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### Everyone Has A Dark Side: How Personality and Empathy Impact Men's Sexual Aggressive Persistence on Dating Apps

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**Everyone Has A Dark Side: How Personality and Empathy Impact Men's Sexual  
Aggressive Persistence on Dating Apps**

**A thesis submitted to  
Regis College  
The Honors Program  
in partial fulfillment of the requirements  
for Graduation with Honors**

**by**  
Samantha Holland

December 2019

**Thesis written by**

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Director, University Honors Program



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## Preface

When I first told my mother about my thesis topic, she was quite worried about me. Why did I want to research the dark side of people's dating behaviors? She became genuinely concerned that I would encounter a real-life psychopath. Although I told her psychopaths are not all dangerous like on all the true crime shows, it did not help ease her worries. But she did have a point why would I even want to research the dark side of internet dating? It all started back in high school. I had a close friend who was a "serial dater", someone who would date one person after another. By the time my junior year rolled around, she had dated over 15 men. I could not figure out what made her want to date so many people back to back. So like any normal high schooler, I decided to research why this was happening neurologically. To make a long story short, I became enthralled with the neuroscience of love. Love is what inspired me to pursue a major in psychology and neuroscience in the first place.

Fast forward to my senior of high school, this friend "Rose" told me in confidence that she had met a boy online. I immediately got a weird feeling in my stomach about this. I had seen enough episodes of *Catfish* to know that people are not who they often seem to be online. But I kept quiet about my feelings until about a few weeks later when Rose told me that this boy was going to come out to Colorado to visit her, and frighteningly, she was not going to tell her parents about this. That sends about a thousand red flags up for me. Rose swore me to keep it a secret despite my protests to tell her parents. I was not able to keep the secret and went to the school counselor about this problem. The counselor contacted Rose's parents because an anonymous student had come to her with concerns about Rose's safety. Rose got in huge trouble, but that was not the worst of it. She knew I was the one who went to the counselor, and well, our friendship ended right there. If she could not see that I did this because I was worried about the

person she was talking to online then it was probably best we were not friends. Rose became willing to take a risk with someone who she merely “met” online. I started to wonder why we, as a society, put so much value in the online connections we make? This became the moment when I started to take an interest in online dating.

Weirdly enough, this entire thesis is because of my experience with one person, Rose. Although she is no longer a part of my life, she helped cultivate a curiosity into a part of the world I never experienced. So, for that, I thank you, Rose. I hope this thesis helps women like you feel safer about using dating apps, and I also hope that you never have to lose a friendship again.

## **Abstract**

In the world of online dating, there is a major issue of men not respecting clear no-signals from their matches. A no-signal is simply when a woman removes her consent to continue in the conversation. In terms of consent, there has been plenty of research into how men misinterpret ambiguous consent for approval to engage in a sexual act, but there has been very little research examining why men persist through non-ambiguous no-signals. There needs to be more research into this area because these behaviors of disregarding no-signals may lead to more serious behaviors such as rape and sexual assault. This current study examines how dark personality traits of Machiavellianism, narcissism, and psychopathy and/or empathy can impact men's likelihood to respect no-signals. In a controlled laboratory experiment, participants used a mock dating app to select and converse with one fictitious match. Eventually, this match presented a sign of no interest, what I refer to as a no-signal, and participants had the choice to disrespect this request of unambiguous lack of consent and continue or respectfully end the conversation. If participants persisted, another, more extreme no-signal was presented; participants stop level is the number of no-signals they ignored and disrespected. Results indicated that 71% of participants persisted through the first no-signal. Furthermore, those who were the highest in psychopathy were also the most persistent. A perspective-taking intervention did not significantly alter persistence to no-signals in general; however, the empathy intervention did interact with psychopathy to reduce persistence for those who are the highest in psychopathy. The results are discussed in terms of real-world implications, such as adding empathy interventions and personality measures to apps such as Tinder and Grindr.

## Introduction

### No-signals

Danny and Jill had both recently downloaded Tinder and matched with each other. At first, the conversation was fun and flirty. But after a few weeks, Jill felt as if there was not a true connection between her and Danny. Jill politely told Danny that she did not have feelings for him romantically but wished him the best of luck trying to find someone. Danny did not handle the rejection very well and asked her what was wrong with him? Jill said it was nothing, in particular, she just did not feel a connection. Danny said okay and Jill said goodbye. But Danny kept the conversation going saying that she should give him another chance. Jill said no. Danny replied back saying he will win her heart. Jill asked Danny to stop messaging her, she did not want to date him. Danny angrily replied that she was going to regret not dating him. Jill became very scared. Why wasn't he listening to her?

Jill's experience is not a unique one for women who use dating apps. Many women match with men who "won't take no for an answer". One woman posted nasty messages she received from a man she rejected on Tinder. The messages ranted on but were based around the same phrase "You have no reason to say no. You are ON A DATING SITE" (Darbyshire, 2018). Another woman shared her text message conversations with a man who refused to stop texting her when she told him no many times. He kept saying at no barrier was going to keep them apart (Mejia, 2015). On top of these examples, there are dozens of open letters online that share women's various stories of men not respecting their rejections (Casper, 2016; Holmes, 2017; Leonhardt, n.d.). This problem of persistence on dating apps is one that creates many issues for women who want to use dating apps safely. Persistence from men should be no surprise to anyone who watches romantic comedies such as *Love Actually*, *10 Things I Hate About You*, and

*Sixteen Candles* or listens to songs like *Grenade* by Bruno Mars and *Hungry Eyes* by Eric Carmen. It appears that persistence following lack of consent is not simply a behavior engaged by a few bad apples, rather it is a misconception that permeates society as a whole and creates the cultural script male persistence. Truth is, repeated persistence and attempts at conversation are not endearing; they are harassment. This harassing persistence past women's unambiguous no-signals leads to sexual assault and rape<sup>1</sup>.

