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# The Moderating Effect of Anger on the Relationship Between Psychological Reactance and Sexual Coercion

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# THE MODERATING EFFECT OF ANGER ON THE RELATIONSHIP BETWEEN PSYCHOLOGICAL REACTANCE AND SEXUAL COERCION

by

Andrea Bonifacia Moreno, M.A.

A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy

COLLEGE OF EDUCATION LOUISIANA TECH UNIVERSITY

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#### **ABSTRACT**

Rape and sexual assault are a pervasive worldwide phenomenon found across cultures affecting all genders. Rape and sexual assault often take a grave toll on the survivors. Per research, 1 in 5 women, and 1 in 75 men will experience rape, while 33.3% of women, and 16.6% of men report experiencing forced sexual contact in their lifetime (Smith et al., 2017). Research shows sexual assault often has a profoundly negative impact on survivors, leaving them at greater risk for posttraumatic stress disorder, substance abuse, major depressive disorder, and suicidal ideation that results in death by suicide (Zinzow et al., 2011). Using reactance theory framework, the purpose of this study was to investigate if clinical anger (a more severe and chronic type of anger) moderated the relationship between sexual coercion and psychological reactance. This study surveyed 498 participants recruited via social media and a university listserv. Results showed verbal and behavioral reactance positively correlated to sexual coercion. Additionally, verbal and behavioral reactance positively correlated to clinical anger. Clinical anger was not shown to moderate the relationship between reactance and sexual coercion. These findings suggest that while reactance does have some link to sexual coercion and clinical anger, clinical anger is does not strengthen or moderate the relationship between psychological reactance and sexual coercion.

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#### **CHAPTER I**

#### INTRODUCTION

Rape and sexual assault are a pervasive worldwide phenomenon found across cultures affecting all genders, though women show a significantly higher risk for victimization; research suggests 91% of rape and sexual assault victims are female, with 9% being male (Bhogal & Corbett, 2016; Grubb & Turner, 2012; Rennison, 2002). According to Smith et al. (2017) in the United States, 1 in 5 women, and 1 in 75 men will experience rape; additionally, 33.3% of women, and 16.6% of men report experiencing forced sexual contact in their lifetime. Additionally, 23.1% of undergraduate college women, 5.4% of undergraduate college men, and 21% of transgender, genderqueer and nonconforming college students will experience rape or sexual assault through physical force, violence, or incapacitation (Cantor et al., 2015). Rape and sexual assault often takes a grave toll on the survivor; Zinzow et al. (2011) found college students who experienced rape and sexual assault are at a higher risk for PTSD, depression, and substance use. Similarly, Segal (2009) found women reporting histories of sexual victimization, particularly rape, were limited in their ability to find reasons for living when contemplating suicide, unlike their non-victimized counterparts.

Given the dangerous and sometimes life-threatening outcomes linked to sexual assault and rape, it is crucial researchers investigate the characteristics and motivations

that fuel sexually predatory behavior. In the past decade, preliminary research has begun to emerge examining the link between psychological reactance and sexually coercive behavior (Bushman et al., 2003). Additionally, the role of trait anger in sexually predatory individuals has been of long-standing interest (Ahmed, 2014; Miguel-Tobal et al., 2001; Scherer & Wallbott, 1994; Sierra et al., 2009).

Psychological reactance is understood as a trait, or motivational state wherein one feels compelled to react or defend against the perceived loss of freedoms, thereby increasing their desire for the unavailable option (Brehm, 1966; Buboltz et al., 2002; Bushman et al., 2003; Seemann et al., 2004). Similarly, anger typically emerges as a reaction to perceived grievances or slights, with an emphasis on assigning externalized blame (Buboltz et al., 2003; Carver & Harmon-Jones, 2009; Frijda, 1986).

Psychological reactance is defined as a motivational state activated in response to either the loss, or perceived loss of one's behavioral freedoms (Brehm, 1966; Buboltz et al., 2002; Seemann et al., 2004). Freedom, in the context of psychological reactance theory is a set of behaviors to which an individual feels entitled, without restrictions from others or the environment in which they exist (Brehm, 1966; Buboltz et al., 2002; Fogarty, 1997; Miron & Brehm, 2006). The significance and depth of entitlement individuals attach to their freedoms dictates the ferocity with which they will react and defend against perceived or real threats (Brehm, 1966; Seemann et al., 2004). Despite differences between where particular freedoms may fall hierarchically, no clear dichotomy exists differentiating "free" from "not free" actions, and as such, highly reactive persons are likely provoked easily into a reactive state even when faced with threats to seemingly trivial freedoms (Fogarty, 1997; Seemann et al., 2004).

Reactance theory posits that when an individual is reactively aroused, their motivation to engage in freedom restorative behaviors manifests in one of three Sexually coercive acts range from manipulative behaviors (i.e., empty promises, provoking guilt), relentless touching (i.e., kisses, hugging, caresses), intoxication (i.e., substances, alcohol), verbal/physical assault (i.e., cat-calling, groping), to rape (Benbouriche & Parent, 2018; Tedeschi & Felson, 1995). Understanding sexual coercion as a spectrum of sexually predatory behaviors ranging from verbal sexual harassment to rape expands our understanding of the issue and allows for more comprehensive research and subsequent interventions.

Examining the role reactance and anger potentially play in sexual coercion is critical to understanding, and thus preventing sexually coercive behaviors. The construct of sexual coercion differs from that of sexual assault or rape, in that it spotlights that sexually violent behavior is not solely defined by legal thresholds or physical actions (Benbouriche & Parent, 2018). Examples of sexual violence that does not always end in assault include receiving unwanted pornographic photos, or verbal harassment; therefore, sexual coercion refers to any tactic or strategy used to engage an individual in sexual behaviors despite their lack of free consent, or explicit verbal/physical refusal (Abbey et al., 2014; Benbouriche & Parent, 2018; Farris et al., 2008). Given that 11.2% of all college students will experience sexual assault/rape, it is crucial researchers examine this pervasive issue from all angles including the characterological and motivational states of sexually predatory individuals.

Scarce literature exists examining the relationship between psychological reactance and sexual coercion; furthermore, though extensive research investigates the

link between aggression and rape, few studies delve into the role of anger in perpetuating sexual coercion. Dowd and Wallbrown's (1993) study found significant relationships between psychological reactance dominance, defensiveness, and aggressiveness; this finding lends support to the idea that a relationship may exist between reactance, anger, and sexual coercion.

#### **Statement of the Problem**

Highly reactive individuals have shown to be less trusting, more vigilant, more prone to worry and anxiety, preoccupied with personal control, and evidencing a large degree of suspicion and distrust of others (Brehm & Brehm, 1981; Buboltz et al., 1999; Dowd & Wallbrown, 1993; Dowd et al., 1994; Seemann et al., 2000, 2004). Reactive individuals likely express these tendencies by being interpersonally aggressive, less socially compliant, impulsive, and territorial (Seemann et al., 2004). Despite what may appear to be a clear link between psychological reactance and sexual coercion, there exists scarce literature exploring the relationship between the two constructs.

The previous research of Bushman et al. (2003) tested a Narcissistic Reactance Model of Sexual Coercion; their theory asserted that individuals high in trait narcissism were likely to view sexual desires as a set of freedoms they possess, and as such, would demonstrate high levels of reactive behaviors (i.e., behaviors aimed to restore their perceived freedoms) when rejected. Bushman et al.'s (2003) work found reactance did play a role in perpetuating sexually coercive behavior when the participant possessed high amounts of narcissism. Because reactance is produced when an individual feels their freedoms are threatened, it stands to reason that even in the absence of narcissism, when people who feel entitled to sexual activity are denied their "freedoms" reactance would

occur, and as such, so too would freedom restorative behaviors (i.e., sexual coercion). In the same vein, anger is a universally felt emotion that often motivates an individual to remove barriers between them and their desired goals; therefore, it appears anger and reactance perhaps share some theoretical overlap in that both emotions produce motivational states to eliminate barriers to their goals or "freedoms" (Armenti et al., 2017; Brehm & Brehm, 1981; Novaco, 1986)

Similarly, earlier research links aggressiveness to sexually coercive behaviors and rape myth acceptance (Bhogal & Corbett, 2016; Gidycz et al., 2007; Lalumiere et al., 2005; Wilson et al., 2015). Moreover, Nunes et al. (2013) investigated the relationship between sexual aggression and implicit/explicit attitudes toward rape and found that the more sexually aggressive participants showed significantly higher levels of implicit/explicit acceptance of rape. These studies demonstrate the positive relationship between aggression and sexual coercion.

