest form of communication between two people; α = .84) and instrumentality (i.e.,

Sex is best when you let yourself go and focus on your own pleasure; α = .80).

       Participants were also given a survey questionnaire (see Appendix A) to collect

demographic information (age, gender, race, and sexual orientation) and information about

sexual behavior not previously addressed on the other questionnaires (number of sexual partners

in the past year, frequency and types of online dating platforms used, contraception usage, etc.).

Procedure

       Participants were recruited through Amazon's Mechanical Turk (MTurk). Individuals

who were interested in the study were given a recruitment survey which contained the consent

form, screening questions, and requested an email address to send the survey too. Those who

consented to the study and provided an email address were sent an email with the password

protected survey link that contained a second copy of the consent form, study materials, and the

debriefing form and the password needed to access the link. Participants that passed the

screening and agreed to the consent form were directed to the survey that contained the measures

to assess the Dark Triad (PPI-R, Mach-IV, NPI-40), preference and prevalence of risky sexual

behavior (LBI, SDS), and attitudes towards sexual behaviors (BSAS). Participants were then

given the demographic survey, followed by the debriefing form.

To quantify risky sexual behavior in this study, total scores from the LBI, SDS, and

BSAS subscales, along with three questions from the demographic survey 1) have you ever lied

about your sexual history, 2) have you been diagnosed with an STI in the last 12 months, 3) do

you use contraceptives? were converted to z-scores and totaled. Higher scores on this composite

risky sexual behavior variable indicated a participant was engaging in more risky sexual

behaviors. A correlation matrix (See Table 1) was computed to provide justification for

combining these measures. The matrix demonstrated that the aforementioned measures correlate

with each other and are measuring the facets of risky sexual behavior as defined above.

To quantify the Dark Triad in this study, total scores from the PPI-R, NPI-40, and Mach

IV were converted to z-scores and totaled. This composite represents a participant's Dark Triad

score; higher scores on this variable indicate that the participant displayed more of the Dark

Triad characteristics. A correlation matrix was computed to assess the multicollinearity of the

Dark Triad traits (see Table 2). As expected, the three variables were highly correlated.

Results

Dark Triad Traits, Risky Sexual Behavior, Online Dating, and Gender

As a lead up to doing moderation analyses, mean differences between the variables were

computed (see Table 3). Independent sample t-tests were run to determine if there were

differences in a composite Dark Triad score and the individual Dark Triad traits (i.e.,

psychopathy, narcissism, and Machiavellianism) between men and women. Results indicated

that men had statistically significantly higher Dark Triad composite, PPI-R, NPI-40, and Mach-

IV scores than women. Independent sample t-tests were also run to determine if there were

differences in composite score of risky sexual behavior between men and women. Results

indicated that men had statistically significantly higher composite score of risky sexual behavior

than women. Lastly, a Chi-Square test was run to determine if there were differences in rates of

online dating usage between men and women. Results indicated that men had statistically

significant rates of online dating usage than women, χ^2 (1) = 8.033, p =.005.

Online Dating and Risky Sexual Behavior

An independent sample t-test was run to determine if there were differences in composite

score of risky sexual behavior between those who use online dating and those who do not.

Results indicated that those who used online dating platforms had a statistically significant

higher composite score of risky sexual those who did not use online dating platforms (see Table

3). This finding supports the hypothesis that those who use online dating platforms are more

likely to have increased composite score of risky sexual behaviors.

An ANOVA was run to assess the moderating effect of gender on the relationship

between online dating and the composite score of risky sexual behaviors. The interaction effect

between gender and online dating on the composite score of risky sexual behavior was not

statistically significant $F(1, 235) = .879$, $p = .349$, partial $\eta^2 = .004$. There was a statistically

significant main effect of online dating use on composite score of risky sexual behaviors, $F(1,

235) = 15.469$, $p < .000$, partial $\eta^2 = .062$ and statistically significant main effect of gender on the

composite score of risky sexual behaviors, $F(3, 235) = 4.391$, $p = .005$, partial $\eta^2 = .053$. Results

indicated that gender does not moderate the relationship between online dating and the

composite score of risky sexual behavior.

