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THE ROLE OF ANALYTIC THINKING AND MORALITY IN PERCEPTIONS OF SEXUAL  
CONSENT

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## ABSTRACT

Sexual misconduct is a serious concern on college campuses. Overall, intervention efforts have proven unsuccessful (Bachar & Koss, 2001; Blackwell, Lynn, Vanderhoff & Gidycz, 2003; Breitenbecher, 2000; Ullman, 2003) and some scholars attribute this to a lack of theoretical basis (Morrison, Hardison, Mathew & O'Neil, 2004; Testa & Livingston, 2009). Drawing on theories from psychology and criminology, this project uses a multi-disciplinary approach to consider the relationship between moral foundations, cognitive abilities, and perceptions of sexual consent. Specifically, the interest lies in examining how individual differences in morality and cognitive ability influence perceptions of consent among college students. Overall, results showed weak but significant relationships between moral foundations and perceptions of consent. The role of cognitive abilities in this relationship, implications, and future directions are discussed.

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## INTRODUCTION

### Background

Sexual misconduct is a serious concern among college students. Studies have found that one in five female college students will experience sexual violence while completing their college education (Black et al., 2011; Krebs, Lindquist, Warner, Fisher, & Martin, 2007) and 5% of the female student population report being raped every year (Kilpatrick, Resnick, Ruggiero, Conoscenti, & McCauley, 2007; Mohler-Kuo, Dowdall, Koss, & Wechsler, 2004). As the number of students affected by this type of violent crime rises, the problematic nature of sexual misconduct becomes a more prevalent concern for both campuses and society.

The costs of sexual violence can be incredibly steep for victims, institutions and society. Sexual victimization can result in significant short-term and long-term effects on physical, mental and sexual health (for review see Jewkes, Sen & Garcia-Moreno, 2002). Physical health consequences include chronic diseases, headaches, gastrointestinal issues, menstrual symptoms, and damage to the genitals (Kimerling & Calhoun, 1994; Morrison, Quadara, & Boyd, 2007). Psychologically, victims report significantly higher rates of anxiety, depression, self-blame, loss of self-esteem, avoidance coping, self-harm, suicidal ideation, and Post Traumatic Stress Disorder (PTSD; Creighton & Jones, 2012; Kaukinen & DeMaris, 2005; Kilpatrick, Veronen & Resick, 1982; Koss, Gidycz & Wisniewski, 1987; Littleton, Horsley, John & Nelson, 2007; Miller, Handley, Markman, & Miller, 2010). With regards to sexual health, sexual violence can also result in the development of sexual dysfunctions and sexually transmitted infections

(Burgess & Holmstrom, 1979; Ellis, Calhoun & Atkeson, 1980; Gostin, Lazzarini, Alexander, Brandt, Mayer & Silverman, 1994; Jenny et al., 1990). Researchers have found that 59% of sexual assault victims reported one or more sexual dysfunction and 69% of those victims viewed their assault as the cause of the condition (Becker, Skinner, Abel & Cichon, 1986).

Multiple studies have indicated that sexual violence can impact social functioning (Ellis et al., 1980; Kilpatrick, Saunders, Veronen, Best & Von, 1987; Hanson, Sawyer, Begle & Hubel., 2010). Studies indicate that victims often engage in socially isolating behaviors following assault (Hanson et al., 2010). A meta-analysis showed that victims decreased social contact with friends and family in the weeks following their assault (Golding, Wilsnack, & Cooper, 2002). Additionally, many victims report significant struggles with romantic relationship following victimization, as well as difficulties with intimacy and trust (Helman, 2014; Herman, 2002). For college students, sexual victimization is linked with an increased likelihood of social binge drinking and drug use (Benson, Gohm, & Gross, 2007; McCauley, Calhoun, & Gidycz, 2010; Testa & Livingston, 2009), lower academic achievement (Combs, Jordan & Smith, 2014), and risky sexual behaviors (Campbell, Sefl & Ahrens, 2004; Deliramich & Gray, 2008). Research on revictimization indicates that each of these consequences also increases the vulnerability of victims to future assaults and poses serious concerns for posttraumatic growth and healing (Testa, Hoffman & Livingston, 2011).

In recent years, the federal government has encouraged and aided higher education institutions in their efforts to promote student safety. The *Campus Sexual Violence Elimination (SaVE) Act* requires higher education institutions to provide prevention and awareness programs for students, to increase victim support services and to ensure victims are aware of their rights and resources (*Campus Sexual Violence Elimination Act*, as part of *the Violence Against Women*

*Reauthorization Act (42 USC §13,701)*; Lindo, Siminski & Swensen, 2015). The White House Task Force to Protect Students from Sexual Assault also serves to raise public awareness through nation-wide campaigns such as “1 is 2 Many” and “It’s On Us,” and to provide access to information regarding response and prevention practices (see [NotAlone.gov](http://NotAlone.gov); Lindo et al., 2015). The White House Task Force is also a driving proponent of the decision to publicize schools under investigation by the Office for Civil Rights for mishandling sexual violence reports, which serve to provide “transparency” and raise “community dialogue” (U.S. Department of Education Press Office, 2014).

Efforts to address sexual violence can be costly. In 2010, the average cost for victim expenses, criminal justice system costs, and crime career costs was \$41,247 per sexual assault. When accounting for the pain and suffering of those effected, criminological, economic and statistical models estimate that the cost raises to \$199,642 per assault (McCollister, French & Fang, 2010). College culture might increase these costs for campus communities (Lindo et al., 2015). For example, on days surrounding Division 1A football games, sexual assault increased by 28%, which collectively could account for an additional \$193 million per year in sexual violence-related expenses (Lindo et al., 2015).

The explanations for these increased costs have focused on campus rape culture (Burnett, Mattern, Herakova, Kahl, Tobola, & Bornsen, 2009; Sutton & Simmons, 2014). “Rape culture” refers to “the perpetuation of rape myths, sexual objectification of women, and the media’s legitimization of sexual aggression and violence against women,” (Hildebrand & Najdowski, 2015). This idea is consistent with criminological social learning (Akers, 2011) and differential association (Sutherland, 1955) theories which suggest that deviance is socially learned. Specifically, in order to commit a crime, people must learn from their environment how to

successfully commit the crime, as well as the motives and reasoning supporting the deviant act (Sutherland, 1956; Sykes & Matza, 1957). The campus rape culture hypothesis states that campuses provide a rape-supportive environment where students are surrounded by the deviant attitudes, rationalizations and behaviors needed to commit acts of sexual violence, and therefore, campus culture fosters sexual misconduct (Sutton & Simmons, 2014). These researchers have specifically identified certain behaviors and attitudes, such as alcohol consumption, casual sex, acceptance of rape-supportive attitudes and high sociosexuality as contributors to the campus rape culture (Sutton & Simmons, 2014).

The social norms regarding dating behaviors on campuses significantly contribute to the campus rape culture (Adams-Curtis & Forbes 2004; Burnett et al., 2009; Flack et al., 2007; Sutton & Simmons, 2014). Researchers have defined “hookups” as sexual encounters, ranging from kissing to intercourse, between two people who do not hold any expectation of future sexual encounters or a committed relationship (Owen, Rhoades, Stanley & Fincham, 2010). Approximately 70% of college students report participating in a hookup (Paul & Hayes, 2002), and college students report experiencing nearly two times as many hookups as first dates (Bradshaw, Kahn & Saville, 2010). Several studies have linked hookup culture with an increased risk of sexual misconduct and victimization (Adams-Curtis & Forbes, 2004; Flack et al., 2007; Sutton & Simmons, 2014). The high prevalence of sociosexuality, defined by Sutton and Simmons (2014) as “a preference for casual sexual encounters”, alcohol consumption, and impulsive sexual activity in hookup culture have been identified as contributors to the elevated risk (Barriger & Velez-Blasini, 2013; Paul & Hayes, 2002; Sutton & Simmons, 2014). For men, sociosexuality is positively associated with rape-supportive attitudes and is a predictor of sexual assault perpetration (Yost & Zurbriggen, 2006). For women, sociosexuality contributes to an



increased risk of victimization and is inversely related to ability to appropriately respond to high-risk sexual situations (Nason & Yeater, 2012; Sakaguchi & Hasegawa, 2007; Sutton & Simmons, 2014). Furthermore, communication regarding expectations, intent, emotions and consent is reportedly infrequent and unclear between hookup partners (Bisson & Levine, 2009; Paul & Hayes, 2002). In combination with the high levels of intoxication and consequent impairment found within campus social life, coercive sexual experiences are common among college hookups (Burnett et al., 2009).

Sociosexuality and other contributors to campus rape culture, such as rape-supportive attitudes, are more common for some campus groups than others (Bleecker & Murnen, 2005; Burnett et al., 2009; Sanday, 2007). Collegiate athletic teams and fraternities have been of particular interest to researchers (Burnett et al., 2009). In 1995, a study on NCAA Division I schools found that student judicial boards received more sexual assault cases for male student athletes than any other students (Crosset, Benedict & McDonald, 1995). The gender-segregation and aggressive nature of sports has been found to contribute to values of dominance and competition among college athletes. Male college athletes gain status among peers from demonstrating acts of physical dominance and aggression, which creates a high risk environment for female sexual victimization (Burnett et al., 2009; Crosset et al., 1995).

Fraternity attitudes and beliefs about women and sexuality differ significantly from those held by students at large (Bleecker & Murnen, 2005). According to Martin and Humner (1989), fraternity culture values secrecy and loyalty, and emphasizes competition and superiority towards others. Combined with prioritizing in-group protection and encouraging excessive alcohol use, fraternity culture is conducive for the perpetration of sexual violence (Martin & Humner, 1989). Both fraternity men and sorority women are more likely to use alcohol before

sex than non-affiliated students (Lanza-Kaduce, Capece, & Alden, 2006). Given that the social fraternity and sorority community contains both an at-risk group of victims (Wuthrich, 2009) and an at-risk group of perpetrators (Bleecker & Murnen, 2005), many scholars find it unsurprising that sorority membership is directly related to sexual victimization (Copenhaver & Grauerholz, 1991; Franklin, 2010; Gross, Winslett, Roberts, & Gohm, 2006; Kalof, 1993; Minow & Einolf, 2009; Wuthrich, 2009). Consistent with the criminological routine activities theory (Cohen & Felson, 1979), crime is likely to occur within fraternity culture because it fosters the interaction of suitable victims (inebriated females with high sociosexual attitudes) and motivated offenders (fraternity men who hold rape-supportive attitudes and beliefs) within a rape-supportive culture that lacks “guardianship” (e.g. sober individuals, people who are willing to intervene, or a more protective environment).

College rape culture may also perpetuate the misconduct and rape-supportive culture by impacting crime reporting (Burnett et al., 2009; Sinozich & Langston, 2014). Societally, sexual violence is underreported at exceptionally high rates (Krebs, Lindquist, Berzofsky, Shook-Sa, & Peterson, 2016) and has been called a “silent epidemic” (Nicoletti, Bollinger, & Spencer-Thomas, 2009). In 2016, the Bureau of Justice Statistics published the “Campus Climate Survey Validation Study” which reported that less than 5% of sexual misconduct incidences were reported to law enforcement and less than 10% were reported to school administration (Krebs et al., 2016). The Bureau of Justice Statistics reported 80% of student victims failed to report a sexual assault to law enforcement, as compared to 67% of non-students of the same age (Sinozich & Langston, 2014). Many factors contribute to this problem, including the prevalence of alcohol consumption and associated fear of legal trouble or victim-blaming (Fisher, Daigle, Cullen & Turner, 2003; Krebs et al., 2007 ; Krebs et al., 2016), rape-supportive attitudes that

encourage victim-blaming and trivialize victim experiences, rape culture that contributes to victims' misunderstanding or hesitation to label their experiences as "rape," and the presence of male-dominated social organizations (e.g. fraternities and athletic teams) that use social control to mute reporting (Burnett et al., 2009; Harned, 2005). Some studies have suggested that low reporting rates can also be partially attributed to the hookup culture and lack of clear communication that is common in sexual situations (Burnett et al., 2009). Adams-Curtis and Forbes (2004) suggest that college students do not have the normative sexual negotiations that are common elsewhere. Instead, researchers argue that college norms obstruct effective sexual negotiations and that it is common for failed sexual negotiations to become coercive and result in acquaintance sexual misconduct, also known as "date rape" (Adams-Curtis & Forbes, 2004). Reporting may also be low due to ambiguity among college students regarding the definition of rape, responsibility, and consent, which may lead victims to question the validity of an assault claim (Adams-Curtis & Forbes, 2004; Burnett et al., 2009).