Not examined in the literature thus far is whether anger may influence the relationship between reactance and sexual coercion. Though previous research has found evidence for relationships existing between reactance and sexual coercion (Bushman et al., 2003), anger and sexual coercion (Ahmed, 2014; Baumeister et al., 1996; Calhoun et al., 1997; Sierra et al., 2009; Thomas & Gorzalka, 2012), and reactance and trait anger (Quick & Stephenson, 2007; Richards & Larsen, 2016), no studies to date examine the moderating effect of anger on reactance and sexual coercion. Given our understanding of reactance as a reactive motivational and behavioral state (Brehm, 1966), and the links between aggression and sexual coercion (Bhogal & Corbett, 2016; Gidycz et al., 2007; Lalumiere et al., 2005; Wilson et al., 2015), it is reasonable to assert that anger and

sexual coercion exist in a geometry; moreover, anger likely affects the strength of the relationship between reactance and sexual coercion.

Despite previous research examining the role of aggression and narcissistic reactance in perpetuating sexual coercion, no data exists to date investigating the relationship between reactance and sexual coercion (Armenti et al., 2017; Bushman et al., 2003; Gidycz et al., 2007; Lalumiere et al., 2005; Nunes et al., 2013; Wilson et al., 2015). To date, there appear to be no prior studies that have examined the relationship between psychological reactance and sexual coercion.

As such, the purpose of this study is to investigate the relationship between psychological reactance and sexual coercion, and to discern if clinical anger (trait anger's more chronic and severe counterpart) moderates that relationship. Further examining these relationships will better enable clinicians to create preventative interventions designed to reduce sexually coercive behaviors.

#### Justification

Given the prevalence of sexual coercion, especially among college students, and the often-destructive effects it has on survivors (i.e., substance abuse, PTSD, suicidality; Segal, 2009; Zinzow et al., 2011) it is imperative researchers examine all possible factors contributing to sexually coercive behavior so that we can better understand the problem and create more effective preventative interventions.

As previously stated, there exists a gap in the literature investigating the relationship between psychological reactance and sexual coercion. Furthermore, though previous studies have examined the link between aggression and sexual coercion, few studies have examined the role of anger in perpetuating sexually coercive behavior (Armenti et al., 2017; Bushman et al., 2003; Gidycz et al., 2007; Lalumiere et al., 2005;

Nunes et al., 2013; Wilson et al., 2015). Additionally, no research exists to date exploring the moderating effect anger has on the relationship between reactance and sexual coercion.

In exploring anger's moderating effects on the relationship between psychological reactance and sexual coercion, this study hopes to provide meaningful data that can be used to design preventive interventions and reduce sexually coercive behaviors.

#### **Review of the Literature**

#### **Psychological Reactance Theory**

Psychological reactance theory (PRT) came about roughly 50 years ago; born out of cognitive dissonance theory, both PRT and cognitive dissonance theory focus on motivational arousal and reduction (Brehm, 1966; Festinger, 1957; Rosenberg & Siegel, 2017). Freedom to behave as one chooses is a vital and adaptive, aspect of people's lives; when that freedom is threatened, a motivation to restore it is triggered (Brehm, 1966; Rosenberg & Siegel, 2017). That motivation, or psychological reactance, is the core of PRT and has inspired over 5 decades of research (Brehm, 1966; Rosenberg & Siegel, 2017).

Psychological reactance theory rests on two assumptions, the first being PRT assumes individuals have a set of free behaviors to which they feel entitled (Brehm, 1966; Rosenberg & Siegel, 2017). Free behaviors according to Brehm (1966) are acts a person may have engaged in previously, currently engage in, or plan to engage in the future, that they feel entitled to without restriction. To be clear, freedom in terms of reactance theory is not an abstract concept, rather, it speaks to concrete behavioral possibilities; therefore, knowledge and ability are perquisites for freedom in the context

of psychological reactance theory (Brehm & Brehm, 1981). Moreover, freedoms are an entirely subjective construct; they exist only if an individual feels entitled and able to behave in a certain manner (Rosenberg & Siegel, 2017; Wicklund & Brehm, 1968).

A second assumption of reactance theory is that when a person's free behaviors are threatened, they become motivated to restore and protect the compromised freedoms (Brehm, 1966). A threat is any force that creates a barrier between one and their perceived freedoms (Brehm & Brehm, 1981). Social threats include commands, persuasion, bribery, and punishments (Brehm & Brehm, 1981). Examples of impersonal threats to freedoms are restrictive laws, shortages of resources, or natural disasters (Brehm & Brehm, 1981). Alternatively, one's own behavior can arouse reactance, when their decisions endanger one of their freedoms (Brehm & Brehm, 1981).

Threats to freedoms can be viewed in terms of the freedom's relationship to the source, meaning threats are either internal (e.g., one's own behavior) or external (e.g., restrictive laws). This dimension speaks to personal versus impersonal threats (Brehm & Brehm, 1981). To what degree an individual perceives their freedoms are threatened largely depends on how the threat is perceived and subsequently categorized (Brehm & Brehm, 1981). Threats posing a high degree of risk to a person's freedoms, likely will be viewed as personal and emergent (Brehm & Brehm, 1981). Conversely, threats deemed abstract or unintentional, arouse less reactance because they are perceived as impersonal or unintentional (Brehm & Brehm, 1981). Stated differently, if a freedom or object is deemed trivial to an individual, threats against those things will likely not inspire reactance; the arousal of psychological reactance and the amount of reactance triggered is directly linked to an individual's valuation of the threatened freedom or object. Stated

clearly, freedoms deemed trivial likely will not be deemed worthy enough to spark reactance (Brehm & Brehm, 1981).

According to Brehm and Brehm (1981), freedoms grow in importance depending on how valuable it is in satisfying one or more needs; therefore, for a freedom to be deemed salient, it must uniquely meet a need or set of needs. When freedom becomes threatened, the amount of reactance aroused is directly tied to the number of endangered freedoms threatened or how relevant and important those freedoms are considered; however, when a person believes they have access to several freedoms to meet their needs, minimal reactance will be stirred when only one of those freedoms is threatened.

Freedoms become threatened when confronted with an event that one interprets as a barrier to exercising their freedom of choice (Brehm & Brehm, 1981). Myriad forces present threats to freedoms, such as monetary or verbal incentives to force one to behave in a certain way, commands, restrictive laws, or societal pressures (Brehm & Brehm, 1981). Moreover, different threats pose different levels of risk to freedoms, such that, even small threats may be perceived as serious in the presence of other threats (Brehm & Brehm, 1981).

Though at its core reactance is a psychological reaction that triggers an emotional or behavioral action, it is imperative to recognize reactance as a multidimensional construct. Over the years, researchers have examined several key factors associated with reactance. Merz (1983) was the first researcher attempting to create a valid measurement of psychological reactance by developing an 18-item instrument to measure reactance. Unfortunately, Merz's (1983) scale proved to be psychometrically unstable and as such was abandoned (Hong & Ostini, 1989; Tucker & Byers, 1987).

Expanding on Merz's (1983) work, Hong and Page (1989) subsequently developed the Hong Psychological Reactance Scale, a 14-item Likert-type inventory adapted from Merz's (1983) original reactance scale (HPRS; Hong & Page, 1989), which found four factors associated with reactance labeled: Freedom of Choice (the adverse psychological reaction to perceived loss of freedoms or choices), Conformity Reactance (resentment of expected compliance), Behavioral Freedom (resistance to perceived outside control or influence), and Reactance to Advice and Recommendations (resistance to unsolicited outside opinions and advice) (Shen & Dillard, 2005). Subsequent research later supported Hong and Page's four actor findings (Hong, 1992; Hong & Faedda, 1996; Shen & Dillard, 2005).