Dark Triad Traits and Online Dating

Independent sample t-tests were run to determine if there were differences in Dark Triad traits between those who use online dating platforms and those who do not. Results indicated that those who used online dating platforms had statistically significantly higher Dark Triad composite, PPI-R and NPI-40 than those who did not use online dating platforms; however, Mach-IV scores were not statically different (see Table 3).

A two-way MANOVA was run with two independent variables – gender and online dating use– and three dependent variables – PPI-R scores, NPI-40 scores, and Mach-IV scores. The combined PPI-R, NPI-40, and Mach-IV scores were used to measure the Dark Triad. The interaction effect between gender and online dating on the Dark Triad traits was not statistically significant $F(3, 233) = .772$, $p = .511$, Wilks' $\Lambda = .990$, partial $\eta^2 = .010$. There was a statistically significant main effect of online dating use on the Dark Triad traits, $F(3, 233) = 3.571$, $p = .015$, Wilks' $\Lambda = .956$, partial $\eta^2 = .044$ and statistically significant main effect of gender on the Dark Triad traits, $F(9, 567.211) = 4.652$, $p < .000$, Wilks' $\Lambda = .841$, partial $\eta^2 = .056$. This finding suggests gender does not moderate the relationship between the individual Dark Triad traits and online dating.

Dark Triad Traits and Risky Sexual Behaviors

Multiple linear regression was run to assess the effect of the Dark Triad on the composite score of risky sexual behaviors. Results of the multiple linear regression indicated that there was a collective significant positive effect between Dark Triad traits and risky sexual behavior, ($F(3, 237) = 85.559$, $p < .000$), explaining 52% of the variance. The individual predictors were examined further and indicated that PPI-R ($t = 7.250$, $p < .000$, $\beta = .477$), NPI-40 ($t = 2.718$, $p = .007$, $\beta = .172$), and Mach-IV ($t = 4.321$, $p < .000$, $\beta = .212$) were significant predictors of risky

sexual behavior composite scores in the model.

Hierarchical multiple regression was run to assess the moderating effect of gender and the relationship between the Dark Triad traits and the composite score of risky sexual behaviors. Gender was introduced to the regression model, $\Delta R^2 < .000$, $\Delta F(1, 236) = .014$, $p = .907$. Results indicated that gender did not explain a statistically significant portion of the variance between Dark Triad traits and the composite score of risky sexual behavior, suggestion that gender does not moderate this relationship.

Dark Triad Composite Score, Online Dating, Gender, and Risky Sexual Behavior

Exploratory analyses were conducted to further examine the relationships between the Dark Triad, online dating, and risky sexual behavior and to see if there were any gender moderation effects on these combined variables. A regression model was run to look at how well the composite Dark Triad score and online dating predict the composite score of risky sexual behavior. The results indicated that there was a collective significant positive effect between the variables, $F(2, 238) = 131.928$, $p < .000$), explaining 52.6% of the variance. The individual predictors were examined further and indicated that the composite Dark Triad score ($t=14.753$, $p < .000$, $\beta = 1.060$) and online dating ($t = 3.435$, $p = .001$, $\beta = 1.215$) were significant predictors in the model.

Hierarchical multiple regression was then run to assess the moderating effect of gender on the relationship between the composite Dark Triad score, online dating, and the composite score of risky sexual behavior, $\Delta R^2 < .000$, $\Delta F(1, 237) =.000$, $p = .995$. Results indicated that gender did not explain a statistically significant portion of the variance between the composite Dark Triad score, online dating, and the composite score of risky sexual behavior, suggesting that gender does not moderate this relationship.

Discussion

This study addressed a significant gap in the Dark Triad literature by assessing the relationship between the Dark Triad traits and online dating on composite scores of risky sexual behaviors, along with analyzing the potential moderating effect of gender on these relationships. For this study, risky sexual behavior was defined as sexual behaviors that increase the risk of problematic outcomes, including promiscuity and limited use of birth controls (Miller et al., 2004). This is the first study that examined the relationship between the Dark Triad and online dating. Most of the general hypotheses were supported; however, contrary to expectations, gender did not moderate any of the expected relationships.