Intervention programs have been developed and administered on college campuses nation-wide (U.S. Department of Justice, 2005), but there is little evidence that these efforts have reduced sexual misconduct or decreased the frequency of high-risk behaviors long-term (for reviews see Bachar & Koss 2001; Blackwell, Lynn, Vanderhoff, & Gidycz, 2003; Breitenbecher, 2000; Ullman, 2003). While some studies have demonstrated success, these successful findings have been difficult to replicate (Breitenbecher & Gidycz, 1998; Breitenbecher & Scarce, 1999) or face significant practical limitations (Rothman & Silverman, 2007). Meta-analytic studies show that the vast majority (more than 80%) of college intervention efforts have mixed or null results (Anderson & Whitson, 2005; Morrison, Hardison, Mathew & O'Neil, 2004; Testa, Hoffman, Livingston & Turrisi, 2010).

Traditional intervention programs have focused on improving students' sexual violence awareness. These programs have educated students about sexual violence, addressed commonly held misconceptions, and provided safety tips (Katz & Moore, 2013). More recently, bystander intervention training programs have been introduced to campus intervention efforts and have gained attention nationwide. These bystander intervention programs have demonstrated more promising results than traditional education-awareness efforts, and following these trainings students demonstrated increases in helping behaviors and decreases in rape-supportive attitudes and rape intentions (Katz & Moore, 2013). Bystander intervention programs do not target perpetrators, however, and consequently results do not indicate significant decreases in perpetration behaviors (Katz & Moore, 2013).

### **Current Study**

Generally, efforts on college campuses have failed to accomplish their primary goal: reducing sexual violence perpetration. Some scholars have noted the lack of theoretical bases for sexual misconduct interventions (Morrison et al., 2004; Testa & Livingston, 2009). Further, surprisingly little empirical research has been devoted to the implications of morality on perpetration. Drawing on theories from psychology and criminology, this project uses a multi-disciplinary approach to consider applications of morality to perceptions of sexual consent in order to aid theoretical development of effective sexual misconduct interventions.

Scholars have questioned if much of campus sexual misconduct can be explained by misperceptions of consent (e.g. Abbey, 1982, 1987; Bart & O'Brien, 1985; Warshaw, 1994). Most definitions of sexual violence are contingent on whether the participants involved in the

sexual act gave “consent,” yet consent is subject to interpretation (e.g. Hickman & Muhlenhard, 1999; McCormick, 1979). Between partners, consent relies on perception of communicated cues that can vary in clarity of intentions (Hickman & Muhlenhard, 1999). Consent is also subject to interpretation when outsiders, such as law enforcement or school administration, attempt to determine if an incident is to be considered sexual violence (Beres, 2007). When the sexual violence is perpetrated by a known acquaintance there is greater likelihood of conflicting consent interpretations (Check & Malamuth, 1983; Temkin, 2000). This makes consent an especially pertinent issue among the college population since the majority of sexual misconduct incidences are perpetrated by acquaintances (Fisher, Cullen, & Turner, 2000; Krebs et al., 2007; Ullman, Karabatsos & Koss, 1999).

Sexual consent can be communicated many different ways. Much of the empirical research has focused on gender differences in sexual communication and perceptions of consent (e.g. Abbey, 1987; Cupach & Metts, 1991; Hickman & Muhlenhard, 1999; Motley & Reeder, 1995). Some of these studies have been successful in determining gender differences in conceptualizing situational cues or messages indicating consent (or lack thereof; e.g. Motley & Reeder, 1995), yet many of these gender differences are small and inconsistent between studies (Hickman & Muhlenhard, 1999). The more significant variable between studies seems to be the method of communication. In 1979, McCormick was one of the first to differentiate types of sexual communication used to convey consent (McCormick, 1979). McCormick found that men and women both commonly use “direct,” or straightforward, strategies as well as “indirect,” or more subtle strategies to communicate both initiation of and response to sexual activities. Hickman and Muehlenhard (1999) expanded upon this and established a seven factor model to explain sexual communication types. This model included verbal and nonverbal subtypes of

McCormick's (1979) direct and indirect categories, and a category that included situations where the recipient's response is a lack of any response (Hickman & Muehlenhard, 1999). Additionally, this study indicated that some consent responses are less ambiguous than others (Hickman & Muehlenhard, 1999) which has important implications for understanding how miscommunications of consent cues can contribute to sexual violence. More recently, Peck Stevenson, Lembo, Karg, and Pagano (2013) conducted a study among Penn State students using a nine factor model of consent and refusal response types that is used by the Office of Student Affairs to train members of the conduct board. This model included the verbal and nonverbal response types seen in prior research (e.g. Hickman & Muehlenhard, 1999), and it also emphasized the clarity in response type by categorizing the verbal and nonverbal responses into "explicit" consent, "explicit" refusal, or "ambiguous" responses (Peck et al., 2013). They found that ambiguity in consent cues significantly increased participants' likelihood of perceiving consent (Peck et al., 2013). Peck and colleagues (2013) also addressed how individual differences in empathy might predict different perceptions of consent and found that high empathy males responded with consent ratings equivalent to women but that low empathy males were significantly more likely to report consent was given for vignettes with explicit refusal or ambiguous responses. These findings indicated that interventions should target situations involving ambiguous consent cues and explicit refusals. More recent research has attempted to replicate these findings and apply them to classroom interventions (Lembo, 2014). Lembo (2014) had participants view a video segment illustrating a situation in which a man and a woman were flirting, and then participants received a brief lesson regarding consent. Lembo (2014) expected low empathy males to be impacted by the lesson and then to demonstrate consent ratings more similarly to high empathy males, but results suggested that only females were impacted by the

lesson. Results from Lembo's (2014) study demonstrated the significance of ambiguity in consent cues in perceptions of consent, but findings were somewhat inconclusive and suggest interventions require both an understanding of consent as well as effective methods for changing attitudes and beliefs.

Research on persuasion has found that messages consistent with individuals' personal characteristics are most likely to result in prosocial attitude change (Briñol & Petty, 2006). Researchers have looked at how framing message content and framing method of message delivery can impact persuasiveness. By personalizing the messages through directing the point of view toward the reader (Burnkrant & Unnava, 1998) and altering the content to be consistent with specific cultural heritages of participants (Herek, Gillis, Glunt, Lewis, Welton & Capitanio, 1998), research has found that catered messages are more persuasive than generalized, impersonal ones. Additional persuasion research has found that matching people's moral motivations to persuasive messages can help increase prosocial behavior. Kidwell, Farmer and Hardesty (2013) attempted to increase recycling behaviors by giving participants a persuasive recycling message. Results showed that Kidwell, Farmer, and Hardesty (2013) were successful in changing participants' recycling efforts, but only when those participants received the pro-recycling message that was consistent with their moral orientation. Similarly, Hartbauer (2015) found that participants who received anti-sexual misconduct messages congruent with their moral orientation were significantly more impacted by the message than those who received a morally "mismatched" message or a neutral message. This assertion of individuals holding different moralities or moral orientations is consistent with a rather recent theory of morality (Haidt & Graham, 2007; Haidt & Joseph, 2004), and these findings support both the multiple

morality theory base and suggest that morality should be considered when developing effective prosocial intervention programs.

Prior to the 1990s, morality research had been documented by cognitive psychologists who claimed that morality consisted of beliefs regarding perceptions of fairness (or justice) and care for others (Gilligan, 1982; Kohlberg 1969, 1971). In the early 2000s, cultural psychologists argued that morality was more complex (Haidt, Koller, & Dias, 1993; Miller, 1994). Scholars such as Shweder, Much, Mahapatra, and Park (1997) demonstrated that “ethics of community” and “ethics of divinity” also contribute to moral judgments which led to a new conceptual model of morality, the Moral Foundations Theory (MFT, Haidt & Graham, 2007; Haidt & Joseph, 2004). According to MFT, created by Johnathan Haidt and colleagues, there are five moral foundations: (1) No Harm/Care, (2) Fairness/Reciprocity, (3) Ingroup/Loyalty, (4) Authority/Respect, and (5) Purity/Sanctity. These five foundations cluster into two overarching categories referred to as “binding foundations” and “individualizing foundations” (Graham et al., 2011). Individualizing foundations refer to the ethics of care and fairness (Napier & Luguri, 2013), and individualizing-oriented individuals value protecting others from harm and unfair treatment (Silver & Abell, 2014). Binding foundations (Khan & Stagnaro, 2016; Shweder et al., 1997) include the ethics of community and divinity, as categorized by group loyalty (Ingroup/Loyalty), respect for authority (Authority/Respect), and adherence to cultural beliefs, practices and religion (Purity/Sanctity; Silver & Abell, 2014). People with strong binding-oriented morals place high value on the well-being of the group or community, on maintaining group cohesion, and on adhering to cultural practices and beliefs (Graham, Haidt & Nosek, 2009; Khan & Stagnaro, 2016; Silver & Abell, 2016).



MFT has primarily been applied to the field of politics and decision making. Studies have found that MFT can explain differences in the ideologies and moral decision making between American political conservatives and liberals (Graham et al., 2009; Pennycook, Cheyne, Barr, Koehler & Fugelsang, 2014). Studies indicate that while liberals prioritize the individualizing moral foundations above the binding, conservatives report valuing all five foundations more equally (Khan & Stagnaro, 2016).

More recently, the criminological literature has seen applications of MFT in explaining deviance. Until recently, sociological and criminological researchers refrained from exploring morality despite the attributions given to it by some of the founding academics in criminology (Hitlin & Vaisey, 2013; Silver & Abell, 2016). For example, Durkheim (Durkheim & Simpson, 1933; Durkheim & Fauconnet, 1961) emphasized how moral rules create the “collective consciousness” of society that guide behavior towards moral norms and group cohesiveness (Antonaccio & Tittle, 2008), and Hirschi claims that social bonds and attachments rely on morality to mediate the relationship between environmental risk factors and delinquency in youth (Hirschi, 1969; Matsueda & Heimer, 1987). While many studies have indicated that morality plays a role in predicting crime (Bachmann, Paternoster, & Ward, 1992; Gallupe & Baron, 2014; Grasmick & Green, 1981; Paternoster & Simpson, 1996; Rogers, Smoak & Liu, 2006), it was not until recently that the role was given more attention among criminological scholars (Silver & Abell, 2016; Wikström & Treiber, 2007). Wikström and Treiber (2007) established the Situational Action Theory (SAT), a criminological theory explaining the interaction between environmental and personal (e.g. individual morality or personality characteristics) factors in causing criminal action (e.g. acts of sexual violence; Wikström, Oberwittler, Treiber & Hardie, 2012). SAT is the first criminological theory to incorporate morality as the predominant causal

factor in deviance while simultaneously explaining how it plays into misconduct theoretically (Antonaccio & Tittle, 2008). Few studies have empirically tested the claims of SAT given its relative youth (Antonaccio & Tittle, 2008), but a few select studies have demonstrated promising findings consistent with specific theoretical assumptions (such as Antonaccio & Tittle, 2008; Wikström & Svensson, 2010; Wikström et al., 2012). Silver and Abell (2016) recently conducted one of the first empirical studies investigating MFT and its implications for deviance by comparing participants' self-reported deviant behaviors and moral foundations. The questionnaire administered to college students measured the frequency with which participants engaged in deviant behaviors and found that binding foundations (operationalized as the "Loyalty-Authority-Purity" (LAP) scale) significantly predicted decreases in acts of deviance overall, except for the frequency of engaging in a physical fight that resulted in another person's injury (Silver & Abell, 2016). For physical fights, individualizing moral foundations was the significant predictor (Silver & Abell, 2016). Results from this study suggest that for acts of deviance that involve interpersonal altercations resulting in potential harm to another and the creation of a victim-perpetrator dynamic, individualizing moral foundations might be more predictive. Given that sexual misconduct is an interpersonal crime, results from Silver and Abell's (2016) study have important implications and suggest further investigation into the role of individualizing moral foundations in predicting deviance is necessary.

### **Hypotheses**

The goal of this project is to integrate the theoretical background from the psychological and criminological fields and to expand upon them to contribute to an empirically-based

understanding of sexual violence perpetration. Focusing specifically on college communities, this project investigates the relationship between different moralities identified by the MFT, analytic thinking by way of cognitive abilities, and perceptions of sexual consent. Specifically, the interest lies in examining how individual differences in morality and cognitive ability influence perceptions of consent among college students in order to contribute to theoretical development of effective sexual misconduct interventions.

**Hypothesis 1.** As mentioned, the MFT literature often groups the five foundations into the categories of binding and individualizing moral foundations (Graham et al., 2011). Research on moral and ideological differences between political conservatives and liberals found that conflicting opinions can be attributed to differences in binding and individualizing moralities. Combined with recent research by Silver and Abell (2016), I predicted that differences in moral orientation would reflect differences in perceptions of sexual consent.