Following in the footsteps of Merz (1983), and Hong and Page (1989), Dowd et al., 1991, developed the Therapeutic Reactance Scale, a 28-item instrument that breaks down into two subscales labeled: Verbal and Behavioral (observable behaviors) (Buboltz et al., 2002). Additionally, the TRS also found four factors labeled: Resentment of Authority, Susceptibility to influence (openness to outside influence), Avoidance of Conflict (willingness to engage/shy away from conflict), and Preservation of Freedom (importance of maintaining freedoms) (Buboltz et al., 2002). The four factors found by Buboltz et al. (2002) appear to tap into the fundamental aspects of reactance theory such as motivation to maintain freedoms, resistance to authority, or unsolicited outside influence (Brehm & Brehm, 1981).

#### **Effects of Reactance**

Brehm and Brehm (1981) asserted reactance produced two direct effects: it compels attempts to regain lost or jeopardized freedoms, and it magnifies the motivation toward the lost or threatened freedoms by making their outcomes appear more attractive. Though implication often arouses reactance, it can under some circumstances reduce that arousal. Individuals who believe a freedom has been eliminated can fabricate a sense of freedom restoration by exercising another freedom they perceive as evidence they continue to possess the lost or threatened freedom. Additionally, a person whose freedom has been threatened can have it restored by a third party who, by restoring their own freedoms, restore the individual's freedom by association (Brehm & Brehm, 1981).

Worth considering, if one consistently confronted threats to their freedoms directly, quickly their behavior would take an antisocial turn; through indirect restoration of freedom, a less socially taxing alternative is presented or achieved (Brehm & Brehm, 1981).

#### **Motivation for Control**

How strong one reacts psychologically to perceived threats is bonded to how valued the freedoms are and to what one is willing to do in order to reestablish and protect those freedoms (Brehm & Brehm, 1981). Interestingly, Brehm and Brehm (1981) and Brehm (1989) asserted an individual does not literally need to restore the lost or threatened freedoms to reduce reactance, rather, one needs to feel they *possess* the *control* necessary to exercise their freedoms; this suggests at its core, reactance speaks to one's need to maintain and exert a sense of control over their lives. Consistent with Brehm and Brehm's (1981) and Brehm's (1989) view, Dowd (1999) supported the

assertion that reactance is strongly related to the desire to maintain control over oneself and their choices; however, if one is unable to achieve a satisfactory level of control, other forms of reactance may emerge, such as destruction, aggression, or lawbreaking. Responses to the perceived loss of control include psychological discomfort, feelings of hostility and anger, aggression, and direct attempts to regain control of the situation (Brehm & Brehm, 1981). Interestingly. Brehm and Brehm (1981) and Brehm (1989) found one's valuation of specific freedoms changes once that freedom has been threatened or lost, such that threatened or lost freedoms suddenly become more valued.

Cherulnik and Citrin (1974) investigated the relationship between psychological reactance, locus of control, and eliminations of freedom. They found those with an internal locus of control demonstrated greater reactance following a personal elimination of their freedom; conversely, externally locus-controlled individuals displayed a higher level of reactance when faced with impersonal levels of freedom elimination. Similarly, a recent study by Xu (2016) examined the impact one's locus of control and controlling language has on psychological reactance. Xu found individuals harboring an internal locus of control were more sensitive to controlling language; furthermore, controlling language was found to ignite reactance. These studies indicate the locus of control one harbors influences the degree to which personal or impersonal threats are processed as triggers.

Strube and Werner (1984) showed that conditions eliciting reactance, such as being forced to relinquish task control, were more conducive to eliciting reactance, resulting in ineffective decision making. Recently, Ma et al. (2019) found individuals experience greater levels of reactance when faced with outside attempts to control their

thoughts than they do attempts to control their behavior. Moreover, attempts at thought control as opposed to behavioral control, led subjects to experience greater anger and negativity, and less motivation to comply with requested behaviors. This finding occurred partly due to the perception that those who felt their thoughts were attempted to be controlled also felt attempts were being made to control their behavior; however, those in the behavioral control group did not assume attempts were made to control their thoughts as well (Ma et al., 2019). These findings suggest relinquishing control and what type of control exerted play important roles in determining the degree to which reactance is triggered; furthermore, it appears thought control is perceived as more threatening and restrictive to one's freedoms than behavioral control (Ma et al., 2019; Strube & Werner, 1984).

#### **Reactance as a Personality Characteristic**

Brehm (1966) initially perceived reactance as a reactive response elicited when one perceives a threat or loss to their entitled freedoms. Stated differently, reactance was originally conceptualized as circumstance-specific construct or response to social expectations and influences. Recent research has expanded the conceptualization, suggesting that while situational in nature, reactance may be a stable personality trait (Brehm & Brehm, 1981; Dowd et al., 1991; Hong & Page, 1989; Ladner, 2005).

Brehm and Brehm (1981) found Type A behavior (competitive, hostile, aggressive, impatient) correlated with psychological reactance; subjects high in Type A tendencies displayed higher levels of reactance than non-Type A individuals. Dowd and Wallbrown (1993) showed individuals high in reactance more likely to be defensive, aggressive, dominant, autonomous, and easily offended. Buboltz et al. (1999) added

further support to previous findings when they found those high in reactive tended to be controlling, aggressive, domineering, independent, and persuasive.

Other research on personality characteristics related to reactance indicates that psychologically active individuals place greater value on authenticity than they do making a favorable impression on others (Dowd, et al., 1994; Ladner, 2005).

Furthermore, highly reactant persons may be domineering, intolerant of others' beliefs, skeptical, assertive, independent, and confident (Dowd, et al., 1994; Ladner, 2005).

Additionally, reactive individuals may resist rules, hold a high opinion of themselves, freely express their emotions and opinions, and pay little attention to their responsibilities (Dowd, et al., 1994; Ladner, 2005). Dowd et al. (1994) also found highly reactive individuals showed a tendency to worry about the future and problems, placing greater value on practical interests than abstract ideas; they likely prefer settings that afford them a high degree of freedom, where initiative is recognized.

Similarly, Dowd et al. (1994), Dowd and Wallbrown (1993) found individuals high in reactance to be more difficult than their less reactive counterparts. Moreover, researchers found highly reactive clients to be more aggressive, defensive, easily offended, and autonomous; furthermore, reactive individuals were more likely to possess characteristics deemed undesirable by society, despite evidence suggesting these people possess leadership and goal-oriented qualities (Dowd & Wallbrown, 1993; Ladner, 2005).

Psychologically reactive individuals appear to possess characteristics not dissimilar to those of psychopathy, such as disregard for rules, lack of responsibility and low self-control, narcissistic traits, bloated self-confidence, a disregard for impression

management (Dowd et al., 1994; Ladner, 2005). Joubert (1990) showed reactive individuals likely respond in ways that are interpreted as antagonistic by others in the face of real or perceived threats to their freedoms; their attempts to maintain or regain control may appear strange and less conforming as they can be extreme and hostile, resulting in social alienation (Joubert, 1990; Ladner, 2005).

Not surprisingly, Joubert (1990) also found reactance to positively correlate to loneliness, negative self-esteem, and unhappiness. Additionally, Seemann's (2003) research suggested highly reactive individuals were wary, untrusting, socially manipulative, hostile, confrontational and moody (Matherne, 2005). Seemann (2003) asserted highly reactive individuals may be described as territorial, impulsive, nonconforming, and vigilant (Matherne, 2005). Interestingly. Dowd et al. (1994) found reactive individuals to harbor high opinions of themselves and express those opinions freely. These findings suggest reactive individuals may lack insight or motivation to engage in honest self-evaluations and appraisals.