The fact that gender did not moderate any of the relationships was one of the more interesting findings to come from this study. Previous literature has demonstrated gender differences in relationship and sexual behaviors, online dating use, and within the Dark Triad (Carter et al., 2014; Jonason et al., 2012; Jonason et al., 2014; Lyon et al., 2014), so not having a moderating effect was quite surprising. There are a few possible explanations as to why this might be. This could be due to the Dark Triad being a better predictor of more online dating usage and risky sexual behaviors and that because of this, gender differences do not emerge. Another possibility is that due to issues in how the constructs are currently defined, the constructs tend to highlight behavioral traits that are more commonly associated with men (Cale & Lilienfeld, 2002; Forouzan & Cooke, 2005, Vitale & Newman, 2001), resulting in gender nuances not being accurately captured. Alternatively, this may be due to the attitudes of women shifting, resulting in more women choosing to engage in short-term sexual behaviors than in previous years (Petersen & Hyde, 2011). Previous literature has focused on evolutionary theory to explain why men traditionally prefer short-term relationships and women traditionally prefer long-term relationships (Carter et al., 2013); however, these traditional views may be changing amongst the younger generation. The lack of gender moderation in this study may suggest that

men and women share similar thoughts regarding relationship behaviors.

As for online dating, this study added to the literature by beginning to look at the relationship between those high in the Dark Triad traits and the use of online dating platforms. It was hypothesized that higher scores on the individual Dark Triad traits would be associated with more online dating platform usage. Results suggest that the Dark Triad traits explain higher rates of online dating use; however, psychopathy was the only significant factor. This finding suggests that of the individual Dark Triad traits, psychopathy best explains more online dating use. The Dark Triad traits have several overlaps in personality characteristics, including but not limited to impulsivity, manipulation, and exploitation (Brewer, Hunt, James, & Abell, 2015; Paulhus & Williams, 2002). However, psychopathy is further defined by superficial interpersonal relationships (Hare, 1991; Hare, 2003), which may explain why this trait is the best predictor of online dating usage.

Participants who used online dating platforms were also found to have higher composite scores of risky sexual behaviors. This was consistent with previous literature that suggests that engaging in sexual relationships from online dating platforms leads to people engaging in more risky sexual behaviors (Couch & Liamputtong, 2008). While there is no generally accepted reason as to why this is, researchers (Baumgartner et al., 2010; Bhattacharya, 2015) proposed that the use of online dating platforms may make individuals more likely change their behavior. O'Sullivan (2014) reports that interactions in cyberspace lower inhibitions and accelerate intimacy, which may be why those who relationships from online dating platforms may display more risky sexual behaviors.

Once the relationship between online dating and risky sexual behaviors was established, the relationship between the Dark Triad and risky sexual behaviors was explored. It was hypothesized that participants with higher scores on the Dark Triad traits would have a higher

composite score of risky sexual behaviors. Results suggest that the Dark Triad traits were significant factors in explaining the higher composite score of risky sexual behaviors; however, psychopathy and Machiavellianism were the strongest predictors. This finding does support research indicating that individuals high on the Dark Triad traits engage in more risky sexual behaviors (Hecht et al., 2016; Jonason and Schmitt, 2012). This may be due to the manipulation and deception associated with those high in psychopathy and Machiavellianism. Indeed, this finding supports the idea posed by Czibor and colleagues (2017) that the presence of other Dark Triad traits, such as psychopathy, can increase the Machiavellian attitude. The authors note that men high in Machiavellianism and psychopathy were found to enact a more risky lifestyle.

To build upon the above findings, exploratory analyses were conducted to further understand the relationship between the Dark Triad, online dating, and risky sexual behavior. Psychopathy and Machiavellianism were the strongest predictors of risky sexual behavior, narcissism and online dating were also significant predictors of risky sexual behaviors, however not as strong as psychopathy or Machiavellianism. While online dating was a significant factor, the results indicated that higher scores on psychopathy and Machiavellianism carry the most weight in this model. These results suggest that while online dating plays a role in risky sexual behaviors, these behaviors will still occur regardless if someone uses online dating platforms or not.

Limitations and Future Research

This study was not without limitations. First, this study was the first to look at the relationship between the use of online dating platforms and the Dark Triad on a composite score of risky sexual behaviors. While results indicated that use of online dating platforms resulted in higher composite score of risky sexual behaviors and those high in the Dark Triad were more likely to use online dating platforms, more research is needed to fully understand these

implications.