Eliciting feeling of disgust with a story depicting legal but socially inappropriate sex, Pennycook and colleagues (2014) looked at differences in moral foundations and perceptions of “moral wrongness.” Participants who reported higher binding foundations were more likely to report higher levels of moral wrongness. Pennycook et al. (2014) suggested these findings supported a “Reflectionist” approach to morality that suggests, consistent with dual-process theory of cognition (Watson & Evans, 1975), that moral decision making involves an initial moral instinct (a heuristic that is quick, intuitive and error prone) which can be overridden by analytic thinking (higher-level thinking that is a longer, effortful and reflective process). Since high levels of binding foundations predicted high levels of moral wrongness, Pennycook and colleagues (2014) concluded that binding moralities predicted lower levels of cognitive reflection. Based off of these findings, I hypothesize that college students immersed in a rape-

supportive culture with more binding moral motivations will be more likely to perceive that consent was given in a sexual interaction (Hypothesis 1a).

While Pennycook and colleagues (2014) assumed disgust was the “default” response in their vignettes (Pennycook et al., 2014), the sexual consent vignettes likely have a different default. Research on the evolutionary development of morality indicates morality derives from adaptive instinctive emotions such as empathy, compassion, and shame (Churchland, 2012; de Waal, 2009). Social learning theorists (e.g. Akers, 2011) would argue these emotions are all experienced in interpersonal situations and thus are advantageous because they act as means for maintaining social control. The morals that provide social control are those that emphasize the well-being of the group, or the binding moral foundations. Applying social learning theory to the reflectionist account of cognitive thought, the intuitive response to the sexual consent vignettes should reflect the socially learned attitudes and values consistent with the environment. In the rape-supportive college environment, these learned attitudes would likely default to a higher likelihood of perceiving consent was given. Following this reasoning, individuals with higher binding moralities will not reflect upon their default, therefore I expect to see higher consent ratings. When consent cues are ambiguous, I expect the analytic reasoning to be more difficult and effortful, resulting in significantly less reflection from those less analytically motivated. Therefore, I hypothesize that the relationship between binding moral foundations and consent scores will be strongest when consent cues are ambiguous (Hypothesis 1b).

Pennycook and colleagues (2014) did not show significant findings for individualizing moral foundations, but other research suggests individualizing morality also plays an important role in moral decision making (Napier & Luguri, 2013; Paxton, Ungar &

Greene, 2012). Napier and Luguri (2013) found that when manipulated to think abstractly (arguably by a higher-level thinking process that may be similar to rational thinking), participants increased their emphasis on individualizing foundations and decreased their binding foundations when making moral judgments. These results indicate that reasoning has a significant relationship with individualizing morality (Napier & Luguri, 2013) which would suggest that those who place greater value on the individualizing moralities will be more likely to reflect and reason when presented with consent vignettes. Given the emphasis individualizing moral foundations place on the concern for the well-being of others (“do no harm”; Graham et al., 2009), I hypothesize that people who report more individualizing moral motivations will be less likely to perceive that consent was given in sexual interactions (Hypothesis 1c). In other words, those who value caring for and protecting others from harm will be more likely to veer on the side of caution so as not to harm a sexual partner by means of misinterpreting consent cues. As previously indicated, I expect ambiguous consent cues to require more effortful and difficult analytic thinking in order to reflect upon intuitions, so I also hypothesize that the relationship between individualizing moral foundations and perceptions of consent will be most apparent when consent cues are ambiguous (Hypothesis 1d).

**Hypothesis 2.** Consistent with Pennycook et al. (2014), I hypothesized that differences in analytic thinking would predict differences in moral judgments. Pennycook and colleagues (2014) suggest that analytic reasoning depends on both the willingness (defined as Analytic Cognitive Style, or ACS) and ability (defined as Cognitive Ability, or CA) of the individual. Results indicated, however, that CA predicted binding moral foundations better than ACS. I expect that those with high CA are capable of reflecting upon gut-intuitions and that these reflections will be consistent with the strength of individualizing moral foundations.

Considering that the “default” of intuition may be adaptive to the social environment and upheld by binding moral foundations that may support harmful deviance among college campuses (e.g. the campus rape culture that makes sexual misconduct acceptable and normative; Burnett et al., 2009), it would suggest that only those with high individualizing moralities will demonstrate any judgments inconsistent with their intuitions. When presented with sexual consent scenarios, I hypothesized that CA will interact with individualizing moral motivations to impact perceptions of consent (Hypothesis 2) where those with high CA and high individualizing moral motivations will be most likely to demonstrate significantly lower perceptions of consent. In other words, participants who reflect on their initial rape-supportive intuitions need high CA in order to reason and high individualizing moral motivations to result in a change from the intuitive response.

**Hypothesis 3.** Hypothesis 2 proposes that differences in CA will impact perceptions of sexual consent which suggests that individuals will naturally differ in their available cognitive resources (where higher CA results in more available cognitive resources). Additionally, research on cognitive load indicates that situational factors, or social contexts, can also impact availability of cognitive resources (Fine, 2006; Suter & Hertwig, 2011) which would suggest that the relationship between CA and cognitive load would be significant in predicting perceptions of sexual consent. Research on cognitive load has looked at how load may affect the relationship between priming and social intuitive judgments (Thompson, Moskowitz, Chaiken & Bargh, 1994). Results have shown that participants who were motivated to be accurate and had available “attentional resources” (or who were not under a condition of load) were able to “resist assimilation” and respond in a manner inconsistent with the primed intuitions (Thompson et al., 1994). When applied to moral judgments, Suter and Hertwig (2011) found that people who take longer to respond to moral dilemmas respond in more rational or “consequentialist” manners

than those who respond quickly and based off their emotions (“deontological” responses). They determined that time acted to limit cognitive resources and ability to reflect and reason (Suter & Hertwig, 2011).

I hypothesized that perceptions of consent will be higher under conditions of cognitive load (Hypothesis 3a) due to lack of cognitive resources available under load conditions which would inhibit the ability to reflect on intuitions that may be consistent with rape-supportive attitudes found in the college community. I also hypothesized that this relationship would be strongest for scenarios in which consent cues were ambiguous (Hypothesis 3b) similar to Hypothesis 1a and 1b.

**Hypothesis 4.** Past research has indicated that not all individuals in the college population hold rape-supportive ideologies to the same degree (Bleecker & Murnen, 2005; Sanday, 2007; Burnett et al., 2009). Specifically, social fraternities, sororities and collegiate athletic teams have been identified as groups of concern (Crosset et al., 1995; Martin & Humner, 1989). Social learning theory (Akers, 2011) also suggests that stronger social bonds contribute to strengthened group morality and likelihood to adapt personal deviant motives, attitudes and values (Akers, 2011, Sutherland, 1956; Sykes & Matza, 1957). Combining these two theories, I hypothesized that identification as a member of a social fraternity, sorority or collegiate sports team would result in higher perceptions of sexual consent, especially for vignettes in which consent cues were ambiguous (Hypothesis 4).

## **METHODS**

### **Participants**

Participants were 257 undergraduate students at the Pennsylvania State University who received course credit for participating. The majority of participants (63.8%) self-identified as white, 9.4% as black/African American, 12.2% as Asian/ Pacific Islander, 7.1 % as Hispanic or Latino, and 7.5% as “other” which included interracial identification or a race not listed. 10.6% of the sample identified as a member of a collegiate athletic team and 20.9% identified as a member of a social fraternity or sorority, making the high-risk group membership 29.5% of the sample.

### **Procedure**

Before beginning the experiment, participants read and signed an informed consent form. All participants were instructed to put the headphones on when beginning the experiment and not to remove them until they completed the experiment. Participants were positioned in front of computers and given instructions in which they were told they would complete half of the questions in the experiment while concurrently performing a listening task. Instructions explained that participants would hear a list of random words (e.g. block, boat, destroy, message, soldier, wonder) at a rate of one word per second and that they should hit the space bar on the keyboard when the word was the name of a color (red, yellow, orange, green blue or purple). Words were randomly selected such that a color name was presented 25% of the time.



Participants did not receive feedback for this task. Participants completed a brief practice trial to familiarize themselves with the listening task and to customize volume level.

All participants completed four sets of questions: the Moral Foundations Questionnaire (MFQ), a measure to evaluate perceptions of sexual consent, a cognitive ability (CA) measure, and demographic questions. The morality and consent questions were split and some participants completed the first set of morality and consent questions while completing the concurrent listening task, while others completed the second set with the concurrent task. Debriefing forms were provided before leaving.

## Measures

**Consent Measure.** Researchers have used a variety of measures to investigate perceptions of sexual consent, including self-report on personal sexual experiences (e.g. McCormick, 1979; Hall, 1998; Beres, Herold & Maitland, 2004), ratings of consent in response to hypothetical scenarios and vignettes (e.g. Burrow, 1997; Hickman & Muehlenhard, 1999; Humphreys & Newby, 2007), and records of impressions of sexual consent interactions over a period of time (e.g. Byers & Lewis, 1988; O'Sullivan & Byers, 1992).

Most sexual misconduct incidences on college campuses occur between a male perpetrator and a female recipient (Burnett et al., 2009). In this experiment, participants read twenty short vignettes, depicting an interaction between a man and a woman. Participants were asked to rate the extent to which the woman gave consent for sexual/romantic physical contact initiated by the man. The woman in these vignettes responded to the sexual advance of the man in one of three different ways: (1) she provided clear cues indicating consent to sexual advances

(Clear Yes), (2) she provided clear cues indicating refusal to sexual advances (Clear No), or (3) she did not provide any cues or her responses were unclear (Ambiguous). Because some of my hypotheses were specific to ambiguous vignettes, four Clear Yes, four Clear No, and twelve Ambiguous were included. Consistent with prior studies on cues indicating sexual consent (e.g. Hickman & Muehlenhard, 1999; Peck et al., 2013), the vignettes presented to participants included verbal and nonverbal responses (The complete set of vignettes can be found in Appendix A). Participants were asked to rate consent on a 6-point Likert scale (0 = “I strongly disagree that consent was given”; 5 = “I strongly agree that consent was given”). This response range was used to reduce confusion for participants who would also be completing the MFQ, which uses this response range.

**MFQ.** The MFQ is a 30-item self-report questionnaire that uses a 6-point Likert Scale (see Khan & Stagnaro, 2016; Low & Wui, 2016; Napier & Luguri, 2013; Rempala, Okdie & Garvey, 2016; Silver & Abell, 2016; Tilburt et al., 2013). The first half of the MFQ asks participants to indicate the extent to which they consider factors when deciding if something is right or wrong. Participants respond using a 6-point Likert scale where 0 = not at all relevant (This consideration has nothing to do with my judgments of right and wrong) and 5 = extremely relevant (This is one of the most important factors when I judge right and wrong). The second part asks participants to indicate to what extent they agree or disagree with the listed statements on a similar 6-point Likert scale (0 = strongly disagree, 5 = strongly agree). As mentioned, the MFQ evaluates people’s moral motivations based on MFT’s five foundations: (1) No Harm/Care, (2) Fairness/Reciprocity, (3) Ingroup/Loyalty, (4) Authority/Respect, (5) Purity/Sanctity (Graham et al., 2011). It has consistently demonstrated both internal reliability and validity (Graham et al. 2011; Davies, Sibley & Liu, 2014).

**Table 1**  
**Summary of scales and subscales, example questions, and scoring**

<i>Name</i>	<i>Measures</i>	<i>Example item</i>	<i>Scoring</i>
<b>Numeracy</b> (Schwartz et al., 1997)	CA	Imagine that we flip a fair coin 1,000 times. What is your best guess about how many times the coin would come up heads in 1,000 flips?	Accepted responses: 500, $\approx$ 500, 50%, or $\approx$ 50%  Correct responses scored 1 pt. Total CA score was average out of 9.
<b>Wordsum</b> (Huang & Hauser, 1998; Cheyne, et al., 2012)	CA	Circle the word that is synonymous with the word provided: <b>Edible:</b> (1) auspicious (2) eligible (3) fit to eat (4) sagacious	Correct answer: 1. (3) fit to eat  Correct responses scored 1 pt. Total CA score was average out of 9.
<b>Moral Foundations Questionnaire (MFQ)</b> (Graham et al., 2011)	Morality	Indicate your agreement or disagreement:  <b>No Harm/Care:</b> Compassion for those who are suffering is the most crucial virtue. <b>Fairness/Reciprocity:</b> When the government makes laws, the number one principle should be ensuring that everyone is treated fairly. <b>In-group/Loyalty:</b> People should be loyal to their family members, even when they have done something wrong. <b>Authority/Respect:</b> Respect for authority is something all children need to learn. <b>Purity/Sanctity:</b> Chastity is an important and valuable virtue.	<b>Scale:</b> (0-5)  See text description  Scores calculated by averaging scores in that foundation.  Individualizing (I-score): average of No Harm/Care and Fairness/Reciprocity  Binding (B-score): average of In-group/Loyalty, Authority/Respect and Purity/Sanctity
<b>Consent vignettes</b> (scenarios created for study)	Perceptions of sexual consent	Mark the extent to which you believe the woman in each scenario has given consent for sexual/romantic physical contact. <sup>1</sup>  <b>Clear Yes:</b> - <b>Verbal:</b> “Good. Let’s go.” - <b>Nonverbal:</b> In response, Carrie slides her hand inside John’s swimsuit. <b>Clear No:</b> - <b>Verbal:</b> “I don’t want to have sex with you; we really need to study.” - <b>Nonverbal:</b> Logan leans in to kiss her, but Danielle pushes him away and starts to leave. <b>Ambiguous:</b> - <b>Verbal:</b> “Hmm.” - <b>Nonverbal:</b> Ashley shrugs. <b>No Response:</b> Sydney continues to throw rocks into the stream.	<b>Scale:</b> (0-5) 0 = I strongly disagree that consent was given; 1 moderately disagree; I slightly disagree; 2 slightly agree; 3 moderately agree; 4 = I strongly agree that consent was given.  Clear Yes, Clear No and Ambiguous response scores were all calculated by averaging indicated responses of the corresponding vignettes.