Adding to the literature on reactance and personality characteristics, Buboltz et al. (1999) found reactive individuals may show a propensity for persuading and manipulating others and typically reject conforming to norms. Regarding self-perceptions, reactive individuals tended to view themselves as self-confident, aggressive, domineering, and independent with an inability to understand others; these traits are consistent with previous findings and further support the view of reactance as a personality constellation (Buboltz et al., 1999; Ladner, 2005).

Interestingly, Merz (1983) found reactance to highly correlate with autonomy and insecurity, while Seemann et al. (2000) showed reactance to correlate with openness to

experiences and extraversion. Reactive individuals were open to new experiences which suggests an appreciation for creativity and contemplation (Matherne, 2005; Seemann et al., 2000). Extraverted individuals tend to evidence assertive, excitement seeking behaviors, be interpersonally distant, and show negative emotional expressions; reactive individuals were found to be more extraverted indicating many of the traits associated with reactance (assertiveness, negative emotional expression) dovetail with trait extraversion (Matherne, 2005; Seemann et al., 2004).

Notably, reactance has been found to correlate with positive attributes such as analytical thinking, intellectual curiosity, self-confidence, ambition, leadership qualities, and an adventurous spirit (Buboltz et al., 1999). Dowd and Wallbrown (1993) similarly found reactive individuals may be viewed as action-oriented leaders, as well as creative (Matherne, 2005).

These mixed findings suggest a nuanced and complicated relationship between psychological reactance and personality, and that it is best to conceptualize this reactance as a multidimensional construct with both positive and negative aspects (Ladner, 2005). Rarely in socials sciences do strict dichotomies exist and it appears reactance is no exception; therefore, we must avoid the proclivity to view reactance through the lens of "good" or "bad."

#### **Reactance and Learned Helplessness**

Researchers have long been intrigued by the link between reactance as the result of continued loss of control and freedoms, and learned helplessness (Ladner, 2005; Seligman, 1975). Wortman and Brehm (1975) claimed that the number of failures an individual experiences affects whether the person will grow psychologically reactive or

maintain the belief that they exert control over outcomes; conversely, in those who perpetually fail, learned helplessness takes root, as they have been conditioned to believe they have no control over potential outcomes (Ladner, 2005; Wortman & Brehm, 1975)

Tennen et al. (1981) asserted the two types of people most inclined to reactiveness are those who believe they have few free behaviors and those that believe their behavioral freedoms are of extreme importance. For individuals who feel they possess few freedoms, any perceived threat is significant because it threatens an already limited number of freedoms. In the same vein, it stands to reason individuals who excessively value their behavioral freedoms harbor a strong need to maintain control and as such, will likely go to great lengths to maintain their freedoms and sense of control.

#### **Reactance and Close Interpersonal Relationships**

Reactance theory can be applied to two stages of interpersonal relationships: the initial stage (when the relationship is being formed) and after a commitment has been made to the relationship (Brehm & Brehm, 1981). In reactance theory, people are like any other attractive object (Brehm & Brehm, 1981). If one feels attracted to another person and perceives they possess the freedom to form a relationship with them, any obstacle hindering the formation of that relationship will thereby trigger reactance, thusly making the desired person appear even more attractive (Brehm & Brehm, 1981). Two types of difficulties can spring up that serve as barriers to relationship formation: personal barriers typically attributed by some aspect of the target person (i.e., target's willingness to date), and social barriers, normally created by an environmental or social hindrance (i.e., geographical distance; Brehm & Brehm, 1981).

When two people have formed a committed relationship, reactance theory suggests several considerations for understanding that relationship (Brehm & Brehm, 1981). A committed relationship has implications for what freedoms exist, potential future freedoms, and how important those freedoms are or will be in the future (Brehm & Brehm, 1981). Hence, a threat to one freedom can easily threaten others through implications, and as such, inspire a high degree of reactance (Brehm & Brehm, 1981).

The influence of reactance on intimate relationships has been examined in myriad studies. Elevated levels of reactance have been positively correlated with relationship conflict (Hockenberry & Billingham, 1993; Thomas, 2005). Seibel (1994) found a relationship between reactance and interpersonal isolation, suggesting that highly reactive persons may find less success within interpersonal relationships than their less reactive peers (Thomas, 2005).

Derbyshire (1997) investigated the relationship between psychological reactance on couples' marital satisfaction; findings showed reactance was not found to be a significant predictor of marital satisfaction. Middleton et al. (2015) examined the relationship between reactance and emotional intelligence. Middleton's team found for women, there was no significant difference between high and low behavioral reactance and emotional intelligence; however, women with higher reactance scores also showed higher scores on emotionality and sociability. In contrast, men with low behavioral reactance scores demonstrated significantly higher emotional intelligence, well-being, self-control, and emotionality. Similarly, men with high reactance scores also scored higher on self-control, well-being, emotionality, and sociability (Middleton et al., 2015). These findings suggest that the link between reactance and emotional intelligence may be

somewhat gender-dependent; moreover, emotionality appears highly associated with reactance across both genders (Middleton et al., 2015).

#### **Gender Differences**

Gender differences in reactance have been observed in several studies (Courchaine, 1993; Dowd et al., 1994;). Dowd (1999) found men score significantly higher on reactance than women on the Therapeutic Reactance Scale (TRS). Mallon (1992) and Loucka (1991) supported Dowd et al.'s findings, showing men to be significantly more psychologically reactant than women using the TRS. Additionally, Joubert (1990) found men to score higher than women on the Hong Psychological Reactance Scale (Hong & Page, 1989). Further supporting these findings, Seemann et al. (2004) also found men to be more reactive than women.

Dowd et al. (1994) found women with high levels of reactance were found to value authenticity over creating good impressions on others. Moreover, reactant women were found to be more resourceful and self-reliant than their less reactive counterparts. Personality characteristics associated with reactance in women included skepticism, intolerance, resistance to rules, decisiveness, sociability, self-assurance, spontaneity, confidence, assertiveness, emotional reactivity, arrogance, and disregard for obligations. Typically, reactant individuals concern themselves more with the future than their less reactive peers; however, this is far less true for reactive women (Ladner, 2005).

Dowd et al. (1994) also theorized that differences in reactance between men and women may be attributed to social conditioning. Generally, men tend to appear more self-assured and decisive than women, and as such, when women present with these characteristics those traits are amplified. While there were similarities between reactant

women and reactive individuals as a whole, the characteristic of sociability was related to reactance exclusively in women, leading Dowd et al. (1994) to conclude that sociability found in females may be a function of self-assuredness. Adding support to Dowd et al.'s (1994) theory of socialization in regard to reactance, Mallinckrodt (1992) found women reported significantly more social support than men. Men, on the other hand, are not socially conditioned to be as sociable, regardless of how self-assured or reactive they are, and as such, sociability would not be a trait linked to reactiveness for men (Ladner, 2005).

#### **Reactance and Cultural or Ethnic Differences**

Scarce literature exists investigating the multicultural differences potentially linked to reactance. Dowd and Sanders' (1994) research found German students significantly more psychologically reactant than American students (Matherne, 2005). Additionally, Seemann et al. (2004) found significant differences in reactance between African American individuals and White individuals. Future research should continue examining the role of multicultural variables on psychological reactance.

#### **Psychological Reactance and Psychotherapy**

Psychotherapy is a unique and intimate experience, easily impacted by outside influences and interpersonal dynamics. Psychological reactance has shown to directly impact the therapeutic environment, process, and outcomes (Matherne, 2005; Seibel & Dowd, 1999). Furthermore, reactance was found to influence the perceptions clients have of their therapist (March, 1993; Matherne, 2005), therapeutic improvement (Matherne, 2005; Seibel & Dowd, 1999), symptom severity (Bischoff, 1997; Matherne, 2005), and attendance to therapy sessions (Matherne, 2005; Morgan, 1986).

Courchaine et al. (1995) asserted that reactance in therapy was more impactful on the working alliance than the therapeutic techniques employed. Dowd and Sanders (1994) also examined therapeutic methods in relation to psychological reactance; they asserted clients low in reactance may be well suited to conventional therapy models, such as compliance-based treatment approaches (Matherne, 2005). Moreover, it is suggested that clients low in psychological reactance are more likely to complete homework, attempt practice exercises, and do additional activities outside of the therapy sessions than their highly reactive counterparts (Dowd & Sanders, 1994; Matherne, 2005).