Assault and rape often happen because there is a lack of respect for a person's removal of consent. I am defining consent as an agreement between participants for any romantic interaction. In terms of sexual consent, consent is ideally marked by a verbal and enthusiastic "yes", to engage in a sexual activity; in terms of conversational courtship, consent should also be ideally marked by the excitement of both parties to talk amongst each other. Most importantly, whether it is sex or a conversation, consent can be removed at any time; this is a definition of personal freedom, yet, it appears that in societies across the globe, the freedom of women is more important than the basic personal freedom of women. Removal of consent is communicated by what I refer to as a no-signal. No-signals can further be unambiguous, such as clear statements of no-interest; likewise, no-signals can be ambiguous, such as body language indicative of lack of interest (i.e. looking at watch). Upon receiving a no-signal, men oftentimes attempt to either regain consent through acts of persistence or completely disregard consent by ignoring and reinterpreting the no-signals of women because it is what the aforementioned cultural scripts prescribe. Furthermore, it is important to point out that when this blatant disregard for consent leads to unwanted sex, this is rape. If our society is creating cultural scripts

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<sup>1</sup> It is important to note that there is difference between sexual assault and rape. Rape is any nonconsensual penetration including oral, vaginal, or anal. Sexual assault is any form of unwanted sexual conduct. It can refer to things like fondling and molestation, but also includes rape.

that promote persistence, then we must admit that our society is promoting both rape and sexual assault. According to this script, men are supposed to be more interested in and be more ready to engage in sexual activity; and research indicates that when consent is taken away, their masculinity can be questioned (Muehlenhard, Humphreys, Jozkowski, & Peterson, 2016; Oswald & Russell, 2006). These facts may explain why, historically, men use more sexual aggressive techniques and resist changes in modern-day mating habits that promote the personal freedom of all involved parties (Azoulay, 2018; McDonald & Paitich, 1982; McKibbin, Schackelford, Goetz, & Starratt, 2008; Thornhill & Thornhill, 1983). While this may begin to provide insight into why men persist, in a larger societal context, it does not provide insight into the individual-level factors that lead many men to choose to persist through clear, unambiguous no-signals.

Research examining no-signals has primarily focused on ambiguous no-signals, the assumption being that men only persist in unclear signaling of women. Research in this vein has shown that no-signals are sometimes given through implicit, ambiguous verbal utterances (saying one is tired) or body language (being bodily unresponsive or looking at your phone) (Brady, Lowe, Brown, Osmond, & Newman, 2018; Kitzinger & Frith, 1999; O'Byrne, Rapley, & Hansen, 2006). This research indicates a clear trend when given ambiguous no signals, men will more often than not interpret these ambiguous signals as clear consent (Hickman & Muehlenhard, 1999; Walsh et al., 2019). This is likely due to the fact that men show a very similar neurological response to women as they do to tools and objects that they use (Cikara, Eberhardt, & Fiske, 2011) indicating that a woman to the average is a tool to be used rather than independent, free-thinking human beings. Interestingly, no studies examine, to my knowledge, men's response to clear verbal no-signals. The assumption appears to be that men only commit harassment, sexual assault, or rape when women do not provide clear no-signals. Given this

review, I hypothesize that this assumption is not only patently incorrect but also represents a biased victim-blaming approach that is embedded in the science of consent.

### **Dating Behaviors, Rape, and Dating Apps**

As the popularity of mobile dating apps (MDAs) has increased so has the number of serious sexual assaults (Almond, McManus, & Chatterton, 2017; National Crime Agency, 2016). The crisis is so volatile that the National Crime Agency has defined a ‘new type of sexual offender’, a rapist who initially met their victims online, and a new type of rape, Internet Facilitated Rape (IFR). IFRs are so devastating because the lack of face to face responding builds trust without the assistance of in-person, interpersonal cues that can signal malintent, and ultimately, this abuse of trust is used by rapists to coerce unsafe behaviors, such as, inviting a stranger over to one’s house when no one is home. Considering location 72% of IFR victims were sexually assaulted at their residence, weaponized trust appears to be the tool of choice of these abhorrent rapists (Almond, McManus, & Chatterton, 2017; National Crime Agency, 2016).

Furthermore, considering that the majority of internet-initiated sexual assault victims are girls were between 13 and 15 years old (73% to 75%) and 99% of perpetrators are adult men, this weaponized trust is being applied to one of the most vulnerable population, children (Canders, Merchant, Pleet, & Fuerch, 2013). Data examining of MDA facilitated rape across all women indicates a 450% increase between 2013 and 2018 (Murphy, 2018). IFR has clearly provided rapists an extremely effective method to inflict harm in general, and specifically, to inflict harm on children.

Abhorrently, college women do not only have to worry about excelling in classes and internships, but also have to remain constantly vigilant for rape and sexual assault.



Approximately 20%-26% of women will experience sexual assault in their life (Cantor et al., 2015; Fisher, Cullen, & Turner, 2000) and 29.4% of all rape victims between the ages of 18 and 24, the traditional age of college women (Guerette & Caron, 2007). In fact, the risk of sexual assault for college women is 1.2 times to 3 times that of the general population of women (Langton, 2014; Morgan, 2018; Planty, Langton, Krebs, Berzofsky, & Smiley-McDonald, 2013; Tjaden & Thoennes, 2000). Similar to how IFRs target the most vulnerable populations, college rapists target the most vulnerable populations as well, first-year female (Kimble, Neacsiu, Flack, & Horner, 2008; Morgan, 2018).

Despite all the data on rapes and sexual assaults happening to women and college students in general, these numbers may be wildly underinflated. For example, rapes are the most underreported crimes in the United States (Boyle, Barr, & Clay-Warner, 2017; Kahn et al., 2003; Morgan, 2018; Muehlenhard, 1994; Taylor & Gassner, 2010; Williams, 1984) most cases of rape are never reported to the police (Bondurant B, 2001; Guerette & Caron, 2007; Kahn et al., 2003; Schafran, 1996; Taylor & Gassner, 2010); the perpetrator is often an acquaintance or a friend of the victim (Kahn et al., 2003; Taylor & Gassner, 2010; Williams, 1984), a fact that reduces reporting due to fear of retaliation from rapist (Morgan, 2018); and factors like one's political and religious belief systems (Nagel, Matsuo, McIntyre, & Morrison, 2005; Pettersson, 1991), the power dynamic between victim and rapist, and the characteristic of the rape itself (Guerette & Caron, 2007; Kahn et al., 2003; Williams, 1984) all reduce the reports of rape. However, we must also examine how shared cultural events reduce the reporting of rape statistics. For example, according to the National Crime Victimization Survey, reports of rape and sexual assault decreased by 40% between 2017 and 2018 (Morgan, 2018). It should not be lost on anyone that during this time period numerous rape victims who went public in high profile cases

against President Trump and Supreme Court Justice Kavanaugh experienced harassment, death threats, and lack of justice in the legal system (Blumell & Huemmer, 2017; Cooks & Zenovich, 2019; Maas, McCauley, Bonomi, & Leija, 2018; Traynor, 2018). This decrease in reports follows historical trends where rape reports decrease following public derogation of rape victims (Blumell & Huemmer, 2017; Kenning, 2018; Schneider & Hannem, 2019; Rossman & Kelly, 2018).