<sup>1</sup>These are just examples of the response cues given in the vignettes. For entire collection of 20 vignettes see Appendix A.

**Cognitive Ability Measure.** Pennycook et al. (2014) found that CA can be predictive of differences in morality. Participants in this experiment answered questions similar to those used by Pennycook and colleagues (see Table 1). The CA measure consists of three Numeracy items and 10 Wordsum items. The Numeracy Test (Schwartz, Woloshin, Black & Welch, 1997) identifies the extent to which individuals have a basic understanding of probability and numbers (Schwartz et al., 1997), and the Wordsum is an abridged version of Thorndike's verbal intelligence test (Thorndike, 1942). Participants responded to ten items from the Wordsum. Both the Numeracy and Wordsum measures have demonstrated validity and reliability (Lipkus, Samsa & Rimer, 2001; Malhotra, Krosnick & Haertel, 2007).

## RESULTS AND DISCUSSION

Three participants failed to follow instructions and were removed from the sample. Final analyses included 254 participants ( $N = 254$ ; 147 women, 107 men;  $M_{\text{age}} = 19.37$  years). Accuracy on the concurrent listening task was exceedingly high ( $M = .95$ ,  $SD = .22$ ), and all scores reflected sincere efforts.

The moral foundations literature has focused on the individualizing and binding groupings of the five domains established by MFT and measured in the MFQ (e.g. Graham et al., 2009; Graham et al., 2011; Napier & Luguri, 2013; Pennycook et al., 2014; Silver & Abell, 2016). Following this trend, I scored the participants in the five moral foundations but also created a composite binding score and individualizing score. Score calculations were made in congruence with the MFQ score report (Graham et al., 2011). The individualizing composite score was calculated by averaging the scores from the No Harm/Care and Fairness/Reciprocity categories. The binding composite score was calculated by averaging the scores from the Ingroup/Loyalty, Authority/Respect, and Purity/Sanctity categories. The entire MFQ can be found in Appendix B. Overall, participants had stronger individualizing motivations ( $M = 3.64$ ,  $SD = .55$ ) than binding motivations ( $M = 2.81$ ,  $SD = .63$ ),  $F(1, 251) = 305.39$ ,  $p < .001$ . This is consistent with national surveys measuring morality with the MFQ (Graham et al., 2011).

Initial analyses on the cognitive ability (CA) measure indicated that certain items were either too difficult or too easy for this sample and did not provide any discriminatory value. I decided to remove items in which less than 30% or more than 90% of participants answered correctly. Four of the Wordsum items were removed. The final CA measure contained 6

Wordsum and 3 Numeracy items. Following removal, overall CA was low ( $M = .62, SD = .19$ ). The CA measure also had weak reliability ( $\alpha = .43$ ). Questions, answers, and scoring criteria can be found in Appendices C and D.

Overall, perceptions of consent were low ( $M = 1.50, SD = .54$ ), but this trend varied by consent type. For Clear Yes vignettes, participants reported very high perceptions of consent ( $M = 4.35, SD = .66$ ). For Clear No vignettes, participants reported very low perceptions of consent ( $M = .13, SD = .49$ ). For Ambiguous vignettes, participants reported relatively low perceptions of consent ( $M = 1.00, SD = .74$ ), suggesting that when consent cues were ambiguous, participants were more likely to view the ambiguity as as a refusal of consent. This trend is consistent with recent affirmative consent standards for college campuses adopted in certain state legislature (e.g. “Yes Means Yes”, SB-967, Cal. Ed. Code § 67386, 2016; “Enough is Enough,” S5965, N.Y. Legis. Assemb., 2015) and might reflect current campus efforts to help students understand the implications of ambiguous consent reposes and the need for a clear consent.

***Hypothesis 1a:*** *People with stronger binding moral motivations will be more likely to perceive that consent was given.*

Correlational analyses indicated a weak but significant direct relationship between binding moral foundations and perceptions of consent ( $r = .13, p = .05$ ), providing some support for the hypothesis.

***Hypothesis 1b:*** *People with more binding moral motivations will be more likely to perceive that consent was given, and this relationship will be strongest when consent responses are ambiguous.*

Correlational analyses were conducted for binding moral foundations and consent responses for the Clear Yes, Clear No, and Ambiguous vignettes. The Ambiguous vignettes demonstrated a weak but significant relationship with binding moral foundations ( $r = .14, p$

=.05), while Clear Yes and Clear No vignette types did not demonstrate a significant relationship ( $p > .05$ ). Consistent with Hypothesis 1b, results indicated that people with high binding moral motivations reported significantly higher consent ratings and this relationship was driven by the ambiguous consent vignettes.

***Hypothesis 1c:*** *People with stronger individualizing moral motivations will be less likely to perceive that consent was given.*

Correlation analysis indicated a weak but significant indirect relationship between I-score and ratings of consent ( $r = -.14, p = .05$ ). Consistent with Hypothesis 1c, participants with stronger individualizing moral motivations reported lower perceptions of consent.

***Hypothesis 1d:*** *People with more individualizing moral motivations will be less likely to perceive that consent was given, and this relationship will be strongest when consent cues are ambiguous.*

Regarding vignette type, individualizing moral foundations only related to consent scores reliably for the ambiguous vignettes ( $r = -.12, p = .05$ ). Clear Yes and Clear No vignettes did not demonstrate a significant correlation with individualizing moral foundations ( $p > .05$ ).

Consistent with Hypothesis 1d, this indicates that when consent cues were ambiguous, those with stronger individualizing moral foundations were significantly less likely to report the women in the vignettes as having indicated consent.

***Hypothesis 2:*** *CA will interact with individualizing moral motivations to impact perceptions of consent where those with high CA and high individualizing moral motivations will be most likely to demonstrate significantly lower perceptions of consent.*

A regression analysis was conducted to look at the effects of CA and individualizing moral foundations (I-score) on perceptions of consent. Results indicated that CA significantly predicted consent scores,  $\beta = -3.06, t(245) = -3.05, p = .003$ , as did individualizing moral

motivations,  $\beta = -.53$ ,  $t(245) = -2.89$ ,  $p = .004$ . The interaction between CA and individualizing moral foundations also predicted consent scores,  $\beta = .65$ ,  $t(245) = 2.40$ ,  $p = .017$ . These relationships explained a significant proportion of variance in consent scores,  $R^2 = .113$ ,  $F(3, 245) = 10.43$ ,  $p < .001$ . When participants indicated strong individualizing moral motivations (high I-score) or high CA, consent scores were significantly lower indicating belief of consent refusal. Highest consent scores, or strong agreement that consent was given in the vignettes, were found when participants indicated low I-scores and low CA. This suggests that the interaction between cognitive ability and individualizing moralities can impact perceptions of consent, and those who have low individualizing moralities and low cognitive abilities may be an at-risk group that should be targeted in sexual misconduct interventions.

***Hypothesis 3a: Perceptions of consent will be higher under conditions of cognitive load***

A repeated measures ANOVA was conducted to analyze the effect of cognitive load on perceptions of consent. Results indicated no significant main effect of cognitive load on consent scores ( $ps > .05$ ), failing to support the hypothesis.

***Hypothesis 3b: Perceptions of consent will be significantly higher under conditions of load when consent responses are ambiguous.***

With regards to vignette type and the effects of cognitive load on perceptions of consent, additional repeated measures ANOVAs were conducted. For Clear Yes, results indicated a significant main effect of load condition,  $F(1, 252) = 5.79$ ,  $p = .02$ . For Clear No, no significant main effects or interactions emerged. For Ambiguous, results showed no significant main effect of load condition. These findings did not provide support for Hypothesis 3b.

To explore potential confounding factors, additional analyses were conducted to determine if the timing of the load (load first or load second) affected consent responses. For



Clear Yes, the main effect of cognitive load was superseded by the interaction with timing of load,  $F(1, 252) = 19.88, p < .001$ . For participants with the cognitive load first, consent scores were significantly lower under conditions of load ( $M_{load} = 4.13, SD = .07; M_{no load} = 4.38, SD = .06$ ),  $F(1, 252) = 8.95, p = .003$ , contrary to prediction. For participants with the cognitive load task second, consent scores were higher under conditions of load ( $M = 4.56, SD = .08$ ) than not load ( $M = 4.34, SD = .06$ ),  $F(1, 252) = 11.97, p = .001$ , as anticipated. No load timing effects were present for Clear No vignettes, but a significant interaction effect emerged between the load condition and timing of load for Ambiguous vignettes,  $F(1, 252) = 44.64, p < .001$ . For participants with the cognitive load task first, consent scores were significantly lower under conditions of load ( $M = .92, SD = .07$ ) than not load ( $M = 1.12, SD = .07$ ),  $F(1, 252) = 14.22, p = .003$ , contrary to prediction. For participants with the cognitive load task second, consent scores were significantly higher under conditions of load ( $M = 1.16, SD = .07$ ) than not load ( $M = .85, SD = .07$ ),  $F(1, 252) = 32.08, p < .001$ , consistent with expectations. These results suggest there may be a confounding factor.

***Hypothesis 4: Individuals indicating participation in a social fraternity, sorority, or collegiate athletic team (high-risk group membership) will be more likely to perceive that consent was given.***

To evaluate the relationship between high-risk group membership and perceptions of consent, an ANOVA was conducted to evaluate the relationship between high-risk group membership and perceptions of consent. Results showed that no significant relationship exists between between group membership and total consent ( $p > .05$ ). Much of the research focuses on males in these high-risk groups (male athletes and fraternity members; Bleecker & Murnen, 2005; Crosset, Benedict & McDonald, 1995), yet initial analyses included both male and female participants identifying as a member of these high-risk social groups. Additional exploratory

analyses were conducted in which gender was accounted for. These results produced a nearly significant interaction effect between high-risk group membership and gender for vignettes in which consent cues were ambiguous,  $F(1,250) = 3.78, p = .053$ . Follow-up analyses were inconclusive, however, possibly due to the small number of participants who indicated high-risk group membership ( $N = 75$ , 43 women and 32 men). Future exploration into these high-risk groups and the relationship between morality, CA and consent are recommended.

## GENERAL DISCUSSION

The goal of this study was to integrate theories of deviance, cognitive psychology, and morality to develop a theoretical basis for sexual misconduct interventions. Results showed that a significant and weak direct relationship between binding morality and consent and a significant and weak indirect relationship between individualizing morality and consent. In combination with research that has shown that misconceptions of sexual consent can lead to sexual misconduct (Adams-Curtis & Forbes, 2004; Burnett et al., 2009), current results tentatively support relationships between morality and risks of sexual misconduct. These results are also consistent with Silver and Abell's (2016) findings that showed individualizing moralities decreased the likelihood of engaging in deviant behaviors that involved harming another. These results indicate that for interpersonal crimes, or those that result in a victim, individualizing moral foundations may predict decreased likelihood of perpetration.