Interestingly, Dowd and Sanders (1994) suggested highly reactive individuals may best be served via defiance-based approaches in which change occurs as a result of attempts to defy the therapist (Matherne, 2005). Reframing maladaptive behaviors as posing threats to a client's freedoms may also be useful; however, for this technique to be effective, it is imperative a strong therapeutic alliance exist (Dowd & Sanders, 1994; Matherne, 2005). Though potentially effective, clients would need to be fairly insightful to find meaning in reframing their behavior (Seemann, 2003).

Dowd and Wallbrown (1993) found reactive individuals, when in therapy, may attempt to protect their personal freedoms by intentionally eliminating alternatives, even going so far as to oppose therapeutic techniques that provide alternatives (Matherne, 2005). Dowd and Wallbrown (1993) and Dowd (1999) also asserted that highly reactive clients may have tremendous difficulty processing new information and find it extremely threatening to their personal freedoms (Matherne, 2005).

Bischoff (1997) found a positive correlation between psychological reactance and symptom severity, finding reactant clients reported more symptoms during therapy than

their non-reactive peers (Matherne, 2005). Palmentera (1996) found reactive clients to be more emotion-focused and less task-oriented during therapy when processing distressing content (Matherne, 2005). Not surprisingly, Palmentera also found highly reactive individuals were resistant to directives in therapy (Matherne, 2005).

Psychological reactance has also been found to color how a client views their therapist (Courchaine et al., 1995; March, 1993). Courchaine et al. (1995) found highly reactive individuals more likely to give an unfavorable evaluation of their therapist (Matherne, 2005). Conversely, March (1993) found highly reactive individuals more likely to rate a therapist as trustworthy or an expert (Matherne, 2005).

Regarding reactance and therapeutic attendance and termination, results have been mixed. Seibel and Dowd (1999) stated reactance was positively associated with early therapeutic termination. Morgan (1986) found highly reactive clients to have a higher rate of "no-shows" over the course of treatment; however, unlike the findings of Seibel and Dowd (1999), Morgan found reactive clients were more likely to remain in therapy longer (Matherne, 2005).

#### **Sexual Coercion**

Sexual assault is a profound and pervasive problem worldwide. According to Smith et al. (2017), one in five women and one in 71 men will be raped in their lifetime. Additionally, one in three women and one in six men will experience some form of violent sexual contact in their lifetime (Smith et al., 2017). Additionally, 23.1% of undergraduate college women, 5.4% of undergraduate college men, and 21% of transgender, genderqueer and nonconforming college students will experience rape or sexual assault through physical force, violence, or incapacitation (Cantor et al., 2015).

Over half of women (51%) who were victims of rape, were violated by their intimate partners, and 40.8% reported being raped by an acquaintance (Black et al., 2011). Men reported similar rates of rape by an intimate partner (52.4%); however, rapes by an acquaintance fell drastically to 15.1% when compared to women (Black et al., 2011). An alarmingly high amount of multiracial (49.5%) and Native American women (45%) are subjected to some form of forced sexual contact in their lifetime (Smith et al., 2017).

Included within the construct of sexual coercion, is sexual harassment. Sexual harassment encompasses myriad behaviors including catcalling, sexually explicit remarks/text messages, and receiving unwanted pornographic photos (Reed et al., 2019). Reed et al. (2019) studied the prevalence of cyber sexual harassment among adolescent females and found 68% of girls reported experiencing some form of cyber sexual harassment, including receiving unwanted sexual messages/photos (53%), receiving unwanted messages requesting sexual favors (49%), being pressured to send sexual photos (36%), and having sexual photos shared without their permission (6%). Additionally, according to the non-profit organization Stop Street Harassment, 81% of women and 43% of men experience sexual harassment in their lifetime.

Sexual coercion is conceptualized as any tactic or strategy meant to facilitate sexual activity without free and informed consent; sexually predatory and abusive behaviors include manipulation and trickery, verbal harassment (i.e., unwanted vulgar remarks), unwanted groping, threats of violence or emotional withdrawal, forced sexual contact (assault), and rape (Benbouriche & Parent, 2018; Pugh & Becker, 2018; Unsafe, 2014). Conceptualizing sexual crimes beyond only those that meet legal definitions,

allows researchers to better understand the phenomena of sexually predatory behavior and other forms of sexual coercion.

According to Black et al. (2011), 37.4% of female rape survivors were raped during their college years (between the ages of 18 through 24) (Black et al., 2011; Young et al., 2016). A study by Krebs et al. (2009), found that 19% of undergraduate women have experienced either attempted or completed rape; furthermore, research suggests college women are at greater risk for sexual violence victimization than their non-college peers (Karjane et al., 2005; Young et al., 2016).

Holmgreen and Oswald (2017) examined if sexually coercive men gravitated toward a particular attachment style in women. One hundred thirty-six college men completed measures of sexual coerciveness and answered questions about personal ads that had been constructed to portray specific attachment styles. Findings suggested sexually coercive men favored women they perceived as sexually vulnerable. These findings speak to the inherently predatory element associated with sexually coercive behavior.

Abbey et al. (2012) examined patterns of sexual aggressiveness over a one-year period, in a community sample of 423 men, between the ages of 18 through 35.

Researchers found one-quarter of the sample reported forcing a woman into sexual activity against her wishes over the past year. Abbey et al. found 18% of participants reported previously behaving in a sexually aggressive manner, and 7.5% of men reported acting sexually aggressive for the first time. The sexually aggressive acts ranged in severity from unwanted touching to rape; verbal sexual coercion was found to be the most common tactic.

Daspe et al. (2015) investigated the relationship between trait neuroticism and sexually coercive behavior in a sample of 299 adult couples. Results showed low to moderate and extremely high levels of neuroticism both predicted sexually coercive behavior in men; however, from very low to low levels of neuroticism the relationship to sexual coercion became negative. Notably, the higher end of the neurotic spectrum is marked by characteristics such as hostility, anger, and irritability, all of which are risk factors for engaging in sexually coercive behaviors (Capaldi et al., 2012; Daspe et al., 2015; Hines & Saudino, 2008). The link between neuroticism and sexual coercion is consistent with Hornsveld and De Kruyk's (2005) observation that sexually violent forensic psychiatric outpatients scored significantly higher on trait neuroticism than did non-sexually violent outpatients (Daspe et al., 2015). Conversely, extremely low scores on the neurotic spectrum are indicative of little self-consciousness, anxiety, and vulnerability, all of which are markers of narcissistic personality disorder and psychopathy (Daspe et al., 2015; Samuel & Widiger, 2004; Widiger & Costa, 2012)

Recently, the use of deception to gain sexual favors has particularly interested sexual assault researchers. Worldwide, the question has been raised as to whether a sexual offense has been committed when consent was obtained through fraud or deception (Pundik, 2015). The view of consent by deception as criminal varies significantly between countries, with steep divisions between common law and civil jurisdictions (Pundik, 2015). In England for example, a man who deceives his partner into believing protection was used can be convicted of rape; in the same vein, a woman who deceived her partner into trusting contraception was used can be convicted of sexual assault (Pundik, 2015). Traditionally, the use of deception has been considered rape

under the circumstances of spousal impersonation and sexual intercourse under the guise of medical treatment (Pundik, 2015; Rubenfeld, 2013). In England, the category of spousal impersonation has expanded to include impersonating a partner who is not the woman's legal husband; in Canada, a man was convicted of sexual assault after impersonating his twin brother and having relations with his brother's girlfriend (Pundik, 2015). In the United States, Tennessee applies the offense of rape to cases in which sex was obtained through deception, without the mention of specific types of deception (Pundik, 2015). Though still widely debated and lacking in clear boundaries, examples such as these illustrate the evolving understanding societies and courts have pertaining to sexual coercion.

Sexual coercion comes in various forms and with steep costs to its victims and society as sexual violation is associated with myriad health and psychological issues.