This review makes two things abundantly clear: 1) all women and girls are at risk of being raped and 2) college women are particularly vulnerable. However, while this paper will not examine rape directly, it will examine the lack of respect for consent in the form of direct and explicit no-signals. This choice is both prudent and theoretical. I believe that this lack of respect for non-ambiguous no-signals is the foundation of the cultural and individual level on which rape and rape culture are built. Leading to my two larger research questions: (1) what drives a single individual to blatantly disregard non-ambiguous no-signals and (2) what drives men as a collective group to disregard no-signals en masse. I hypothesize that personality and empathy may hold the answers to both of these questions.

## **Personality**

In terms of why individuals ignore no-signals, consent, and even commit rape, one potential answer is that they are simply bad people with bad and dark personality traits. Specifically, I hypothesize that these individuals possess some malicious traits, specifically, the “dark triad.” The “dark triad” is a combination of three personality traits of Machiavellianism, subclinical narcissism and subclinical psychopathy. Machiavellianism is best summarized as a manipulative personality, in that possessing higher levels of Machiavellianism is associated with a stronger desire to exploit others and gain advantage with little to no concern for morality

(Bourbonnais & Durand, 2018; Paulhus & Williams, 2002). Narcissism is best summarized as an extreme form of self-grandeur, in that possessing higher levels of Narcissism is associated with an over-inflated ego, thoughts of grandiosity and entitlement, and a massive amount of arrogance<sup>2</sup>. Psychopathy is best summarized as motivated by perverse pleasure, in that possessing higher levels of psychopathy is associated with lack empathy for others' needs and emotions, sadism, impulsivity, thrill-seeking, sex-seeking, and egocentric (Bourbonnais & Durand, 2018; Paulhus & Williams, 2002).

## **The Dark Triad in Relationships**

### **Overview.**

Dark personality traits research has indicated that these traits influence both romantic and sexual relationships (Ali & Chamorro-Premuzic, 2010; Jauk et al., 2016; Jonason & Kavanagh, 2010; Timmermans, De Caluwé, & Alexopoulos, 2018). These traits are associated with poor relationship quality (Ali & Chamorro-Premuzic, 2010), lower empathy for other humans, (Berger, Batanova, & Cance, 2015; He & Zhu, 2016; Lee & Lee, 2016; Leunissen, Sedikides, & Wildschut, 2017; Loftus & Glenwick, 2001; Pfabigan et al., 2015; Soderstrom H, 2003; Watson, Grisham, Trotter, & Biderman, 1984; Zhou, Zhou, & Zhang, 2010) utilizing interpersonal manipulation (Ali & Chamorro-Premuzic, 2010; Bourbonnais & Durand, 2018; Brewer & Abell, 2017; Brewer et al., 2018; Chabrol, Van Leeuwen, Rodgers, & Séjourné, 2009; Jonason & Buss, 2012; Jonason & Kavanagh, 2010; Jonason, Li, Webster, & Schmitt, 2009; Jonason & Tost, 2010; Jones & Paulhus, 2014; March, Grieve, Marrington, & Jonason, 2017; Oswald & Russell,

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<sup>2</sup> However, it is important to note that the construct of subclinical narcissism came from Raskin and Halls' (1979) attempt to outline a subclinical version of the DSM-defined personality disorder (Bourbonnais & Durand, 2018; Paulhus & Williams, 2002; Raskin & Hall, 1981).

2006; Paulhus & Williams, 2002; Shimberg, Josephs, & Grace, 2016; Timmermans, De Caluwé, & Alexopoulos, 2018; Wurst et al., 2017; Zara & Özdemir, 2018; Zhou, Zhou, & Zhang, 2010) and a general concern for others (Brewer & Abell, 2015a, 2015b, 2017; Brewer et al., 2018; Chabrol, Van Leeuwen, Rodgers, & Séjourné, 2009; Foster & Campbell, 2005; Hickman & Muehlenhard, 1999; Jonason & Kavanagh, 2010; Jonason & Krause, 2013; Jonason & Tost, 2010; Jones & Paulhus, 2011; Kreager, Cavanagh, Yen, & Yu, 2014; March, Grieve, Marrington, & Jonason, 2017; Paulhus & Williams, 2002; Pfabigan et al., 2015; Zara & Özdemir, 2018; Zhou, Zhou, & Zhang, 2010).

### **Machiavellianism and Relationships.**

Since Machiavellianism is associated with manipulative behaviors, those high in this trait prefer emotionally detached relationships, low levels of relationship commitment, and sexual deception (Ali & Chamorro-Premuzic, 2010; Brewer et al., 2018; Jonason & Buss, 2012). Machiavellians do not engage in sex for the pleasure of another person. Rather, they engage in sex for personal gain: fulfilling physical needs, obtaining goals, emotional satisfaction, reducing security, reducing stress, experiencing pleasure, increasing social status, and to enhance self-esteem. (Brewer & Abell, 2015a). The exploitive nature of Machiavellianism suggests that men and women may be most motivated by an individual reward/goal. Specifically, it can be predicted that this trait will be positively related to engaging in sexual acts in order to achieve an end goal, but not for physical or emotional intimacy (Brewer & Abell, 2015a). Thus, I predict that those high in Machiavellianism would respond rather diversely to no-signals. For others, the no-signals may be a sign to try harder to gain the benefits of sex. Therefore, I predict that Machiavellianism will be uncorrelated with no-signal persistence.

### **Narcissism and Relationships.**

Narcissists have difficulty navigating romantic relationships. First, narcissists' sense of grandeur and consequential entitlement results in less doubt about their less partner's commitment but a heightened sensitivity to cues of rejection from their (Foster & Campbell, 2005; Brewer et al., 2018). They are attracted to superficial cues of success, such as beauty and success, and, they often struggle to maintain appropriate interpersonal boundaries resulting in increased distance and, eventually, rejection (Zara & Özdemir, 2018). However, they are more loyal than many relationships, as they display less commitment and attention toward alternative partners in an attempt to maintain a partnership where their solipsistic needs are being met (Zara & Özdemir, 2018). Thus I predict that no-signals are a threat to Narcissists, as they are very sensitive to rejection and will desire to limit their exposure to future rejection. Therefore, I predict that Narcissism will be negatively correlated with persistence to no-signals.

### **Psychopathy and Relationships.**

Psychopathy is also likely impacts romantic relationships. Interestingly, there is little research focusing on this topic, however, research indicates that men with psychopathy are cold, unemotional, and sadistic (Chabrol, Van Leeuwen, Rodgers, & Séjourné, 2009). Furthermore, this becomes more complicated since other investigations do not find this pattern of results (Brewer, 2018). Nonetheless, if Psychopaths enjoy causing distress and pain to others, then no-signals should lead those highest in psychopathy to exhibit the strongest tendency to persist.