The current data showed that Penn State students generally have stronger individualizing moral foundations than binding moral foundations. This is consistent with other morality research conducted on Penn State students (Peck et al., 2013) suggesting Penn State community should have low-risk of sexual misconduct. However, like other college communities, there is evidence to suggest otherwise (Sinozich & Langston, 2014), which raises questions. Perhaps some college students are socialized not to view nonconsensual sexual interactions as harmful. Sykes and Matzda (1957) have established that people are able to manage the cognitive dissonance created between conflicting criminal desires and moral values by using specific cognitive rationalizations to validate deviant behaviors. Some of these "neutralization techniques" include denial of responsibility (e.g. "it's not my fault," "it was out of my control" or "it was an accident"), denial of injury (e.g. "well, no one got hurt, so it wasn't that bad"), and

denial of the victim (e.g. “they were asking for it”; Sykes & Matza, 1957). Recent research has applied the theory of neutralization techniques to sexual violence and has found that neutralizing rape is a prevalent and problematic issue among college students (see Boyle & Walker, 2015). The conflicting results of the current study compared to the prevalence of sexual misconduct on campuses suggest that some of the people with high individualizing moral motivations may utilize neutralization techniques to commit acts of sexual misconduct without violating their moral values while others do not. Research has yet to determine what provokes certain individuals to use neutralization techniques in instances of sexual misconduct. Future investigative efforts may want to consider how binding moral motivations play a role in the likelihood of using neutralization techniques. Perhaps neutralizations are used to resolve conflicting individualizing and binding moral motivations.

The binding foundations, while not as prevalent among college students, still indicated a significant relationship to consent. Evolutionary morality research has indicated that morality is adaptive and therefore is subject to environmental influence (Suhler & Churchland, 2011; de Waal, 2008). In combination with a social learning theory (Akers, 2011) and differential association (Sutherland, 1956) account of deviance, this would indicate that the motives and attitudes to support engagement in criminal activity are learned through social interactions. The binding foundations emphasize the importance of social groups and social bonds, so the binding foundations are the moralities susceptible to societal influence and social learning. Assuming that higher perceptions of consent would contribute to more miscommunication between sexual partners and increases in sexual misconduct (e.g. Hickman & Muehlenhard, 1999), perhaps this suggests that individuals who prioritize binding moral foundations over individualizing moral foundations may be more likely to commit acts of sexual violence. This is especially concerning

given that the correlation between binding morality and perceptions of consent was driven by the vignettes that displayed ambiguous consent cues. This would suggest that individuals who are high on binding moral foundations may understand that “yes means yes” and “no means no,” but when the situation does not provide enough information to gather the intentions of a partner, those with high binding moral foundations are more likely to resort to cultural norms and assume consent was given, as opposed to those with higher individualizing moral foundations who would air on the side of caution.

It should be noted that overall the sample provided rather low perceptions of consent, so even those with high binding moral motivations, relative to the sample, reported more perceptions consistent with consent refusal than consent given. The correlation between binding moral foundations and perceptions of consent, however, still remained significant. Self-report questionnaires, such as the MFQ and vignettes in this study, are known to be subject to response bias in which participants are more likely to respond to questions in a manner believed to be socially desirable (Furnham, 1986). This response bias could potentially be diminishing the strength of the correlation, suggesting the significance of this relationship may be stronger than indicated and should be considered when theorizing consent and potential for intervention approaches.

Results from this study also provide tentative support for Pennycook et al.’s (2014) Reflectionist account of moral judgements and the role of analytic thinking. Reflection is a moot point, however, if the individual does not have the cognitive capacity (or CA) to reason. The results suggested that people with low individualizing moralities and low CA were more likely to infer consent was given despite clear refusal. This is important conceptually for interventions

because if the clearest indicators were not perceived as clear refusals, these individuals are at high-risk for sexual misconduct.

I also hypothesized that under conditions of load, perceptions of consent will be higher due to a lack of available cognitive resources that prevent reflection on rape-supportive intuitions. The results did not support this hypothesis. Results indicated that there was no significant main effect of cognitive load on perceptions of consent, but a significant interaction emerged between cognitive load and timing of load. Participants who answered the first set of vignettes under load (T1) demonstrated a small but significant decrease in perceptions of consent while those that received the second set of vignettes under load showed a small but significant increase in consent perceptions. These contradicting trends suggest the lack of significant support for the cognitive load hypotheses may be due to methodological issues. Further investigation is necessary to determine the effect of cognitive load on perceptions of consent.

Despite the robust findings indicating that membership in social groups such as social fraternities, sororities and athletic teams hold significantly greater rape-supportive attitudes and beliefs consistent with high-risk for sexual misconduct (Burnett et al., 2009; Crosset et al., 1995; Martin & Humner, 1989), results did not demonstrate any significant relationship between participants in these high-risk groups and perceptions of sexual consent. Exploratory analyses into the role of gender in these high-risk groups was marginally significant, suggesting future analyses might benefit from focusing solely on these high-risk groups to identify whether the research supporting their high rape-supportive attitudes is more indicative of the potentially perpetrating males as opposed to the potentially victimized females (e.g. Burnett et al., 2009). It is possible that combining the males and females of these high-risk groups weakened the relationship, but follow-up analyses could not confirm due to the sample size. Additionally, the

lack of a significant relationship could be the result of sexual misconduct interventions administered on campus. These high-risk groups have been subject to many mandatory intervention programs, and perhaps these results are representative of some intervention effectiveness.

Similarly, all participants in this study cannot be considered a naive sample. While high-risk groups may have additional or specialized intervention programs, all students on campus are subjected to campus-wide efforts to reduce sexual misconduct. While positive impacts of these efforts are welcome, it does pose potential limitations to the results of this experiment.

Lastly, the cognitive abilities measure used in this study has some significant limitations. Despite success in prior work, the reliability of the CA measure was considerably low, suggesting the validity of the CA measure warrants further investigation. Also, Pennycook et al.'s (2014) reflectionist account of morality indicates that analytic thinking involves both a willingness and ability to reason. In Pennycook et al.'s study (2014), they included an "analytic cognitive style" (ACS) variable. ACS was not included in this study because prior research has demonstrated that CA is more predictive (Pennycook et al., 2014). Results regarding CA, however, were rather inconclusive and thus raise the question if a measure of ACS is needed to better understand the relationship between CA and perceptions of consent.

### **Implications**

While most of the significant relationships found were weak, the significance provides guidance towards future avenues of exploration. Results supported prior research that indicated sexual situations with more ambiguous consent cues have greater likelihood of misperceptions of consent (e.g. Hickman & Muhlenhard, 1999). Intervention efforts taking an education model

would likely benefit from incorporating lessons that include the different ways consent can be communicated and strategies to diminish consent ambiguity. Findings also indicated that individualizing and binding moralities might significantly impact perceptions of sexual consent. Prior research on persuasion and prosocial attitude change has indicated that persuasiveness significantly increases when messages are framed consistent with individual moral motivations (Briñol & Petty, 2006; Hartbauer, 2015; Kidwell et al., 2013), so to improve sexual misconduct interventions, prosocial messages regarding sexual attitudes and perceptions of consent should be catered to individual moral foundations. Given that individualizing moral foundations somewhat predicted stronger perceptions of consent refusal in this study, the inconsistencies between the high prevalence of sexual misconduct on campuses and the high prevalence of individualizing moral foundations suggest some students may not be perceiving misperceptions of sexual consent as potentially harmful. To improve effectiveness, intervention programs should emphasize the impact of misperceptions of sexual consent and address common neutralization techniques, specifically through messages that appeal to the individual's binding and individualizing moral makeup. Further exploration into the role of cognitive ability, analytic thinking, high-risk group membership, and differences in individual morality on perceptions of consent would be prudent to continue with these preliminary findings and aid in the development of theoretically-supported and effective sexual misconduct interventions.



## Appendix A.1

### Consent Vignettes Part A

Read each of the following scenarios and mark the extent to which you believe the woman in each scenario has given consent for sexual/romantic physical contact.

- 0 = I strongly disagree that consent was given
- 1 = I moderately disagree that consent was given
- 2 = I slightly disagree that consent was given
- 3 = I slightly agree that consent was given
- 4 = I moderately agree that consent was given
- 5 = I strongly agree that consent was given

- \_\_\_\_\_ 1. Ashley and Nick are hanging out at Ashley's apartment watching a Penn State basketball game. Nick looks longingly at Ashley and asks if she wants to spend half-time with him in the bedroom. Ashley shrugs.
- \_\_\_\_\_ 2. While John and Jill are studying on John's bed, John turns to Jill and says, "Can't we have more fun with the lights off?" Jill responds, "Who knows?"
- \_\_\_\_\_ 3. Justin and Alexis are going to a friend's wedding. As Alexis comes out of the bedroom, Justin smiles and says, "Wow, that dress looks amazing on you. I wonder if it looks as good off of you as it does on." Alexis laughs and says, "You want to have sex now?" When Justin nods enthusiastically, Alexis looks at her watch and says, "Okay. How fast can you undress?"
- \_\_\_\_\_ 4. Cory and Samantha are skiing in Vermont. After hours on the slopes, they go inside to warm up. When Cory starts to lift up Samantha's shirt, she helps him take it off before unbuttoning his pants.
- \_\_\_\_\_ 5. While watching television, Ryan puts his arm around Erin and says, "You...me...bedroom?" Erin does not respond and remains quiet.

\_\_\_\_\_ 6. While cooking dinner together, George sneaks up behind Maya and kisses her neck.

Maya turns to look at him and raises her eyebrows.

\_\_\_\_\_ 7. After driving Maria home from a holiday party, Rick says, “I didn’t want to embarrass you in front of the others, but you look really hot tonight. Can I come in? I would love to see you naked.” Maria answers, “Hmm.”

\_\_\_\_\_ 8. Logan lies to help Danielle get out of trouble. Danielle thanks Logan and tells him that she owes him one. Logan leans in to kiss her, but Danielle pushes him away and starts to leave.

\_\_\_\_\_ 9. After closing the Starbucks shop for the day, Anton and Eleanor are cleaning up.

When they are done, Anton takes off his apron, turns to Eleanor, and says, “Hey, we’re alone. Do you want to help me take the rest of my clothes off? Could be fun.”

Eleanor continues to sweep the floor.

\_\_\_\_\_ 10. Chris and Lauren are studying on Chris’s bed. Chris puts his hand near her inner

thigh. Lauren responds, “I don’t want to have sex with you; we really need to study.”

## Appendix A.2

### Consent Vignettes Part B

Read each of the following scenarios and mark the extent to which you believe the woman in each scenario has given consent for sexual/romantic physical contact.

- 0 = I strongly disagree that consent was given
- 1 = I moderately disagree that consent was given
- 2 = I slightly disagree that consent was given
- 3 = I slightly agree that consent was given
- 4 = I moderately agree that consent was given
- 5 = I strongly agree that consent was given

- \_\_\_\_\_ 1. After running a 10k race together, Bruce and Sharon return to Bruce's house for showers and protein bars. Sharon tells Bruce that she is really tired. Bruce says that he is tired too, but that he has enough energy left to give her the sexual thrill of a lifetime. Sharon flops down on the bed.
- \_\_\_\_\_ 2. While walking along a secluded forest trail, Jake and Sydney stop to throw rocks into a stream. Jake puts his arms around Sydney's waist, leans up against her back and says, "This is very romantic. Have you ever had sex in the woods?" Sydney continues to throw rocks into the stream.
- \_\_\_\_\_ 3. Matt and Lauren go to a private beach to watch the sun set. Matt starts to play with Lauren's bikini strings, inching his hand under her bikini bottoms. Lauren pushes his hand away and covers herself with her towel.
- \_\_\_\_\_ 4. While watching The Voice, Michael puts his head on Claire's shoulder and his hand on the inside of her thigh and says, "I want you." Claire continues to watch The Voice.

- \_\_\_\_\_ 5. Daniel and Jessica spend the entire day at an amusement park. After their exciting date, they go back to Daniel's apartment for dinner and to watch a movie. During the movie, Jessica cuddles up next to Daniel who starts inching up Jessica's shirt. Jessica responds, "I'm so tired; I'm not in the mood for sex right now. Let's just watch the movie."
- \_\_\_\_\_ 6. At the end of a pool party, John and Carrie go inside. John starts touching and kissing Carrie. In response, Carrie slides her hand inside John's swimsuit.
- \_\_\_\_\_ 7. Mark and Diana are getting ready for a costume party. When Diana comes out in her nurse costume, Mark says, "Wow, you look beautiful. Want to ditch the party, get naked, and play doctor?" Diana answers, "Maybe, maybe not."
- \_\_\_\_\_ 8. Liam and Collette are going to a formal. After a great night, Liam walks Collette home and she invites him in. Liam leans in and whispers to Collette, "I want you." Collette asks, "You want to have sex with me, right now?" Liam whispers, "Yes." Collette whispers back, "Good. Let's go."
- \_\_\_\_\_ 9. After watching a movie in bed, Bruce tells Sharon that he is really tired, but wants to have sex anyway. Sharon gets up to turn off the lights.
- \_\_\_\_\_ 10. Jack and Leslie are baking a cake. Jack turns to Leslie and asks, "Do you think this frosting would taste better if I licked it off of you?" Leslie responds, "I don't know."