Tjaden and Thoennes (2006) found 19.4% of women and 9.7% of men who experienced rape reported that the assault caused them to miss work, often resulting in lost financial gains and advancement opportunities. Kilpatrick et al. (2003), found interpersonal violence, including physical abuse, rape, and sexual assault correlated with increased risk for PTSD, major depressive disorder, and substance abuse disorder; additionally, sexual assault was a significant risk factor in developing comorbid diagnosis. Sexual assault also appears to affect physical health; Zinzow et al. (2011) found reported victimization was linked to a greater likelihood of reporting poor physical health. The aforementioned studies illustrate the costly psychological and physical effects of sexually coercive behavior.

#### Anger

Research suggests anger may play a role in the perpetuation of sexual coercion. A widely used conceptualization, State-Trait Anger theory was developed by Spielberger (1999) over 30 years ago. Based on the assumption that trait anger is universal and as such, those high in trait anger will behaviorally differ from low trait anger individuals. Spielberger asserted that unlike their low anger counterparts, high anger individuals are easily triggered, more often angry, and experience anger for longer periods of time; they may ruminate on perceived past mistreatments, and their anger grows increasingly strong as frustration/stress/provocation increases. High anger individuals are likely to cope with anger in maladaptive ways (i.e., aggression), and experience more frequent and negative consequences due to their anger and anger expressions (Alcazar-Olan & Deffenbacher, 2013; Spielberger, 1999).

Yet, another conceptualization of anger was proposed by Snell et al. (1995) (Snell, 2002) in which he introduced the concept of clinical anger, a more severe and chronic form of anger that can lead to numerous health and psychological impairments (i.e., irritability, fatigue, rage). Since anger is a multidimensional construct, it lends itself to manifesting in myriad ways. Anger expression is best understood as a spectrum of maladaptive behaviors, such as belligerence, emotionally abusive and manipulative behaviors, substance abuse, and physical assault (Bettencourt et al., 2006; Tafrate et al., 2002).

Anger is defined in the purest semantic sense as an intense feeling of displeasure and usually of antagonism (Merriam-Webster, n.d.). Anger is generally viewed as a negative approach-related emotion (Carver & Harmon-Jones, 2009; Lievaart et al., 2018)

that typically facilitates behavior that attempts to counter or redress perceived wrongdoing (Fernandez, 2013; Lievaart et al., 2018). Despite overarchingly being viewed as a negative emotion, anger is evolutionarily adaptive and at times leads to positive outcomes such as inspiring compliance and cooperation from others, attaining a stronger sense of self-control, and sparking the desire to change problematic situations (Fischer & Roseman, 2007; Lievaart et al., 2018; Van Doorn et al., 2014) Additionally, Averill (1983) and Kassinove et al. (1997) found through diary studies that individuals regularly experience anger and typically resolve their anger in nonaggressive and prosocial ways. Thusly, anger can be considered an adaptive and fundamental emotion that is not entirely negative or problematic if regulated appropriately.

Conversely, maladaptive anger, or anger that is not appropriately regulated leads to negative, and often violent consequences. Inappropriately regulated anger can cause individuals to say cruel things (they sometimes later regret), and lead to violent offending and aggressive behavior (Lievaart et al., 2018; Novaco, 2011). Anger becomes maladaptive when it morphs into a predominant personality trait and impairs one's daily functioning; furthermore, anger growing in its intensity, duration, frequency, and expression is indicative of dysfunction (DiGiuseppe & Tafrate, 2010; Lievaart et al., 2018; Spielberger, 1999). Anger is a bipolar emotion, that is best understood in the context of its dual nature; adaptive when regulated and appropriately expressed, dysfunctional when excessive and unregulated (Novaco, 2000, 2011).

Anger and its mutations – rage, hate, and revenge – often mobilize violent behavior as is empirically supported in forensic contexts (Novaco, 2011). Typically experienced as a justified response to perceived wrongdoing, anger is a crucial

component in activating antagonistic behavior toward someone or something (Novaco, 2011). The concept of "hostile attribution" has substantial value in aggression research and literature; the term refers to the proclivity individuals prone to react aggressively have in perceiving hostile intent in the behaviors of others (Dodge & Coie, 1987; Dodge & Frame, 1982; Novaco, 2011). Similarly, Schultz et al., (2004) found hostile attribution bias to be associated with teacher-reported aggression in children (Novaco, 2011).

Furthermore, hostile attribution and anger have been linked to intimate partner violence (Novaco, 2011; Sommer et al., 2016). Sommer et al. (2016) found anger to be associated with physical assault perpetration in an ethnically diverse sample of heterosexual couples. Armenti et al. (2017) found anger to significantly moderate the relationship between juvenile detention, physical assault, and psychological aggression. Additionally, anger was indicated to be a significant predictor of intimate partner violence (Giordano et al., 2016).

Threat perception underpins anger activation; once a threat has been perceived, the actions that follow serve as mechanisms to stave off the perceived threat; these subsequent actions are fueled by anger (Novaco, 2011). Threat-driven anger activation is an amplification process by which succeeding events, in even slight retrospect, creates increasingly intense feelings of anger; this chain of events is crucial to the facilitation and escalation of anger and aggression (Novaco, 2011). Anger arousal produces cognitions that justify anger, which in turn increases the likelihood that future events will be appraised through an anger-inducing filter (Novaco, 2011). Within the notion of threat repeal lays the potential of harm to the focus of one's anger; anger is sparked when threat is perceived, malevolence is assumed, and motivation to attack activated (Novaco, 2011).

Tafrate et al. (2002) examined the self-reported characteristics of specific anger episodes in a sample of 93 community adults over the age of 25-years-old. Anger was measured using the Trait Anger Scale (Spielberger, 1999). Anger expression information was assessed using a revised version questionnaire from Kassinove et al.'s team (1997), in which participants responded to an open-ended prompt to describe a recent time they felt angry. To assess confederates' cognitive appraisals, participants were provided with a list of 24 positive and negative cognitions and asked to respond to specific sentence stems such as "What kind of thoughts were going through your mind during or right after the anger episode you described above." Participants were allowed to check unlimited cognitions they felt applicable. Physical manifestations of anger were assessed using a checklist consisting of 17 physical sensations; participants were then asked to identify how many physical sensations they experienced during or immediately after their reported anger episode. Outcome information was first gleaned by having subjects select from a list how they felt after their anger had passed. Participants then reported the impact of their anger on the target person by identifying outcomes from a list of 20 outcome options. Finally, subjects indicated whether their anger concluded in positive, neutral, or negative outcomes. The intensity of the anger episode was measured on a scale ranging from 0 (No emotional arousal) to 100 (The maximum emotional arousal I have ever experienced).

Researchers (Tafrate et al., 2002) found those in the high anger group (HTA) reportedly experienced anger significantly more than those in the low anger group (LTA). Furthermore, distorted and maladaptive cognitions were significantly more common among the HTA group. Moreover, HTA participants reported significantly greater desire

to engage in physical actions, abusive verbal behavior, substance use, and anger suppression. Researchers found reports of physical aggression to be three times higher in the group high in trait anger, versus their low-anger peers. Additionally, high anger participants were twice as likely to engage in screaming, yelling, threats, and making abusive remarks as their low-anger counterparts.

Bettencourt et al. (2006) conducted a meta-analytic review to examine the relationship between personality and aggressive behavior under provoking and nonprovoking conditions; in total, 63 studies were included for analysis. Studies chosen for inclusion were based on the researchers' ability to calculate an effect size estimate of the difference between the aggressiveness of individuals who scored high and low on a personality measure hypothesized to increase aggression under provoking, neutral, or non-provoking circumstances. Specific variables that are known to increase aggression, such as alcohol or violent cues were included; furthermore, studies that included selfreport measures of aggression, or that used deviant or clinical samples were excluded. Finally, studies in which personality measures were administered post aggression measures were not included. Researchers operationally defined aggression as any behavior that is intended to harm another individual who wishes to avoid being harmed; conversely, trait aggression is defined as individuals prone to hostile cognitions, angry affect, and a readiness to engage in both physical and verbal aggression. Provocations were categorized into physical, monetary, verbal, and those of frustration.