### **Empathy**

Beyond personality, the aforementioned information on sexual assault and rape, tells a different story. Specifically, a large proportion of men commit sexual assault and rape. Why would a large majority of men rape and assault women? As stated earlier, one possible answer is

that men view women as objects to be used. That is, men, in general, appear to be dehumanizing women, and thus, are less likely to experience empathy for women. Thus, it is important to state another hypothesis, a majority of men, independent of their personality traits, will show persistence to the no-signals of women.

Empathy is a complex, multifaceted idea that generally refers to the thoughts and feelings of an observer in response to observing emotion in another human being or animals. In general, many scholars focus on cognitive and affective empathy (Olderbak, Sassenrath, Keller, & Wilhelm, 2014). Cognitive empathy is simply being able to understand and know the internal state of the other being. Cognitive empathy does not necessarily mean that an individual feels the same state as the person in distress, this is known as affective empathy. In fact, numerous arguments can be made against the utility of this type of empathy as being in the same emotional state may reduce one's ability to help. Nonetheless, over 50 years of research on empathy indicates consistent finding, empathy equals helping (Baston, Decety, & Ickes, 2011). Interestingly, research indicates that (1) empathy for outgroups is low (Drwecki, Moore, Ward, & Prkachin, 2011; Fourie, Subramoney, & Gobodo- Madikizela, 2017) and (2) women are seen as outgroups to the ingroup of men (Kokkonen & Karlsson, 2017; Richins, Barreto, Karl, & Lawrence, 2019). Thus, if a majority of men are willing to harm women, and harm is the opposite of helping, it is logical to hypothesize that reduced empathy plays a role in persistence to no-signals. Likewise, if empathy is lower for outgroups and women are viewed, by men, as an outgroup, then it is also logical to hypothesize that reduced empathy plays a role in persistent to no-signals. Furthermore, as previous research shows that manipulations of empathy via perspective taking increases helping and reduces harm towards outgroup members (Drwecki,

Moore, Ward, & Prkachin, 2011), it is also logical to hypothesize that perspective-taking will decrease persistence following no-signals.

## **Empathy by Personality**

### **Machiavellianism and Empathy.**

Conflicting predictions have been made with regards to the association between Machiavellianism and empathy. Indirect evidence arranged in support of Machiavellians being actually empathetic based on the characteristics many shows such as being charismatic, charming, ingratiating, and prosocial (Bagozzi et al., 2013; Berger, Batanova, & Cance, 2015; Deluga, 2001; Hawley, 2003). However, other researchers disagree with this and posit that Machiavellians are emotionally detached from people and are purely using them for personal gains (Ali & Chamorro-Premuzic, 2010; Brewer et al., 2018; Jonason & Buss, 2012). When Machiavellianism traits are correlated with the Big 5 traits, many researchers found that it was negatively correlated with agreeableness and conscientiousness (Carretta & Ree, 2018; Deluga, 2001; Szijarto & Bereczkei, 2015), but Machiavellians could positively relate with affective responding to sad facial expressions (Berger, Batanova, & Cance, 2015; Jonason & Krause, 2013; Loftus & Glenwick, 2001). Machiavellianism research has shown conflicting beliefs on how Machiavellians use or internalize empathy; therefore it would be difficult to predict how they would respond to an empathy intervention, so I predict that there is going to be no interaction between empathy and Machiavellianism.

### **Narcissism and Empathy.**

Research has shown that empathy has declined for American college students over the past three decades (Shimberg, Josephs, & Grace, 2016). This means the generation of students

now is the least likely to be able to relate and share emotions with each other. Research suggests that this drop in empathy is associated with a rise in narcissism (Konrath, O'Brien, & Hsing, 2011; Shimberg, Josephs, & Grace, 2016) that leaves today's college students with the primary goal of obtaining personal wealth, not helping others as previous generations aspired to do (Pew Research Center, 2007; Twenge & Foster, 2008). If narcissism is on the rise, it is possible that empathy inducing interventions may prove particularly beneficial for those who are high in narcissism. Nonetheless, as I am predicting that narcissists will already show a tendency to stop in response to no-signals, we do not predict that empathy and narcissism will interact to affect persistence to no-signals.

### **Psychopathy and Empathy.**

Empathic deficits have long been described as a core feature of psychopathy with empathic dysfunction being one part of the diagnostic criteria of psychopathy (Hare, 1991). However, it has been difficult to pinpoint what part empathy, cognitive or affective, has the most impact on psychopathic individuals. There has been one study that found that the Dark Triad, in general, is negatively correlated with affective empathy, but showed only weak associations with cognitive empathy (Wai & Tiliopoulos, 2012). On the other hand, there is a known significant association between psychopathy and Internet "trolling" (the deliberate attempt by an individual to create distress and conflict by communicating insulting, provocative, and demeaning comments to their victims (Buckels, Trapnell, & Paulhus, 2014), in which, lacking affective empathy has been found to be a significant predictor of Internet trolling, but cognitive empathy and Internet trolling was moderated by psychopathy (March, 2019; Sest & March, 2017). When put into perspective-taking activity to induce empathy, psychopaths with higher levels would have the ability to see the other person's point of view and adjust their behaviors accordingly



(Mullins-Nelson, Salekin, & Leistico, 2006; Pfabigan et al., 2015). Developing perspective-taking skills can aid in reducing the aggressive and callous behaviors commonly seen in psychopaths (Lee & Lee, 2016). Therefore, I predict that individuals who are high in psychopathy will be affected by the empathy intervention, such that they do stop persisting through no-signals.

In order to best address the numerous research questions, I have decided to conduct a laboratory experiment exploring (1) men's persistence to unambiguous no-signals, with the prediction being that a majority of men will persist to at least one no-signals, (2) higher levels of non-clinical psychopathy will result in higher levels of persistence, (3) higher levels of non-clinical narcissism will be associated with a decrease in persistence to no-signals, (4) an empathy-inducing, perspective-taking intervention will reduce persistence to no-signals for the average participant, independent of personality, and (5) an empathy-inducing perspective-taking intervention will reduce the persistence to no-signals for those highest in non-clinical psychopathy.

## **Methods**

### **Participants**

Participants in this study included 38 undergraduate students from Regis University. All the participants are men between the ages of 18 and 24 who have a self-expressed sexual interest in women. All participants were undergraduates Regis University who volunteered. Some participants received course credit. This study was approved by the Institutional Review Board at Regis University.

### **Empathy Manipulation**

A perspective-taking intervention was adapted from the work of Fultz, Baston, Fortenbach, McCarthy, and Varney (1986). Specifically, (N= 18) participants in the intervention condition were asked to “spend 20 seconds imagining how your response to their question or statements will impact your dating partner, emotionally.” Likewise, participants in the control condition (n = 17) were asked to “spend 20 seconds thinking about how to get a date with your interaction partner.” Participants were randomly assigned to an experimental condition.