Additionally, our sample was collected entirely from MTurk, which resulted in a sample that was not overly diverse, limiting generalizability. While MTurk is able to produce quality samples for research, these samples are not representative of the general population. Research indicates clear cultural differences (Issa et al., 2017). Future research should aim to replicate these findings amongst minority groups to see if findings could be applied across cultures and sexual orientation.

Building off of this, another limitation the study faced was potential gender bias. The sample as a whole had a fairly even gender distribution; however, when comparing online dating use and gender, it was found that an overwhelming majority of the sample who used online dating were men. This in conjunction with the fact that several of the variables used have biased conceptualization (Forouzan & Cooke, 2005) may have resulted in gender moderation affects not being accurately assessed. More research is needed to fully understand the potential gender bias in relation to the variables.

Another limitation is that this study relied on self-report measures. While self-report measures are considered valid, there is the concern that the person filling out the measure may not be as accurate with their responses. Further, if a measure has high face validity, the participant may tweak their responses to when they believe a researcher is hoping to find. Several of the measures pertaining to sexual attitudes had high face validity. To control for this, future studies should use a combination of self-report measures and other data collection techniques to ensure that findings are consistent.

Similarly, this study also relied on the recall and disclosure of participants. Due to the sensitive nature of sexual behaviors, there may have been participants who were not as forthcoming with their sexual activity, those who embellished their sexual activity, or those who

just may not remember their sexual activity of the past year. This is a risk many researchers face when conducting online studies. To help ensure the results in this study were valid, conservative measures were taken when cleaning out invalid and incomplete data. That being said, findings should be replicated to ensure consistency across various sample groups.

Lastly, this study did not look at the *types* of online dating platforms used. Future research should further break down the online dating platforms to see if any online dating usage results in higher composite score of risky sexual behaviors or if specific platforms are associated with these increased risky sexual behaviors. Many popular online dating platforms are targeted to specific demographics (i.e.,, Christian Mingle vs. Tinder vs. Our Time), and this secondary analysis may shed light on if certain demographics are at a higher risk for displaying more risky sexual behaviors.

Conclusions

This study contributes to the growing Dark Triad literature by adding more insights into how the Dark Triad traits, online dating, and risky sexual behaviors are related. The results from this study support the notion that those high in the Dark Triad traits and use online dating have higher composite scores of risky sexual behaviors. These findings suggest that those high in the Dark Triad and who use online dating display a greater risk for public health issues associated with risky sexual behaviors. Those who display more psychopathic traits or Machiavellian traits appear to be at greater risk, though this may be due to behavioral characteristics associated with those who are high in these traits (Czibor et al., 2017).

However, the findings of this study can be applied more broadly, such as exploring morality and victim selection. Those high in the Dark Triad, specifically psychopathy, are less likely to choose a partner based on emotions and more likely to use rationalization (Balash & Falkenbach, 2018;). Understanding more about sexual partner selection from online dating

platforms may allow for more insight into rationalizations behind other forms of interpersonal

behaviors such as victim selection (Denardo-Roney, Falkenbach, & Aveson, 2018).

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Table 1

Table 1: Correlation matrix for the risky sexual behavior composite score

	LBI	SDS	BSAS Permissiveness Subscale	BSAS – Birth Control Subscale	BSAS – Communion Subscale	BSAS – Instrumentality Subscale	Lied About Sexual History	Been Diagnosed with STI	Use Contraception
LBI	---	-.665**	.773**	-.343**	.773**	.771**	.171**	.290**	-.106
SDS		---	-.511**	.277**	-.507**	-.511**	-.255**	-.214**	-.006
BSAS – Permissiveness Subscale			---	-.441**	.998**	.995**	.074	.198**	-.058
BSAS – Birth Control Subscale				---	-.397**	-.384**	.081	-.158**	.016
BSAS – Communion Subscale					---	.999**	.079	.195**	-.059
BSAS – Instrumentality Subscale						---	.081	.189**	-.057
Lied About Sexual History							---	.206**	.121*
Been Diagnosed with STI								---	.036
Use Contraception									---

* $p < 0.05$.