Unsurprisingly, findings showed those high in trait aggression behaved more aggressively. Additionally, results showed that individuals high in trait irritability behaved more aggressively in the provoking, neutral, and non-provoking conditions than

did their low trait irritability counterparts. Furthermore, individuals high in trait anger when provoked, showed reliably greater levels of aggressive behavior than people low in trait anger. Notably, when under neutral circumstances, high trait anger individuals were no more likely to act aggressively than those low in trait anger. Similarly, individuals with levels of impulsivity were also prone to greater levels of aggressive behavior under provoking circumstances (Bettencourt et al., 2006).

### **Psychological Reactance and Sexual Coercion**

Since the 1960's psychological reactance has enjoyed rich interests in social science research. Sexual coercion too has been of particular interest to researchers since the 1950's. Specifically, sexual coercion on college campuses (Benbouriche & Parent, 2018; Kirkpatrick & Kanin, 1957). Sexual coercion is defined as any tactic or strategy meant to another individual in sexual activity, despite the absence of free and informed consent, or an explicit refusal (Benbouriche & Parent, 2018). Coercive strategies include physical force, threats, verbal assaults, intoxication, and manipulation; therefore, the construct of sexual coercion is best understood as a spectrum ranging from acts that meet the legal threshold for rape to unwanted vulgar verbal advances and assaults (Benbouriche & Parent, 2018; Tedeschi & Felson, 1995).

Despite the abundance of reactance and sexual coercion research independently, little research exists examining the relationship between psychological reactance and sexual coercion.

Baumeister et al. (2002) proposed rape and sexual coercion can be understood from a reactance theory and narcissism framework. Using psychological reactance theory, Baumeister and colleagues framed sexual activity as a freedom, to which one

feels entitled. Narcissism is the underpinning force fueling the reactance, making one feel sexual gratification is entitled. Rejection or denial thus triggers the movement to restore said freedom, resulting in sexually coercive behavior.

Bushman et al. (2003), further explored sexual coercion within the framework of narcissistic reactance. Narcissism and reactance both share a crucial commonality: an enflamed sense of entitlement (Bushman et al., 2003). Moreover, narcissism has shown to strongly correlate with psychological reactance (Frank et al., 1998; Joubert, 1992). Researchers found that narcissism was linked to low empathy toward rape victims and a high subscription to rape myth beliefs. Given that narcissistic men displayed a pattern of thinking that likely is conducive to sexual coercion.

More salient to the current research, Bushman et al., (2003) measured reactance in their participants by setting up an expectation of sexual stimulation. Male participants were told they were involved in an experiment assessing their perceptions of pornographic material, thus creating the expectation of sexual stimulation. Participants were then told a woman would proceed to read them a piece of pornographic literature; however, for some participants, the female actor demonstrated a high level of resistance to reading the literature, and some completely refused; however, other female actors read the entire passage with no prodding from the experimenters. Results showed when the actor refused to read the entire passage or required prodding, narcissistic individuals reacted more harshly, electing to withhold payment and deny future work opportunities from her.

#### **Psychological Reactance and Anger**

Psychological reactance is a negative reactionary emotional state that arises when an induvial perceives threats to their freedoms, and as such, must assert their autonomy through attempting to restore said freedoms (Brehm, 1966). Though a psychological phenomenon, the consequences of reactance are at their core, communicative (Richards & Larsen, 2016). More importantly, a reactive individual generally restores their threatened freedoms by acting in a contrarian manner, be it through physical actions or berating the triggering source of reactance (Richards & Larsen, 2016). Reactance is a multidimensional construct that can be subdivided into two components: motivation and behavior (Brehm, 1966). Similarly, trait-anger can be conceptualized in terms of behavior (i.e., physical assault, verbal assault) and emotional states leading to preceding behavior (i.e., rage, frustration), which we could arguably label as "motivational" states.

Despite previous research studying the effects of psychological reactance on everything from substance use (Dillard & Shen, 2005) to sun protection (Buller et al., 1998, 2000), little research focuses on understanding the nature of reactance and the underlying variables the moderate how reactance is processed (Quick & Stephenson, 2007).

Quick and Stephenson (2007) investigated how participants processed seven different male contraceptive ads that varied in the amount of reactance they elicited. The researchers recruited 160-participants from undergraduate communication courses for the study; 79.9% of the sample was female. Participants were seated in a theatre style-room and the ads were viewed; after viewing, participants completed a series of measures. Threats to perceived choice were measured using an 11-point Likert Type Scale.

Immediately after each viewing, subjects were given 90 seconds to record their thoughts and code each thought as positive (in agreement with the message), negative (not in agreement with the message), or neutral (neither in agreement or disagreement with the message); the total number negatively rated thoughts represented the negative cognitions measure. Anger was assessed using an 11-point scale, anchored by *none of this feeling* and *a lot of this feeling*. After each ad, participants indicated the extent to which they felt angry, irritated, annoyed, or aggravated. Finally, the persuasive power of the ad was measured using the stem, "I felt this ad was...." Items on this measure were anchored using *not at all persuasive/very persuasive and not at all convincing/very convincing*.

Researchers' findings supported Dillard and Shen's (2005) operationalized definition of reactance as a latent variable comprised of state anger and negative cognitions (Quick & Stephenson, 2007). Across all seven ads, Quick and Stephenson found evidence to support the assertion reactance is a combination of affective and cognitive components; furthermore, operationally defining reactance as a composite of state anger and negative cognitions is consistent with Brehm's (1966) original conceptualization of psychological reactance. This finding demonstrates the foundational element anger plays in its relationship to reactance.

Richards and Larsen (2016) examined how anger expression moderates the negative consequences of reactance. Researchers randomly assigned 222-participants to view a public service announcement (PSA) that varied in degrees of freedom-threatening language; the PSA was a flier allegedly attributed to the university's Public Health Initiative (a fictitious organization). After reading the PSA's, participants completed questionnaires and a thought-listing task. Anger was measured using four validated items

from Dillard and Shen (2005), using a 7-point Likert Type Scale (1= none of this feeling, 7 = a great deal of this feeling). To assess negative cognitions, participants were asked to write their thoughts down following the PSA viewing, then self-code the relevance (i.e., relevant, or not relevant) and valence (positive, negative, neutral) of their written thought. One's attitudes towards having conversations about sexual history prior to sex with a new partner was measured using seven semantic differential items anchors (McCroskey & Richmond, 1989) (i.e., bad/good, foolish/wise, negative/positive). Anger was measured using a 7-point Likert Type Scale that assessed the degree to which a person tends to express or repress their anger (Spielberger et al., 1985). Trait reactance was assessed using the Hong Psychological Reactance Scale (Hong & Faedda, 1996).

Researchers found a significant effect of freedom-threatening language on perceived threats to one's freedoms, with low threatening language leading participants to feel less threatened. Furthermore, when state reactance was low in an individual, there was minimal difference in the degree to which expressed anger affected attitude. When state reactance increased, its association with attitude was increasingly negative for people with growing levels of anger expression. Additionally, this study further illustrated the degree to which trait anger and psychological reactance are linked, finding the more trait reactive an individual is the more overt they are in their anger expression (Richards & Larsen, 201

#### **Anger and Sexual Coercion**

Sexual assault and sexual coercion remain an area of ongoing research in academia; however, comparatively little research has examined the role trait anger may play in relation to sexual violence (Ahmed, 2014). Notably, over the past 20-years interest in investigating the role anger and other negative emotional states play in the perpetration of sexual violence has increased, even expanding to include anger within the framework of relapse prevention (Ahmed, 2014). Anger, like anxiety, fear, and sadness, can be functionally adaptive; however, these negative states can turn maladaptive when not processed effectively. Anger in particular can turn maladaptive when its duration, intensity, or frequency exceeds adaptive or appropriate thresholds (Ahmed, 2014; Scherer & Wallbott, 1994). Hostile aggression, the most common form of aggression, is aggression for the purpose of causing harm, such as assault, intimate partner violence, and child abuse (Ahmed, 2014; Baumeister et al., 1996)