## **Dependent Measures**

### **Personality Measures.**

A short form of dark personality inventory was used to measure all personality traits (SD3) (Jones & Paulhus, 2014.) (Appendix B).

### **Persistence to No-Signals**

Persistence to no-signals was measured via simulated app-based dating procedure, designed, via the experimental design software PsychPy PsychoPy (Peirce, Gray, Simpson, MacAskill, Höchenberger, Sogo, Kastman, Lindeløv, 2019) to be similar to the Tinder©™ dating application.

Specifically, participants were told that they simply interacting with a computer but were asked to respond as naturally as possible. After these instructions, participants could swipe left (reject) or swipe right (accept) through 5 different profiles (Appendix A). If participants swiped right on any of the profiles, they were given an opportunity to have a text-based conversation with one of the women they accepted in the swiping procedure<sup>3</sup>

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<sup>3</sup> 3 participants did not swipe right on any of the profiles.

(The specific women was chosen at random from the accepted choice) and were informed that at any time they could stop have the conversation by pressing the ALT button on the keyboard. Participants were then shown three courteous, “getting to know you” statements (Appendix C). In the fourth statement, participants were presented with the following no-signals designed to increase in intensity via an increase in the use of the words no, not, and stop.

A participant’s persistence to no-signals score referred to from here on out as persistence, is simply the number of times a participant sends a message in response to a no-signal. Persistence scores range from 0 (stopping the conversation after the first no-signal) to 5 (never stopping and being told that their partner has stopped the conversation).

## **Procedure**

I obtained consent from all participants, and then queued up the appropriate experimental program via PsychoPy. I then left the testing room, and the computer program leads participants through the procedure. Before the experiment began, participants were informed that the experiment was completely fabricated, i.e. they were not interacting with real individuals at any time during the experiment and were given basic instructions for the swiping task. Participants completed the swiping task and were randomly assigned to have a conversation with one of their accepted matches. The participants were exposed to their instructions for the perspective-taking intervention. Specifically, participants in the perspective-taking condition read the following:

“Research indicates that when people actively try to take the perspective of another this leads to positive interpersonal outcomes. We believe that taking the perspective of potential romantic partners will lead to more positive outcomes

for both you and your dating partner. We simply ask that before you type any response you spend 20 seconds imagining how your response to their question or statements will impact your dating partner, emotionally.”

Participants in the control group read the following:

“Research indicates that when people actively try to get a date this leads to positive interpersonal outcomes. We believe that trying to get a date will lead to more positive outcomes for both you and your dating partner. We simply ask that before you type any response you spend 20 seconds thinking about how to get a date with your interaction partner.”

Participants then completed the persistence to no-signal measure described above, the measures of personality, and finally completed a short demographics questionnaire. After completing the questionnaire, participants were thanked and debriefed.

## **Results**

### **Overall level of persistence.**

As predicted, a large majority of participants persisted past the first no-signal. Specifically, 71% of participants persisted through the first no-signal, 47% of participants persisted through the second no-signal also, 3<sup>rd</sup>, 4<sup>th</sup>, 5<sup>th</sup>.

### **Empathy on Persistence**

The empathy intervention did not alter persistence to no-signals. ( $M_{\text{Empathy}} = 1.89$ ,  $SD_{\text{Empathy}} = 1.32$ ;  $M_{\text{Control}} = 2.00$ ,  $SD_{\text{Control}} = 1.87$ ;  $t(28.67) = -0.20$ ,  $p = 0.842$ ,  $d = -0.07$ ; see Figure 1).

## **Dark Triad on Persistence**

Bivariate correlations were calculated for all subscales of the Dark Triad measure and the measure of persistence. As predicted, higher levels of non-clinical psychopathy were associated with increased persistence; however, no other measures of personality were correlated with persistence (see Figure, 2). Furthermore, the  $R^2$  of this relationship indicates that variation in psychopathy scores was associated with 12.25% of the variation in persistence scores.

## **Dark Triad and Empathy on Persistence**

Three separate multiple regression analyses, one each for Machiavellianism, narcissism, and psychopathy, were calculated to examine the relationship between each individual personality trait, empathy, and trait X empathy interaction. The results are presented in Table 2. It is important to note that only psychopathy significantly interacted with empathy ( $B = 1.96, p = 0.071$ ), and this model accounted for 26% of variance scores in stop level scores ( $R^2 = 0.26, F(3, 31) = 3.58, p < 0.025$ ).

Simple slopes analyses were conducted to unpack this interaction. Specifically, estimated values were calculated by setting psychopathy to +1SD, Mean, and - 1SD and utilizing a -1 control, +1 empathy effects coding for the empathy intervention (Figure 3). These predicted values indicate that the empathy intervention drastically reduced persistence for high in psychopathy, moderately reduced persistence for those of average psychopathy, and increased persistence for those who are low in psychopathy.

## **Discussion**

### **Overall levels of Persistence**

The results showed that a high percentage of participants, 71%, persisted despite a clear and unambiguous no-signal. This result clearly supports our hypothesis that the average man would disregard the no-signals of women. This finding is important because a majority/the entirety of previous research has focused solely on ambiguous signals (Brady, Lowe, Brown, Osmond, & Newman, 2018; Hickman & Muehlenhard, 1999; Kitzinger & Frith, 1999; O’Byrne, Rapley, & Hansen, 2006). The current results indicate that men will ignore consent despite clear unambiguous signals.

### **Empathy on Persistence, in General**

The empathy intervention, unfortunately, did not reduce persistence, for participants, in general. This may be because this intervention will not work in the general population, or it may be the result of another experimental flaw.

### **Psychopathy and Empathy on Persistence**

Those who are the highest in psychopathy, also exhibit the most persistence to no-signals, as predicted. This result indicates that those high in psychopathy are even more likely than the general population to persist despite no signals and disrespect the consent demands of their conversation partner. However, this effect was drastically diminished via the empathy intervention. This is important for three reasons: (1) it indicates that personality does not fully determine persistence to no-signals, (2) it indicates that individuals who are high in non-clinical psychopathy are not unable to experience and understand empathy for another individual, and (3) it shows that respect towards women is attainable via careful environmental controls, even for those individuals who are the least prone towards respect, in general. Interestingly, those who were low in psychopathy, and by definition more prone to empathetic experiences, were even

more likely to persist following the empathy intervention. We hypothesize that this effect may be due to these individuals' heightened desire to help. That is, under normal circumstances, they are likely to respect the wishes of their partner and simply stop the conversation; however when empathy is induced they may be more inclined to apologize to the individual or even thank them for their time to create a positive rejection experience for their partner. Nonetheless, more research is necessary to examine this conjecture.