## Appendix B.1

### MFQ Part A

When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale:

[0] = not at all relevant (This consideration has nothing to do with my judgments of right and wrong)

[1] = not very relevant

[2] = slightly relevant

[3] = somewhat relevant

[4] = very relevant

[5] = extremely relevant (This is one of the most important factors when I judge right and wrong)

- \_\_\_\_\_ 1. Whether or not someone suffered emotionally
- \_\_\_\_\_ 2. Whether or not some people were treated differently than others
- \_\_\_\_\_ 3. Whether or not someone's action showed love for his or her country
- \_\_\_\_\_ 4. Whether or not someone showed a lack of respect for authority
- \_\_\_\_\_ 5. Whether or not someone violated standards of purity and decency
- \_\_\_\_\_ 6. Whether or not someone was good at math
- \_\_\_\_\_ 7. Whether or not someone cared for someone weak or vulnerable
- \_\_\_\_\_ 8. Whether or not someone acted unfairly
- \_\_\_\_\_ 9. Whether or not someone did something to betray his or her group
- \_\_\_\_\_ 10. Whether or not someone conformed to the traditions of society
- \_\_\_\_\_ 11. Whether or not someone did something disgusting
- \_\_\_\_\_ 12. Whether or not someone was cruel
- \_\_\_\_\_ 13. Whether or not someone was denied his or her rights
- \_\_\_\_\_ 14. Whether or not someone showed a lack of loyalty
- \_\_\_\_\_ 15. Whether or not an action caused chaos or disorder
- \_\_\_\_\_ 16. Whether or not someone acted in a way that God would approve of

## Appendix B.2

### MFQ Part B

Please read the following sentences and indicate your agreement or disagreement:

- [0] = strongly disagree  
 [1] = moderately disagree  
 [2] = slightly disagree  
 [3] = slightly agree  
 [4] = moderately agree  
 [5] = strongly agree

- \_\_\_\_\_ 1. Compassion for those who are suffering is the most crucial virtue.
- \_\_\_\_\_ 2. When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.
- \_\_\_\_\_ 3. I am proud of my country's history.
- \_\_\_\_\_ 4. Respect for authority is something all children need to learn.
- \_\_\_\_\_ 5. People should not do things that are disgusting, even if no one is harmed.
- \_\_\_\_\_ 6. It is better to do good than to do bad.
- \_\_\_\_\_ 7. One of the worst things a person could do is hurt a defenseless animal.
- \_\_\_\_\_ 8. Justice is the most important requirement for a society.
- \_\_\_\_\_ 9. People should be loyal to their family members, even when they have done something wrong.
- \_\_\_\_\_ 10. Men and women each have different roles to play in society.
- \_\_\_\_\_ 11. I would call some acts wrong on the grounds that they are unnatural.
- \_\_\_\_\_ 12. It can never be right to kill a human being.
- \_\_\_\_\_ 13. I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.
- \_\_\_\_\_ 14. It is more important to be a team player than to express oneself.
- \_\_\_\_\_ 15. If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.
- \_\_\_\_\_ 16. Chastity is an important and valuable virtue.

## Appendix C

### Numeracy Measure

#### Numeracy Questions and Scoring

Question	Accepted Responses
1. Imagine that we flip a fair coin 1,000 times. What is your best guess about how many times the coin would come up heads in 1,000 flips?	Accepted responses: 500, $\approx 500$ , 50%, or $\approx 50\%$
2. In Acme Publishing Sweepstakes, the chance of winning a car is 1 in 1,000. What percent of tickets for Acme Publishing Sweepstakes win a car?	Accepted responses: .1 or .1%
3. In the Big Bucks Lottery, the chance of winning a \$10 prize is 1%. What is your best guess about how many people would win a \$10 prize if 1,000 people each buy a single ticket to Big Bucks?	Accepted responses: 10, 10 people or $\approx 10$ (people)

## Appendix D

### Wordsum Vocabulary Measure

The following questions will test your vocabulary. Please circle the word that is synonymous with the word provided.

Lift*:	sort out	<b>raise</b>	value	enjoy
Discern:	<b>foresee</b>	engage	furnish	disturb
Efface:	<b>obliterate</b>	make level	elapse	embroider
Blunt:	<b>dull</b>	drowsy	deaf	doubtful
Accustom:	disappoint	customary	encounter	<b>be used to</b>
Chirrup*:	aspen	joyful	capsize	<b>chirp</b>
Edible*:	auspicious	eligible	<b>fit to eat</b>	sagacious
Malady:	<b>affliction</b>	bunched	arched	cloistered
Tactility:	<b>tangibility</b>	grace	subtlety	extensibility
Sedulous*:	muddled	sluggish	stupid	<b>assiduous</b>

Answers are displayed in bold.

\* Removed due to low discriminatory value. Percentage of participants scoring correctly was either below 30% or above 90%.



## REFERENCES

- Abbey, A. (1982). Sex differences in attributions for friendly behavior: Do males misperceive females' friendliness? *Journal of Personality and Social Psychology*, 42(5), 830.
- Abbey, A. (1987). Misperceptions of friendly behavior as sexual interest: A survey of naturally occurring incidents. *Psychology of Women Quarterly*, 11(2), 173-194.
- Adams-Curtis, L. E., & Forbes, G. B. (2004). College women's experiences of sexual coercion: A review of cultural, perpetrator, victim, and situational variables. *Trauma, Violence, & Abuse*, 5(2), 91-122.
- Akers, R. L. (1977). *Deviant behavior: a social learning approach*. Belmont, CA: Wadsworth.
- Akers, R. L. (2011). *Social learning and social structure: A general theory of crime and deviance*. Transaction Publishers.
- Anderson, L. A., & Whitson, S. C. (2005). Sexual assault education programs: A meta-analytic examination of their effectiveness. *Psychology of Women Quarterly*, 29, 374-388.
- Antonaccio, O., & Tittle, C. R. (2008). Morality, self-control, and crime. *Criminology*, 46(2), 479-510.
- Bachar, K., & Koss, M. (2001). From prevalence to prevention. *Sourcebook on Violence Against Women*. Thousand Oaks, CA: Sage Publications, 117-142.
- Bachman, R., Paternoster, R., & Ward, S. (1992). The rationality of sexual offending: Testing a deterrence/rational choice conception of sexual assault. *Law and Society Review*, 343-372.
- Barriger, M., & Vélez-Blasini, C. J. (2013). Descriptive and injunctive social norm overestimation in hooking up and their role as predictors of hook-up activity in a college student sample. *Journal of Sex Research*, 50(1), 84-94.

- Bart, P., & O'Brien, P. H. (1985). *Stopping rape: Successful survival strategies* (1-10). New York: Pergamon Press.
- Becker, J. V., Skinner, L. J., Abel, G. G., & Cichon, J. (1986). Level of postassault sexual functioning in rape and incest victims. *Archives of Sexual Behavior, 15*(1), 37-49.
- Benson, B. J., Gohm, C. L., & Gross, A. M. (2007). College women and sexual assault: The role of sex-related alcohol expectancies. *Journal of Family Violence, 22*(6), 341-351.
- Beres, M. A. (2007). 'Spontaneous' sexual consent: An analysis of sexual consent literature. *Feminism & Psychology, 17*(1), 93-108.
- Beres, M. A., Herold, E., & Maitland, S. B. (2004). Sexual consent behaviors in same-sex relationships. *Archives of Sexual Behavior, 33*(5), 475-486.
- Bisson, M. A., & Levine, T. R. (2009). Negotiating a friends with benefits relationship. *Archives of sexual behavior, 38*(1), 66-73.
- Black, M.C., Basile, K.C., Breiding, M.J., Smith, S.G., Walters, M.L., Merrick, M.T., Chen, J., & Stevens, M.R. (2011). *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention.
- Blackwell, L. M., Lynn, S. J., Vanderhoff, H., Gidycz, C., Koenig, L. J., Doll, L. S., O'Leary, A., & Pequegnat, W. (Eds.) (2004). *From childhood sexual abuse to adult sexual risk: Trauma, revictimization, and intervention*. Washington, DC: American Psychological Association.
- Bleecker, E. T., & Murnen, S. K. (2005). Fraternity membership, the display of degrading sexual images of women, and rape myth acceptance. *Sex Roles, 53*(7), 487-493.

- Boyle, K. M., & Walker, L. S. (2016). The Neutralization and Denial of Sexual Violence in College Party Subcultures. *Deviant Behavior, 37*(12), 1392-1410.
- Bradshaw, C., Kahn, A. S., & Saville, B. K. (2010). To hook up or date: Which gender benefits?. *Sex Roles, 62*(9-10), 661-669.
- Breitenbecher, K. H. (2000). Sexual assault on college campuses: Is an ounce of prevention enough?. *Applied and Preventive Psychology, 9*(1), 23-52.
- Breitenbecher, K. H., & Gidycz, C. A. (1998). An empirical evaluation of a program designed to reduce the risk of multiple sexual victimization. *Journal of Interpersonal Violence, 13*(4), 472-488.
- Breitenbecher, K. H., & Scarce, M. (1999). A longitudinal evaluation of the effectiveness of a sexual assault education program. *Journal of Interpersonal Violence, 14*(5), 459-478.
- Briñol, P., & Petty, R. (2006, August 4). Fundamental Processes Leading to Attitude Change: Implications for Cancer Prevention Communications. *Journal of Communication*.
- Burgess, A. W., & Holmstrom, L. L. (1979). Adaptive strategies and recovery from rape. *Coping with life crises, 353-365*.
- Burnkrant, R., & Unnava, R. (1989). Self-referencing: A strategy for increasing processing message content. *Personality and Social Psychology Bulletin, 15*, 628-638.
- Burnett, A., Mattern, J. L., Herakova, L. L., Kahl Jr, D. H., Tobola, C., & Bornsen, S. E. (2009). Communicating/muting date rape: A co-cultural theoretical analysis of communication factors related to rape culture on a college campus. *Journal of Applied Communication Research, 37*(4), 465-485.
- Burrow, J. J. (1997). *Men's and women's perceptions of verbal and nonverbal consent for sexual intercourse*. Unpublished master's thesis. University of the Pacific, Stockton, CA.

- Byers, E. S., & Lewis, K. (1988). Dating couples' disagreements over the desired level of sexual intimacy. *Journal of sex research*, 24(1), 15-29.
- Campbell, R., Sefl, T., & Ahrens, C. E. (2004). The impact of rape on women's sexual health risk behaviors. *Health Psychology*, 23(1), 67.
- (2013) *Campus Sexual Violence Elimination Act (SaVE)*. Part of the *Violence Against Women Reauthorization Act (42 U.S.C. §13,701)*. Amendments to §485 of the *Higher Education Act of 1965 (20 U.S.C. § 1092)*.
- Check, J. V., & Malamuth, N. M. (1983). Sex role stereotyping and reactions to depictions of stranger versus acquaintance rape. *Journal of Personality and Social Psychology*, 45(2), 344.
- Cohen, L. E., & Felson, M. (1979). Social change and crime rate trends: A routine activity approach. *American sociological review*, 588-608.
- Copenhaver, S., & Grauerholz, E. (1991). Sexual victimization among sorority women: Exploring the link between sexual violence and institutional practices. *Sex Roles*, 24(1), 31-41.
- Creighton, C. D., & Jones, A. C. (2012). Psychological profiles of adult sexual assault victims. *Journal of forensic and legal medicine*, 19(1), 35-39.
- Crosset, T. W., Benedict, J. R., & McDonald, M. A. (1995). Male student-athletes reported for sexual assault: A survey of campus police departments and judicial affairs offices. *Journal of Sport and Social Issues*, 19(2), 126-140.
- Cupach, W. R., & Metts, S. (1991). Sexuality and communication in close relationships. *Sexuality in close relationships*, 93-110.
- Davies, C. L., Sibley, C. G., & Liu, J. H. (2014). Confirmatory factor analysis of the Moral Foundations Questionnaire. *Social Psychology*.

- Deliramich, A. N., & Gray, M. J. (2008). Changes in women's sexual behavior following sexual assault. *Behavior Modification, 32*(5), 611-621.
- DeMaris, A., & Kaukinen, C. (2005). Violent victimization and women's mental and physical health: Evidence from a national sample. *Journal of Research in Crime and Delinquency, 42*(4), 384-411.
- De Waal, F. (2009). *Primates and philosophers: How morality evolved*. Princeton University Press.
- Dilchert, S., Ones, D. S., Davis, R. D., & Rostow, C. D. (2007). Cognitive ability predicts objectively measured counterproductive work behaviors. *Journal of Applied Psychology, 92*(3), 616.
- Durkheim, E., & Fauconnet, P. (1961). *Moral Education: A Study in the Theory and Appl. of the Sociology of Education*. Free Press of Glencoe.
- Durkheim, E., & Simpson, G. (1933). *Emile Durkheim on the division of labor in society*.
- Ellis, E. M., Calhoun, K. S., & Atkeson, B. M. (1980). Sexual dysfunction in victims of rape: Victims may experience a loss of sexual arousal and frightening flashbacks even one year after the assault. *Women & Health, 5*(4), 39.
- Fine, C. (2006). Is the emotional dog wagging its rational tail, or chasing it? Reason in moral judgment. *Philosophical explorations, 9*(1), 83-98.
- Fisher, B. S., Cullen, F. T., & Turner, M. G. (2000). The Sexual Victimization of College Women. Research Report.