** $p < 0.01$.

Table 2

Table 2: Correlation matrix for the Dark Triad traits

	Psychopathy	Narcissism	Machiavellianism
Psychopathy	--	.701**	.402**
Narcissism		---	.296**
Machiavellianism			---

** *p* < 0.01.

Table 3

Table 3: Descriptive statistics for the Dark Triad traits, online dating, and risky sexual behaviors by gender and online dating use

	M (SD)			*t*	*M* (SD)		*t*
	Overall	Men	Women		Uses Online Dating	Does Not Use Online Dating	
Dark Triad Traits							
Psychopathy	18.23 (2.34)	18.89 (2.14)	17.32 (2.32)	5.394**	18.97 (2.22)	17.76 (2.30)	4.060**
Narcissism	16.49 (8.41)	17.92 (8.11)	14.55 (8.47)	3.112*	18.69 (8.04)	15.09 (8.37)	3.310*
Machiavellianism	57.84 (10.41)	60.39 (9.79)	54.64 (10.08)	4.401**	58.61 (8.71)	57.35 (11.36)	.97
Combined Dark Triad	5.32×10^{-15} (2.40)	.70 (2.18)	-.93 (2.38)	5.462**	-.42 (2.39)	.65 (2.30)	-3.464*
Risky Sexual Behaviors	1.36×10^{-15} (3.78)	.82 (3.74)	-1.09 (3.57)	3.960**	1.43 (3.96)	-.92 (3.37)	4.753**

* *p* < 0.05.

** *p* < 0.01.

Appendix A

Q204 How old are you?

○ 18-23 (1)

○ 24-29 (2)

○ 30-35 (3)

○ 36-41 (4)

○ 42-47 (5)

○ 48-53 (6)

○ 54-59 (7)

○ 60 or older (8)

Q205 What is your birthday? (Please use MM/DD/YYYY format)

_____

Q203 How would you describe your gender?

○ Man (1)

○ Woman (2)

○ Transgender Man (3)

○ Transgender Woman (4)

○ Nonbinary/Gender Fluid (5)

○ Different gender identity/Other (6)

_____

Q211 How would you describe your race?

○ White (1)

○ Black or African American (2)

○ American Indian or Alaska Native (3)

○ Asian (4)

○ Native Hawaiian or Pacific Islander (5)

○ Other (6) _____

Q212 Are you of Hispanic, Latinx, or of Spanish origin?

○ Yes (1)

○ No (2)

Q212 What is the highest level of schooling you have completed?

○ Less than high school (1)

○ High school graduate (2)

○ Some college (3)

○ 2-year degree (4)

○ 4-year degree (5)

○ Master's degree (9)

○ Doctorate (Ph.D, Psy. D, MD, JD, etc.) (7)

○ Technical degree (6)

○ Other (8) _____

- -

Q213 Are you currently employed?

○ Employed full time (1)

○ Employed part time (2)

○ Unemployed looking for work (3)

○ Unemployed not looking for work (4)

○ Retired (5)

○ Student (6)

○ Disabled (7)

○ Other (8) _____

- -

Q206 How would you define your sexual orientation?

○ Heterosexual/Straight (1)

○ Homosexual/Gay/Lesbian (2)

○ Bisexual (3)

○ Asexual (4)

○ Other (5) _____

Q207 What is your marital status?

○ Single/Never married (1)

○ Married (2)

○ Widowed (3)

○ Divorced (4)

○ Separated (5)

○ Other (6) _____

Skip To: Q208 If What is your marital status? = Single/Never married
Skip To: Q208 If What is your marital status? (Other) Is Not Empty

Q224 For how long?

_____

Page Break

Q208 Have you used an online dating website or app in the last 12 months? Think about any app or website you used to find a romantic or sexual partner.

◯ Yes (1)

◯ No (2)

Skip To: Q214 If Have you used an online dating website or app in the last 12 months? Think about any app or webs... = Yes

Skip To: Q239 If Have you used an online dating website or app in the last 12 months? Think about any app or webs... = No

Q214 Was it a website, a phone app, or both?

◯ Website (1)

◯ Phone app (2)

◯ Both (3)

Skip To: Q215 If Was it a website, a phone app, or both? = Website

Skip To: Q216 If Was it a website, a phone app, or both? = Phone app

Skip To: Q217 If Was it a website, a phone app, or both? = Both

Q215 Which websites did you use? Please list all.

_____

_____

_____

_____

_____

Skip To: Q220 If Which websites did you use? Please list all. Is Not Empty

Q216 Which phone apps did you use? Please list all.