These results are to be expected. Previous research indicates that high psychopathy is associated with very low levels of empathy and high levels of sadism (Brewer et al., 2018; Chabrol, Van Leeuwen, Rodgers, & Séjourné, 2009; Jonason & Kavanagh, 2010; Jonason & Krause, 2013; Jonason, Li, Webster, & Schmitt, 2009; Jonason & Tost, 2010; Jones & Paulhus, 2011, 2014; Levenson, Kiehl, & Fitzpatrick, 1995; March, Grieve, Marrington, & Jonason, 2017; Paulhus & Williams, 2002). As predicted, these individuals are prone towards the sadistic tendency to continue to harass an internet dating partner, under normal circumstances. However, of even greater importance, is the fact that the tendencies towards sadistic behavior were reduced in individuals high in non-clinical psychopathy via a perspective-taking intervention. While many individuals will take the result that 12.25% of unwanted persistence was driven by differences in psychopathy, as evidence that we must ban those high in psychopathy from dating sites in general, we must remember that 87.75% of persistence was not associated with psychopathy, showing, that with an environment conducive to empathy, even those prone to sadistic behavior can be made to respond like average individuals; however, many individuals with average and low levels of psychopathy respond in sadistic ways despite their personality traits driving them to have lower overall levels of sadism. Considering the previous discussion of the drastic decline in empathy over the last 30 years, we must ask the question of how much of

our current rape culture is due to a societal-wide lack of empathy where individuals are more worried about their own personal gains and less concerned about developing genuine community?

These results are important because they suggest that subtle changes to dating applications can reduce unwanted harassment. For example, it is possible that an empathy intervention, similar to the one developed for this survey, will reduce the overall harassment and persistence on these apps. However, psychopaths are not the only reason why disregard for clear no signals exist; the majority of males in this study did persist through at least one no signal and they scored within average levels of psychopathy. Research examining the root causes of persistence to clear no signals is necessary to create more positive virtual dating applications.

Overall, the evidence from this study suggests the disturbing fact that most men disregard unambiguous signals of consent. This suggests a much larger problem in our society, we cannot dismiss these horrible behaviors on psychopathy because “normal” men will still disregard consent. Attitudes towards rape today have pushed the fact that women often times are “asking for it” when they dress a certain way or act a certain way. But blaming the victim is never the answer. A huge amount of empirical research has tried to discern what makes rape victims blame more likely. One of the largest factors is if the women were acquainted with her rapist before the act, the women are more likely to be held responsible for her victimization (Deming, Covan, Swan, & Billings, 2013.; Egan & Wilson, 2012; Frese, Moya, & Megías, 2004). Women who experience with someone known to them causes identifying and labeling experiences of rape difficult. Society has built the “rape script” that rapes are committed by a stranger at night when they are alone (Deming, Covan, Swan, & Billings, 2013; Kahn, Mathie, & Torgler, 1994; Littleton & Axsom, 2003). Therefore, when their rape breaks that script, women have difficulty



identifying themselves as victims and are less likely to report their rapes because of the stigma attached to being a rape victim (Deming, Covan, Swan, & Billings, 2013). Although women may find themselves to blame because they are not a part of the “typical rape script”, they are not the reason rapes are occurring. Men are often times exonerated of the blame because society sees their behaviors as something out of their control. Young men can simultaneously position themselves as “good guys” who do not commit rapes, while at the same time engage in sexual assaults (Pascoe & Hollander, 2016). Often times when alcohol is involved, men will become more sexually aggressive, but their acts of rape are dismissed because he was intoxicated (Meyer, 2010). Truth is, no matter what condition you are under men should be accountable for their behaviors and women should not be blamed for how they dress or act.

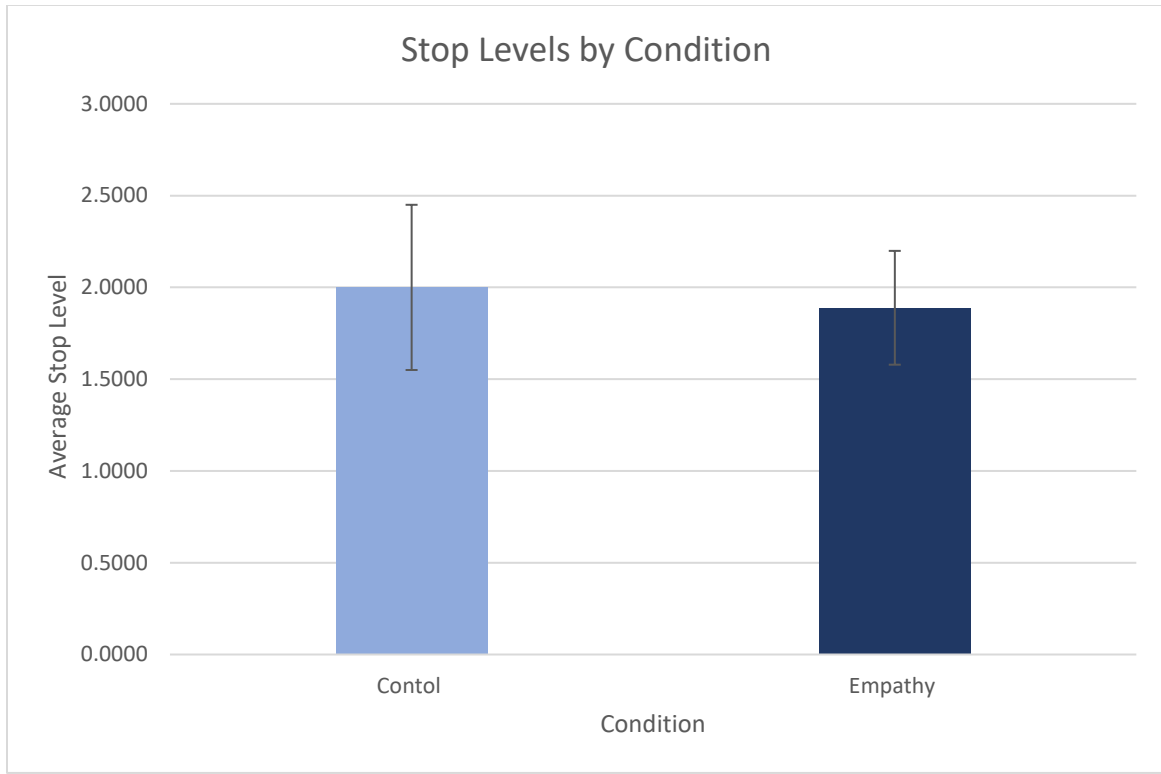
We cannot dismiss the fact that men who are high in psychopathy or just the average man may choose to commit acts of rape that exist in our society. Our culture has made it seem that all psychopaths are horrible people that we cannot change nor do we want to change. It seems that when psychopaths are even just brought up in conversation, the only solution to deal with them that comes up is to lock them up: out of sight, out of mind. But when a rape is committed by an average man, their behaviors are not ever their fault and are somehow blamed on the women as seen above. However, I find it morally wrong to want to completely hide a part of the human population or ignore rapists just because they committed horrible acts. From being taught at a Jesuit University, I have learned that issues such as rape and sexual assault are not solved by the acts of one person. As much as we want to push these horrible acts from our view, they are not going to be solved unless our world comes together to show compassion. One of my personal favorite Jesuit core values is “Men and Women for and with others”. I believe in the spirit of giving and providing services to those in need and standing with the marginalized. I do not