- Fisher, B. S., Daigle, L. E., Cullen, F. T., & Turner, M. G. (2003). Reporting sexual victimization to the police and others: Results from a national-level study of college women. *Criminal justice and behavior, 30*(1), 6-38.
- Flack Jr, W. F., Daubman, K. A., Caron, M. L., Asadorian, J. A., D'Aureli, N. R., Gigliotti, S. N., ... & Stine, E. R. (2007). Risk factors and consequences of unwanted sex among university students: Hooking up, alcohol, and stress response. *Journal of Interpersonal Violence, 22*(2), 139-157.
- Franklin, C. A. (2010). Physically forced, alcohol-induced, and verbally coerced sexual victimization: Assessing risk factors among university women. *Journal of Criminal Justice, 38*(2), 149-159.
- Frederick, S. (2005). Cognitive reflection and decision making. *The Journal of Economic Perspectives, 19*(4), 25-42.
- Furnham, A. (1986). Response bias, social desirability and dissimulation. *Personality and individual differences, 7*(3), 385-400.
- Gallupe, O., & Baron, S. W. (2014). Morality, self-control, deterrence, and drug use: Street youths and situational action theory. *Crime & Delinquency, 60*(2), 284-305.
- Gilligan, C. (1982). In a different voice. Harvard University Press.
- Golding, J. M., Wilsnack, S. C., & Cooper, M. L. (2002). Sexual assault history and social support: Six general population studies. *Journal of Traumatic Stress, 15*(3), 187-197.
- Gostin, L. O., Lazzarini, Z., Alexander, D., Brandt, A. M., Mayer, K. H., & Silverman, D. C. (1994). HIV testing, counseling, and prophylaxis after sexual assault. *JAMA, 271*(18), 1436-1444.

- Graham, J., Haidt, J., & Nosek, B. A. (2009). Liberals and conservatives rely on different sets of moral foundations. *Journal of personality and social psychology*, *96*(5), 1029.
- Graham, J., Nosek, B. A., Haidt, J., Iyer, R., Koleva, S., & Ditto, P. H. (2011). Mapping the moral domain. *Journal of personality and social psychology*, *101*(2), 366.
- Grasmick, H. G., & Green, D. E. (1981). Deterrence and the morally committed. *The Sociological Quarterly*, *22*(1), 1-14.
- Gross, A. M., Winslett, A., Roberts, M., & Gohm, C. L. (2006). An examination of sexual violence against college women. *Violence against women*, *12*(3), 288-300.
- Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, *20*(1), 98-116.
- Haidt, J., & Joseph, C. (2004). Intuitive ethics: How innately prepared intuitions generate culturally variable virtues. *Daedalus*, *133*(4), 55-66.
- Haidt, J., Koller, S. H., & Dias, M. G. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of personality and social psychology*, *65*(4), 613.
- Hall, D. S. (1998). Consent for sexual behavior in a college student population. *Journal of Human Sexuality*, *1*, 1-16.
- Hanson, R. F., Sawyer, G. K., Begle, A. M., & Hubel, G. S. (2010). The impact of crime victimization on quality of life. *Journal of traumatic stress*, *23*(2), 189-197.
- Harned, M. S. (2005). Understanding women's labeling of unwanted sexual experiences with dating partners: A qualitative analysis. *Violence Against Women*, *11*(3), 374-413.
- Hartbauer, K. E. (2015). *Developing an intervention to increase prosocial intentions related to sexual misconduct* (Unpublished honors thesis). The Pennsylvania State University, University Park, Pennsylvania.

- Hellman, A. (2014). Examining Sexual Assault Survival of Adult Women: Responses, Mediators, and Current Theories. *Journal of forensic nursing, 10*(3), 175-184.
- Herek, G. M., Gillis, J. R., Glunt, E. K., Lewis, J., Welton, D., & Capitanio, J. P. (1998). Culturally sensitive AIDS educational videos for African American audiences: Effects of source, message, receiver, and context. *American journal of community psychology, 26*(5), 705-743.
- Herman, J. L. (2002). Posttraumatic Stress Disorder: A Comprehensive Text• Treating Psychological Trauma and PTSD. *American Journal of Psychiatry, 159*(8), 1452-1453.
- Hickman, S. E., & Muehlenhard, C. L. (1999). “By the semi-mystical appearance of a condom”: How young women and men communicate sexual consent in heterosexual situations. *Journal of Sex Research, 36*(3), 258-272.
- Hildebrand, M. M., & Najdowski, C. J. (2014). The potential impact of rape culture on juror decision making: implications for wrongful acquittals in sexual assault trials. *Alb. L. Rev., 78*, 1059.
- Hirschi, T. (1969). *The causes of delinquency*. Berkeley: The University of California Press.
- Hitlin, S., & Vaisey, S. (2013). The new sociology of morality. *Annual Review of Sociology, 39*.
- Humphreys, T., & Newby, J. (2007). Initiating new sexual behaviours in heterosexual relationships. *The Canadian Journal of Human Sexuality, 16*(3/4), 77.
- Jenny, C., Hooton, T. M., Bowers, A., Copass, M. K., Krieger, J. N., Hillier, S. L., ... & Holmes, K. K. (1990). Sexually transmitted diseases in victims of rape. *New England Journal of Medicine, 322*(11), 713-716.
- Jewkes, R., Garcia-Moren, C., & Sen, P. (2002). Sexual violence. In E.G. Krug, L.L.



- Dahlberg, J.A. Mercy, A.B. Zwi & R. Lozano (Eds.), World report on violence and health: summary, 149–181. Geneva: World Health Organization.
- Jordan, C. E., Combs, J. L., & Smith, G. T. (2014). An exploration of sexual victimization and academic performance among college women. *Trauma, Violence, & Abuse, 15*(3), 191-200.
- Khan, S. R., & Stagnaro, M. N. (2016). The Influence of Multiple Group Identities on Moral Foundations. *Ethics & Behavior, 26*(3), 194-214.
- Kalof, L. (1993). Rape-supportive attitudes and sexual victimization experiences of sorority and nonsorority women. *Sex Roles, 29*(11-12), 767-780.
- Katz, J., & Moore, J. (2013). Bystander education training for campus sexual assault prevention: An initial meta-analysis. *Violence and Victims, 28*(6), 1054-1067.
- Kidwell, B., Farmer, A., & Hardesty, D. M. (2013). Getting liberals and conservatives to go green: Political ideology and congruent appeals. *Journal of Consumer Research, 40*(2), 350-367.
- Kilpatrick, D. G., Veronen, L. J., & Resick, P. A. (1982). Psychological sequelae to rape. *Behavioral Medicine, 473-497*.
- Kilpatrick, D. G., Saunders, B. E., Veronen, L. J., Best, C. L., & Von, J. M. (1987). Criminal victimization: Lifetime prevalence, reporting to police, and psychological impact. *NPPA Journal, 33*(4), 479-489.
- Kilpatrick, D. G., Resnick, H. S., Ruggiero, K. J., Conoscenti, L. M., & McCauley, J. (2007). *Drug-facilitated, incapacitated, and forcible rape: A national study*. National Criminal Justice Reference Service.

- Kimerling, R., & Calhoun, K. S. (1994). Somatic symptoms, social support, and treatment seeking among sexual assault victims. *Journal of consulting and clinical psychology*, 62(2), 333.
- Kohlberg, L. (1969) *Stage and Sequence: The Cognitive-Developmental Approach to Socialization*. New York: Rand McNally.
- Kohlberg, L. (1971). From Is to Ought: How to Commit the Naturalistic Fallacy and Get Away with It in the Study of Moral Development. *Cognitive Development and Epistemology*, (151–235).
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of consulting and clinical psychology*, 55(2), 162.
- Krebs, C. P., Lindquist, C. H., Warner, T. D., Fisher, B. S., & Martin, S. L. (2007). *The campus sexual assault (CSA) study: Final report*. Washington, DC: National Institute of Justice, US Department of Justice.
- Krebs, C., Lindquist, C., Berzofsky, M., Shook-Sa, B., Peterson, K., Planty, M., ... & Widico-Stroop, J. (2016). *Campus climate survey validation study: Final technical report*. US Department of Justice, Office of Justice Programs, Bureau of Justice Statistics.
- Lanza-Kaduce, L., Capece, M., & Alden, H. (2006). Liquor is quicker: Gender and social learning among college students. *Criminal Justice Policy Review*, 17(2), 127-143.
- Lembo, J. M. (2014) *Shifting views of consent: A video activity* (Unpublished honors thesis). The Pennsylvania State University, University Park, Pennsylvania.
- Lindo, J. M., Siminski, P. M., & Swensen, I. D. (2015). *College party culture and sexual assault* (No. w21828). National Bureau of Economic Research.

- Lipkus, I. M., Samsa, G., & Rimer, B. K. (2001). General performance on a numeracy scale among highly educated samples. *Medical decision making, 21*(1), 37-44.
- Littleton, H., Horsley, S., John, S., & Nelson, D. V. (2007). Trauma coping strategies and psychological distress: a meta-analysis. *Journal of traumatic stress, 20*(6), 977-988.
- Low, M., & Wui, M. G. L. (2016). Moral foundations and attitudes towards the poor. *Current Psychology, 35*(4), 650-656.
- Malhotra, N., Krosnick, J. A., & Haertel, E. (2007). The psychometric properties of the GSS Wordsum vocabulary test. *GSS Methodological Report, 11*.
- Martin, P. Y., & Hummer, R. A. (1989). Fraternities and rape on campus. *Gender & Society, 3*(4), 457-473.
- Matsueda, R. L., & Heimer, K. (1987). Race, family structure, and delinquency: A test of differential association and social control theories. *American Sociological Review, 52*, 826-840.
- McCauley, J. L., Calhoun, K. S., & Gidycz, C. A. (2010). Binge drinking and rape: A prospective examination of college women with a history of previous sexual victimization. *Journal of interpersonal violence, 25*(9), 1655-1668.
- McCollister, K. E., French, M. T., & Fang, H. (2010). The cost of crime to society: New crime-specific estimates for policy and program evaluation. *Drug and alcohol dependence, 108*(1), 98-109.
- McCormick, N. B. (1979). Come-ons and put-offs: Unmarried students' strategies for having and avoiding sexual intercourse. *Psychology of Women Quarterly, 4*, 194-211.
- Miller, A. K., Handley, I. M., Markman, K. D., & Miller, J. H. (2010). Deconstructing self-blame following sexual assault: The critical roles of cognitive content and process. *Violence Against Women, 16*(10), 1120-1137.

- Miller, J. G. (1994). Cultural Diversity in the Morality of Caring: Individually-Oriented Versus Duty-Based Interpersonal Moral Codes. *Cross-Cultural Research* 28(1), 3–39.
- Minow, J. C., & Einolf, C. J. (2009). Sorority participation and sexual assault risk. *Violence Against Women*, 15(7), 835-851.
- Mohler-Kuo, M., Dowdall, G. W., Koss, M. P., & Wechsler, H. (2004). Correlates of rape while intoxicated in a national sample of college women. *Journal of studies on alcohol*, 65(1), 37-45.
- Morrison, S., Hardison, J., Mathew, A., & O'Neil, J. (2004). *An evidence-based review of sexual assault preventive intervention programs*. Washington, DC: Department of Justice.
- Morrison, Z., Quadara, A., & Boyd, C. (2007). *"Ripple Effects" of Sexual Assault*. Australian Centre for the Study of Sexual Assault.
- Motley, M. T., & Reeder, H. M. (1995). Unwanted escalation of sexual intimacy: Male and female perceptions of connotations and relational consequences of resistance messages. *Communications Monographs*, 62(4), 355-382.
- Napier, J. L., & Luguri, J. B. (2013). Moral mind-sets: Abstract thinking increases a preference for “individualizing” over “binding” moral foundations. *Social Psychological and Personality Science*, 4(6), 754-759.
- Nason, E. E., & Yeater, E. A. (2012). Sexual attitudes mediate the relationship between sexual victimization history and women’s response effectiveness. *Journal of interpersonal violence*, 27(13), 2565-2581.
- Nicoletti, J., Bollinger, C. M., & Spencer-Thomas, S. (2009). *Violence goes to college: The authoritative guide to prevention and intervention*. Charles C Thomas Publisher.