_____

_____

_____

_____

_____

Skip To: Q220 If Which phone apps did you use? Please list all. Is Not Empty

Q217 Which websites/apps did you use? Please list all.

_____

_____

_____

_____

_____

Q220 How often did you use this/these dating platforms?

○ Daily (1)

○ Several times a week (2)

○ Once a week (4)

○ Several times a month (5)

○ Monthly (6)

○ Several months out of the year (7)

○ Only once or twice during the year (8)

○ Other (9) _____

- -

Q218 Consider the website/app that you use the most. Did you have to pay a membership fee?

○ Yes (1)

○ No (2)

- -

Q219 Consider the website/app that you use the most. Did you use the website/app to find a romantic partner (boyfriend/girlfriend, spouse, etc.)?

○ Yes (1)

○ No (2)

- -

Q221 Consider the website/app that you use the most. Did you use the website/app to find a

sexual partner (short-term sexual relationship [under one month], hookup, booty call, etc.)?

○ Yes (1)

○ No (2)

Q222 How often did/do you use the website/app to find sexual partners?

○ Always (1)

○ Most of the time (2)

○ About half the time (3)

○ Sometimes (4)

○ Never (5)

Q239 Have you had a sexual partner* in the last 12 months?
"Sex" is described as any sexual activity including but not limited to penile/vaginal penetration, penile/anal penetration, oral stimulation of the vagina, anus, or penis, using your hand to stimulate your partner's vagina, anus, or penis, etc.

○ Yes (1)

○ No (2)

Q223 How many sexual partners* did you have in the last 12 months? Please use your best estimate
"Sex" is described as any sexual activity including but not limited to penile/vaginal penetration,

penile/anal penetration, oral stimulation of the vagina, anus, or penis, using your hand to stimulate your partner's vagina, anus, or penis, etc.

Q225 What types of sexual activity have you engaged in over the last 12 months. Please check

all that apply.

- [ ] None (1)

- [ ] Penile/vaginal penetration (2)

- [ ] Penile/anal penetration (3)

- [ ] Oral stimulation of the penis, vagina, or anus (4)

- [ ] Using your hand to stimulate the penis, vagina, or anus (5)

- [ ] Using sex toys with a partner (6)

- [ ] Engaging in a threesome (7)

- [ ] Engaging in an orgy (4+ partners) (8)

- [ ] Experimenting with someone of your own gender (9)

- [ ] Experimenting with someone that is not your own gender (10)

- [ ] Role playing (11)

- [ ] Kinky sex (including by not limited to bondage, blind folds, domination/submission, fire/wax play, etc.) (12)

- [ ] Creating a pornographic film/image (13)

- [ ] Watching a pornographic film/looking at pornographic images (14)

☐   Other (Please specify) (15)

_____

Q240 Please select red.

○ Red (1)

○ Blue (2)

○ Green (3)

Q227 Have you ever lied about your sexual history?

○ Yes (1)

○ No (2)

Q228 Have you ever been tested for Sexually Transmitted Infections or STIs (formerly known as STDs or Sexually Transmitted Diseases)?

○ Yes (1)

○ No (2)

Q229 Have you ever been diagnosed with an STI?

○ Yes (1)

○ No (2)

Skip To: Q230 If Have you ever been diagnosed with an STI? = Yes
Skip To: Q232 If Have you ever been diagnosed with an STI? = No

Q230 Did you tell recent sexual partners?

○ Yes (1)

○ No (2)

Q231 Why or why not?

_____

_____

_____

_____

_____

Q232 When you engage in sexual activity, do you use contraceptives (e.g. condoms, "the pill," IUD, etc.)?

○ Yes (1)

○ No (2)

Skip To: Q233 If When you engage in sexual activity, do you use contraceptives (e.g. condoms, "the pill," IUD, etc.)? = Yes

Skip To: Q235 If When you engage in sexual activity, do you use contraceptives (e.g. condoms, "the pill," IUD, etc.)? = No

Q233 What type of contraceptives do you use?

_____

Q234 How often do you use contraceptives?

○ Always (1)

○ Most of the time (2)

○ About half the time (3)

○ Sometimes (4)

○ Never (5)

- -

Q235 Please select no.

○ Yes (1)

○ No (2)