condone any of the behaviors that rapists do, but I believe in standing up for compassion to help them become better people in our society. If we do not show compassion and allow the people to learn the errors of their ways, we are no better than the rapists themselves. We are allowing these behaviors to occur because we are just standing by and waiting for someone else to solve the issue. As seen from this present research study, those who are high in psychopathy respond to empathy. They are more likely to listen and respect no signals than when they are put in the empathy intervention. So, as a society, we need to start treating those who present psychopathic traits with compassion and try to teach them empathy. We can use techniques like the intervention in this study to help psychopaths become more prone to respecting consent. If they can understand why consent matters and how it harms the other people if you do not acknowledge and follow it, this will hopefully lead to a world where rape and sexual assault do not occur.

Not only will showing compassion to rapists and those who are high in psychopathy help them become better people, it will also help their victims. Women have been a group of people constantly taken advantage of by the many people in the male population. Sexual harassment happens to women far more often than it does to men (Azoulay, 2018; Fisher, Cullen, & Turner, 2000; Kimble, Neacsiu, Flack, & Horner, 2008; Morgan, 2018; Planty, Langton, Krebs, Berzofsky, & Smiley-McDonald, 2013; Schafran, 1996). Although I have never experienced any of these actions other than catcalling, I have been surrounding by women how have dealt with everything from voyeurs to rapists. I cannot bear to see the people care about have to deal with people disrespecting their removal of consent. But as stated before, we must show compassion for the perpetrators because is one of the best ways to help them find the error in their ways. If they understand that their actions are hurting someone else, it will reduce their tendency to hurt

women. Women can feel safer being out in the world without the threat of someone not taking a no for an answer. In the end, society needs to understand that compassion for all really does lead to a better, safer world.

## Figures



*Figure 1:* The average stop level score between control (light blue) and empathy (navy) conditions. No significance reported. Lines represent Standard Error.

	Machiavellianism	Stop Level	Narcissism	Stop Level	Psychopathy	Stop Level
Machiavellianism	1					
Stop Level	0.18	1				
Narcissism	0.24	0.22	1			
Stop Level	0.19	0.10	0.18	1		
Psychopathy	<b>0.59*</b>	0.20	<b>0.41*</b>	0.23	1	
Stop Level	0.31	0.27	0.30	0.27	<b>0.35*</b>	1

Table 1: The correlation matrix shows the correlations between the stop levels and personality traits. There is a significant correlation between psychopathy and high stop levels. There is also a correlation between high levels of psychopathy and high levels of Machiavellianism and narcissism.

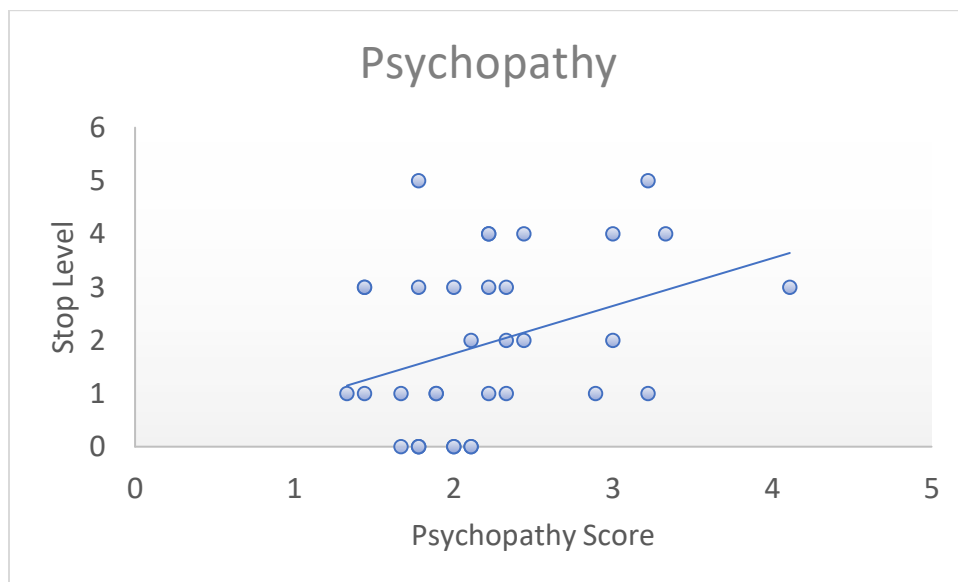


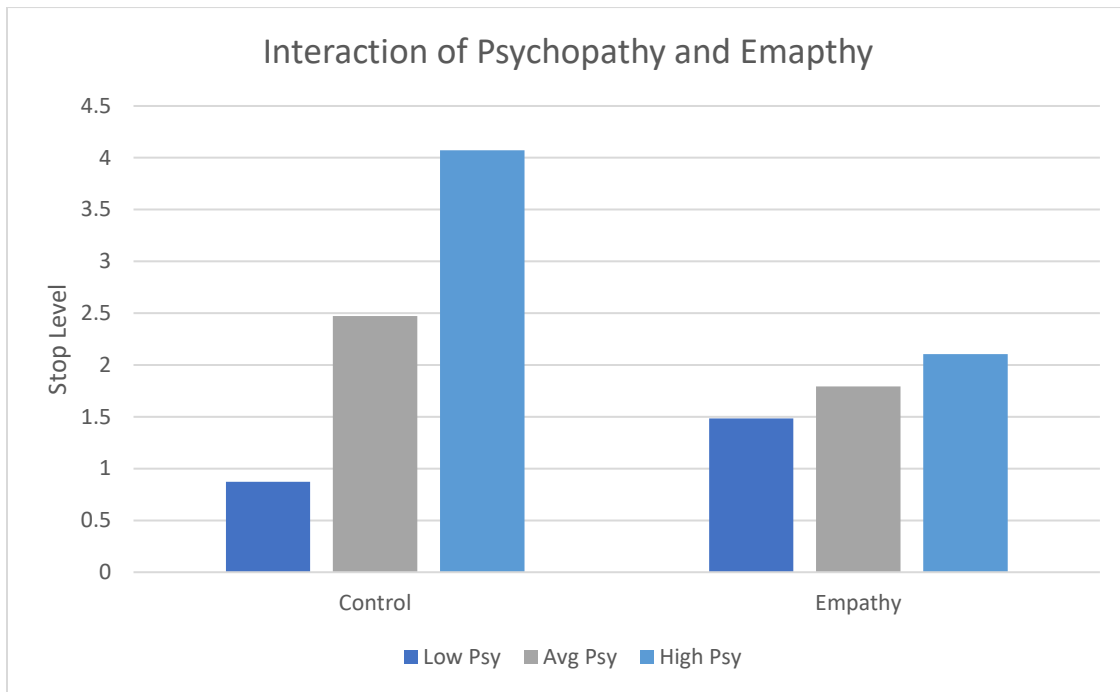
Figure 2: The graph shows the relationship between the scores of psychopathy and the stop level score. The higher the score of psychopathy ones have, the higher-stop level score one will have.