- O'Sullivan, L. F. & Byers, E. S. (1992). College students' incorporation of initiator and restrictor roles in sexual dating interactions. *Journal of Sex Research*, 29(3), 435-446.
- Owen, J. J., Rhoades, G. K., Stanley, S. M., & Fincham, F. D. (2010). "Hooking up" among college students: Demographic and psychosocial correlates. *Archives of sexual behavior*, 39(3), 653-663.
- Paternoster, R., & Simpson, S. (1996). Sanction threats and appeals to morality: Testing a rational choice model of corporate crime. *Law and Society Review*, 549-583.
- Paul, E. L., & Hayes, K. A. (2002). The casualties of casual sex: A qualitative exploration of the phenomenology of college students' hookups. *Journal of Social and Personal Relationships*, 19(5), 639-661.
- Paxton, J. M., Ungar, L., & Greene, J. D. (2012). Reflection and reasoning in moral judgment. *Cognitive Science*, 36(1), 163-177.
- Peck, A., Stevenson, L., Lembo, J., Karg, K., & Pagano, C. (2013). [Students' understandings of consent]. Unpublished raw data.
- Pennycook, G., Cheyne, J. A., Barr, N., Koehler, D. J., & Fugelsang, J. A. (2014). Cognitive style and religiosity: The role of conflict detection. *Memory & Cognition*, 42(1), 1-10.
- Rempala, D. M., Okdie, B. M., & Garvey, K. J. (2016). Articulating ideology: How liberals and conservatives justify political affiliations using morality-based explanations. *Motivation and Emotion*, 40(5), 703-719.
- Rogers, M., Smoak, N. D., & Liu, J. (2006). Self-reported deviant computer behavior: A big-5, moral choice, and manipulative exploitive behavior analysis. *Deviant Behavior*, 27(3), 245-268.

- Rothmans, E., & Silverman, J. (2007). The effect of a college sexual assault prevention program on first-year students' victimization rates. *Journal of American College Health, 55*(5), 283-290.
- SB-967. Cal. Ed. Code § 67386 (2016). Colloquially known as “Yes Means Yes” Bill.
- S5965. N.Y. Legis. Assemb. Reg. Sess. 2015-2016. (N.Y. 2015). Colloquially known as “Enough is Enough” Bill.
- Sanday, P.R. (2007). *Fraternity gang rape: Sex, brotherhood, and privilege on campus*. New York: New York University Press.
- Sakaguchi, K., & Hasegawa, T. (2007). Personality correlates with frequency of being targeted for unexpected advances by strangers. *Journal of Applied Social Psychology, 37*(5), 948-968.
- Schwartz, L. M., Woloshin, S., Black, W. C., & Welch, H. G. (1997). The role of numeracy in understanding the benefit of screening mammography. *Annals of internal medicine, 127*(11), 966-972.
- Shweder, R., Much, N., Mahapatra, M., & Park, L. (1997). Divinity and the “big three” explanations of suffering. *Morality and health, 119-169*.
- Silver, E., & Abell, L. (2016). Beyond harm and fairness: A study of deviance and morality. *Deviant Behavior, 37*(5), 496-508.
- Suhler, C. L., & Churchland, P. (2011). Can innate, modular “foundations” explain morality? Challenges for Haidt's moral foundations theory. *Journal of cognitive neuroscience, 23*(9), 2103-2116.
- Sutherland, E. (1956). *A Sociological Theory of Criminal Behavior*.

- Sutton, T. E., & Simons, L. G. (2015). Sexual assault among college students: Family of origin hostility, attachment, and the hook-up culture as risk factors. *Journal of Child and Family Studies, 24*(10), 2827-2840.
- Sykes, G. M., & Matza, D. (1957). Techniques of neutralization: A theory of delinquency. *American sociological review, 22*(6), 664-670.
- Temkin, J. (2000). Prosecuting and defending rape: Perspectives from the bar. *Journal of Law and Society, 27*(2), 219-248.
- Testa, M., Hoffman, J. H., & Livingston, J. A. (2011). Intergenerational transmission of sexual victimization vulnerability as mediated via parenting. *Child abuse & neglect, 35*(5), 363-371.
- Testa, M., Hoffman, J. H., Livingston, J. A., & Turrisi, R. (2010). Preventing college women's sexual victimization through parent based intervention: A randomized controlled trial. *Prevention Science, 11*(3), 308-318.
- Testa, M., & Livingston, J. A. (2009). Alcohol consumption and women's vulnerability to sexual victimization: Can reducing women's drinking prevent rape?. *Substance Use & Misuse, 44*(9-10), 1349-1376.
- Thompson, E. P., Roman, R. J., Moskowitz, G. B., Chaiken, S., & Bargh, J. A. (1994). Accuracy motivation attenuates covert priming: The systematic reprocessing of social information. *Journal of Personality and Social Psychology, 66*(3), 474.
- Thorndike, R. L. (1942). Two screening tests of verbal intelligence. *Journal of Applied Psychology, 26*(2), 128.
- Tilburt, J. C., James, K. M., Jenkins, S. M., Antiel, R. M., Curlin, F. A., & Rasinski, K. A. (2013). "Righteous minds" in health care: measurement and explanatory value of social

- intuitionism in accounting for the moral judgments in a sample of US physicians. *PloS one*, 8(9), e73379.
- Ullman, S. E. (2003). A critical review of field studies on the link of alcohol and adult sexual assault in women. *Aggression and Violent Behavior*, 8(5), 471-486.
- Ullman, S. E., Karabatsos, G., & Koss, M. P. (1999). Alcohol and sexual assault in a national sample of college women. *Journal of interpersonal violence*, 14(6), 603-625.
- U.S. Department of Education, Press Office. (2014). U.S. Department of Education Releases List of Higher Education Institutions with Open Title IX Sexual Violence Investigations [Press release]. Retrieved from <https://www.ed.gov/news/press-releases/us-department-education-releases-list-higher-education-institutions-open-title-i>
- Warshaw, R. (1994). *I never called it rape (2nd ed.)*. New York: Harper & Row.
- Wikström, P. O. H., Oberwittler, D., Treiber, K., & Hardie, B. (2012). *Breaking rules: The social and situational dynamics of young people's urban crime*. OUP Oxford.
- Wikström, P. O. H. & Svensson, R. (2010). When does self-control matter? The interaction between morality and self-control in crime causation. *European Journal of Criminology*, 7(5), 395-410.
- Wikström, P. O. H., & Treiber, K. (2007). The role of self-control in crime causation: Beyond Gottfredson and Hirschi's general theory of crime. *European Journal of Criminology*, 4(2), 237-264.
- Wuthrich, C. K. (2009). Reflections on personal responsibility: Sorority members at risk for interpersonal violence. *NASPA Journal*, 46(2), 228-257.



Yost, M. R., & Zurbriggen, E. L. (2006). Gender differences in the enactment of sociosexuality: An examination of implicit social motives, sexual fantasies, coercive sexual attitudes, and aggressive sexual behavior. *Journal of sex research*, 43(2), 163-173.

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# KAYLA CONWAY

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## EDUCATION

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**The Pennsylvania State University | The Schreyer Honors College** **University Park, PA**

The College of the Liberal Arts | Bachelor of Arts in Psychology 2017

The College of the Liberal Arts | Bachelor of Arts in Criminology

The College of the Liberal Arts | Interdisciplinary Honors in Psychology and Criminology

Honors Thesis Supervisor: Andrew Peck, PhD

Title: The role of analytic thinking and morality in perceptions of sexual consent

### Education Abroad

*International Studies Institute*

**Florence, Italy**

Jan 2016 – May 2016

## RESEARCH

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**Penn Staters Researching Interventions in Social Misconduct (PRISM) Lab** **University Park, PA**

*Honors Research Assistant*

2016 - 2017

- Conducted honors thesis research on sexual consent, analytic thinking and morality to aid in development of effective sexual misconduct interventions
- Created an experimental design for empirical research
- Collected and analyzed data
- Reviewed available literature pertaining to sexual assault, consent, moral foundations theory, cognitive ability, cognitive load and persuasion.

### Amy Marshall's Relationships and Stress Lab

*Research Assistant*

**University Park, PA**

2015

- Assisted graduate student with graduate students' dissertations from organizational tasks, to behavioral coding and cleaning of data sets
- Coded interpersonal behaviors and interactions of intimate partners using a study-specific categorization system.
- Aided with literature reviews
- Guided lab meeting discussions on trauma-based topics and inputs from recent studies

## RESEARCH PRESENTATION

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### Psi Chi Research Conference

*Presenter*

**University Park, PA**

Apr 2017

- Presented empirical thesis research data on the effects of individual moralities and cognitive load on perceptions of sexual consent

## GRANTS/ SCHOLARSHIPS

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Provost Scholarship Award, \$24000

2013 – 2017

Schreyer Honors College Academic Excellence Scholarship, \$16000

2013 - 2017

Liberal Arts Travel Grant, \$1020	Spring 2016
Liberal Arts Internship Enrichment Funding, \$900	Summer 2016
Schreyer Honors College Internship Grant, \$300	Summer 2016
Schreyer Honors College Travel Ambassador Grant, \$300	Spring 2016

## HONORS/AWARDS

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Schreyer Honors College	2013 - Present
Liberal Arts Paterno Fellows Program	2013 - Present
Dean's List	2013 - Present

## WORK AND VOLUNTEER EXPERIENCE

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<b>Mental Health Worker</b>	<b>Bellefonte, PA</b>
<i>State Correctional Institute Rockview</i>	2017 - present

- Assisted the staff of the Mental Health Unit in Rockview prison
- Provided care to offender population residing in the unit and informed psychiatric staff of updates in offender functioning.
- Participated in weekly multidisciplinary treatment planning meetings
- Conducted interventions under the supervision of psychiatric nursing and medical staff
- Supervised offenders in routine activities of daily living by conducting rounds of wellness checks every 15 minutes
- Facilitated educational activities designed to provide inmates with tools to manage their mental health and coping with prison life
- Facilitated peer social interactions and group activities
- Responded to crises according to training, protocol and/or professional judgement
- Assisted with documentation and maintenance of mental health care medical records, including records of treatment planning, daily contact notes, and observations and assessment of behavior and mood

<b>Private Investigation Legal Internship</b>	<b>New York, NY</b>
<i>Confidential Global Investigations (CGI) and the Seiden Group</i>	Summer 2016
<i>Intern</i>	

- CGI is a licensed, professional private forensic investigations firm that focuses on financial-related investigations, court-appointed receiverships, finding hidden assets, and complex projects that span international borders. The CGI team is staffed by experts in the fields of law enforcement, government, the legal community, and the financial sector both in the US and internationally
- Assisted with background investigations into targets involved in receivership and domestic cases
- Conducted asset searches state-side and abroad, helped establish company structure and associated subsidiaries of target corporations in receivership cases, and participated in undercover gray market online buys to aid in evidence compilation for our luxury goods brands clients

- Utilized online resources such as SEC archives, local property records, state-wide corporation registration sites, and databases such as Westlaw and PACER
- Personally established connection between one of the target companies and a \$70million asset that resulted in recovery

### **Crisis Hotline Counselor**

*Centre Helps (formerly the Centre County Community Help Centre)*

- Counselor at a telephone hotline and walk-in crisis center
- Assisted with interpersonal, mental health, and basic need issues of clients
- Contributed to policy making and utilized leadership skills within the agency
- Completed extensive 180 hour training program and engaged in more than 400 hours of professional and volunteer hotline service
- Currently one of the most senior counselors on staff

State College, PA  
2015 - present

### **Sexual and Domestic Violence Counselor and Advocate**

*Centre County Women's Resource Center*

- Volunteer counselor and advocate for domestic violence and sexual assault victims
- Accompanied victims to hospital for medical examination following sexual assault
- Provided counseling and advocacy on the 24-hour hotline for sexual and domestic violence
- Completed an 80-hour training program

State College, PA  
May 2015 - present

### **Peer Support Helper**

*Penn State Schreyer Honors College "Scholars Helping Scholars" Program*

- Founding Member
- Asked to establish a peer mentoring and counseling program by the Associate Dean of the Honors College along with two other students
- Created the mission statement and training curriculum
- Assisted in training new members on counseling, active listening, and communication skills
- Designed website and logo for program
- Interviewed and selected potential candidates

University Park, PA  
May 2015 – Jan 2017

### **Tutor for Student-Athletes**

*Penn State Morgan Academic Support Center for Student-Athletes*

- Tutored student-athletes individually and in groups in subjects including psychology, sociology, criminology, statistics, algebra and calculus

University Park, PA  
Jun 2015 – Dec 2015

### **Teaching Assistant for intro Criminology Course**

- Crim 100: Intro to Criminal Justice
- Professor: Brian Baker

University Park, PA  
Fall 2016