*Multiple Regression for Personality and Empathy on No-signals (N = 38)*

Variable	<i>B</i>	<i>SE B</i>	<i>β</i>	<i>F</i>	<i>R</i> <sup>2</sup>
Machiavellianism	0.41	0.47	0.16	0.81	0.07
Empathy	-1.64	1.43	-1.05		
MachxEmp	0.50	0.47	0.98		
Narcissism	0.59	0.50	0.23	0.47	0.04
Empathy	0.78	1.54	0.50		
NarsxEmp	-0.27	0.50	-0.54		
Psychopathy	1.54	0.48	0.60*	3.58	0.26
Empathy	1.96	1.05	1.25		
PsyxEmp	-1.04	0.48	-1.52*		
Total Personality	0.56	0.24	0.51*	1.79	0.15
Empathy	2.28	1.98	1.45		
TotalxEmp	-0.31	0.24	-1.63		

\**p* < .05. \*\**p* < .01.

*Table 2: Multiple regressions were run to calculate the stop levels based on the predictors of personality, empathy, and an interaction of both. There was significance only with psychopathy, the interaction of psychopathy and empathy, and total personality.*



*Figure 3:* A multiple regressions were run to show the interaction between the effect of the empathy condition on stop levels for those who contain high, average, or low levels of Psychopathy. Dark blue bars represent low levels of Psychopath, grey bars represent average levels of Psychopathy, and light blue bars represent high levels of Psychopathy.

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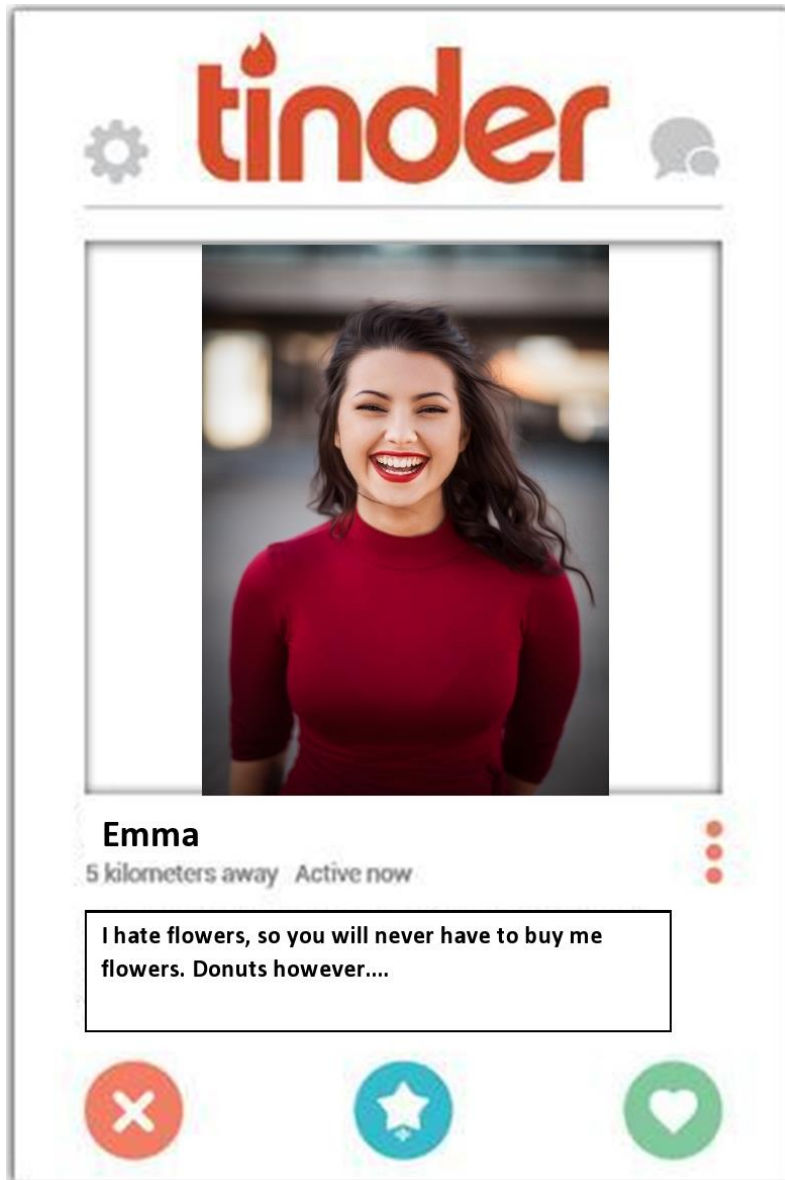
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## Appendices A: Tinder Profiles





**Ava**

5 kilometers away Active now



Foodie looking for a chef





**Zoey**

5 kilometers away Active now



Explorer, Dreamer, Surfer  
Looking for my adventure companion







**Olivia**

5 kilometers away Active now



**"You have to keep breaking your heart till it opens" - Rumi**





## Appendix B: Short Dark Triad Personality Inventory (SD3)

Please rate your agreement or disagreement with each item using the following guidelines.

1	2	3	4	5
Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree

### ***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 C: No Signal Levels

1: Thank you for your interest, but I don't think we are an ideal match. [1 not]

2: No, I don't think we will work out [1 no, 1not = 2]

3: No, I do not want to date you, not at this time. [1 no, 2 not = 3]

4: No, I really do not want to date you, no, please stop. # this is important because when we designed it, we created it so that the number of Nos and Nots increased. It's ok if it's a mistake, but a footnote will be needed.

5: No, seriously. I really do not want to talk to you anymore. No, please stop. [2 Nos, 1 not, 1 stop]

End: The partner ends the conversation and the computer program tells the participant: "The conversation was ended."