Sierra et al. (2009) investigated the relationship between sociodemographic variables (i.e., age, having a partner, frequency of religious practice), personality traits (i.e., anger, hostility, aggressiveness), sexual attitudes, and male chauvinist attitudes (i.e., erotophilia, double standard, rape supportive attitudes) in explaining sexually coercive behavior in a sample of 700, El Salvadorian, male, university students ages 18-40 years old. Researchers measured sexual aggression using the Aggressive Sexual Behavior Inventory (Mosher & Anderson, 1986), anger using the Spanish version of the State Trait Anger Expression Inventory – 2 (Miguel-Tobal et al., 2001), aggression using the Aggressive Questionnaire (Buss & Perry, 1992), erotophilia using the Sexual Opinion Survey (Fisher et al., 1988), double standards using the Double Standard Scale (Caron et

al., 1993), and rape attitudes using the Rape Supportive Attitude Scale (Lottes, 1991). Social desirability was measured using Crowne and Marlowe's Social Desirability Scale (1960). Participants with a score over 1.5 standard deviations above the mean on the Social Desirability Scale (Crowne & Marlowe, 1960) were excluded from the study.

Sierra et al. (2009) found that on average, 11.6% of the men surveyed reportedly used some type of sexual coercion or sexual aggression, ranging from verbal manipulation, the use of substances (i.e., drugs, alcohol), or threats. The influence of personality traits related to aggressive behavior and attitudes toward aggressive sexual behavior showed explained only 18% of the variance; however, among all the variables in the model, anger produced the greatest weight, explaining almost half of the total variance. Furthermore, men who engaged in sexually aggressive behavior (i.e., force, threats) or used other forms of sexually coercive behavior were all characterized by trait anger, meaning, indicating anger and hostility all appeared to be risk factors in the perpetuation of sexual violence.

Calhoun et al. (1997) examined sexual coercion and attraction to sexual aggression in a sample of 65, heterosexual, young men (average age of 19.9 years), from a rural Georgia county. Sexual aggression was measured using a 12-item version of the Sexual Experiences Survey (SES; Koss et al., 1987), one's attraction to and likelihood of engaging in sexually coercive behavior was assessed using the Attraction to Sexual Aggression Scale (Malamuth, 1989), hostility toward women was assessed using the Hostility Toward Women Scale (Check, 1985), anger was measured using the Multidimensional Anger Inventory (Siegel, 1986), and adolescent behavioral problems was assessed using The Youth Self-Report (Achenbach & Edelbrock, 1987). Researchers

also collected information via self-report such as sexual promiscuity, age, alcohol use, dating frequency, and alcohol consumption on dates.

Overall, researchers found that 22% of the sample endorsed engaging in sexually coercive behavior such as unwanted fondling, kissing, and using menacing threats, or penetration by objects; additionally, 6.4% of young men admitted to rape as defined by the legal standard. Furthermore, 34% of the variance found in the attraction to sexual aggression variable was accounted for by the hostility toward women variable, indicating hostility, a manifestation of anger predicted attraction to sexually aggressive behavior. Finally, this study also showed anger to significantly and positively correlate to how attractive a participant found sexually aggressive behavior.

Similarly, Thomas and Gorzalka (2012) investigated the proclivity toward sexually coercive behavior in a sample of 59 heterosexual, male participants, between the ages of 18 and 25, from the University of British Columbia Human Subjects Pool.

Thomas and Gorzalka divided their study into two parts, with phase one consisting of collecting demographic information and completing a sexual coercion package.

Participants completed several measures, and a sexual proclivity coercion package consisting of the Rape Myth Acceptance Scale (Burt, 1980), the Hostility Toward Women Scale (Check, 1985), the Sexual Experiences Survey (Koss & Oros, 1982), and the Likelihood of Raping Item (Malamuth, 1981). Affect was assessed using the Affect Adjective Checklist (Russell & Mehrabian, 1974), acculturation was measure using the Vancouver Index of Acculturation, and social desirability was assessed using the Balanced Inventory of Desirable Responding -Version 6 (Paulhus, 1984; Paulhus & Martin, 1988).

Upon arriving for the second part of the study, participants were individually escorted to another room by a female research assistant; along the way, a female confederate bumped into the subjects. Depending on the condition to which the participants were assigned, the female confederate either offered an apology or an insult. Upon entering the research room, participants encountered an attractive female confederate writing notes on a whiteboard under the pretense of preparing for a meeting; she agreed to allow participants to use the room while she prepared. Researchers assessed participants' emotional reactivity prior to the bump and again after reading either an insult/sexually coercive, insult/non-sexually coercive, and no insult/sexually coercive vignette.

Thomas and Gorzalka (2012) found that those exposed to the insult and the sexually coercive vignette showed significant increases in anger when compared to the condition that received insult and the non-sexually coercive vignette; furthermore, the highly sexually coercive proclivity group demonstrated higher emotional reactivity across all conditions when compared to the low sexually coercive proclivity group.

#### The Present Study

The present study aims to examine the relationship between psychological reactance, sexual coercion, and the moderating effect of anger on that relationship.

Despite much research investigating the role of aggression in terms of rape, little research has looked at the relationship between psychological reactance and sexual coercion; to date, no research has examined the role of anger as a possible moderator between reactance and sexual coercion.

The current study conceptualizes reactance from a two-dimensional model consisting of verbal and behavioral reactance (Buboltz et al., 2002). Given current research on sexual coercion views sexually coercive behavior as on a spectrum that ranged from verbal harassment to rape, it stands to reason there may be a link between reactance and sexual coercion. Furthermore, the role of aggression in rape and sexual assault (Armenti et al., 2017; Bhogal & Corbett, 2016; Shorey et al., 2008) demonstrated in previous studies suggests it could be helpful to examine the role anger plays in the facilitation of sexual assault; anger being conceptualized as a negative emotional state leading to maladaptive response patterns falling along a spectrum ranging from belligerence to physical violence. This study assessed clinical anger, another name for chronic anger; this manuscript uses the terms interchangeably, and it should be understood that both clinical and chronic anger are referring to the same construct.

### **Hypotheses**

### **Hypothesis 1A:**

Verbal reactance will significantly relate to sexual coercion, such that, higher verbal reactance is related to greater sexually coercive behavior.

### **Hypothesis 1B:**

Behavioral reactance will significantly relate to sexual coercion, such that, higher behavioral reactance is related to increased sexually coercive behavior.

#### **Justification for hypothesis 1A and 1b**:

Sparse literature exists delving into the relationship between psychological reactance and sexual coercion. Bushman et al. (2003), tested a narcissistic reactance theory of sexual coercion and found individuals high in narcissism, were more reactive to

the perceived loss of sexual freedoms. Expanding on this work, the present study aims to explore the link between reactance and sexual coercion from a purely reactance theory framework. Seemann et al. (2004) found highly reactive individuals to be more interpersonally aggressive, less socially compliant, territorial, and impulsive. Knowing this, it would stand to reason that reactive individuals would likely view sexual desires as a set of free behaviors, and as such, be triggered when threats are presented (i.e., rejection, denial).

### **Hypothesis 2A:**

Verbal psychological reactance will significantly relate to overall anger, such that, higher verbal reactance is related to higher clinical anger.

### **Hypothesis 2B:**

Behavioral psychological reactance will significantly relate to anger, such that, higher behavioral reactance is related to higher clinical anger.

### Justification for hypothesis 2A and 2B

Seemann et al. (2004) found highly reactive individuals to be more interpersonally aggressive, less socially compliant, territorial, and impulsive.

Furthermore, Quick and Stephenson (2007) asserted reactance is the product of negative cognitions and trait anger. Based on the previous research, strong evidence exists to support the assertion reactance and anger are closely tied construct

## **Hypothesis 3:**

Anger will significantly moderate the relationship between psychological reactance and sexual coercion such that, those high in clinical anger will behave more sexually coercive, and those low in trait anger will be less sexually coercive.

### **Justification for hypothesis 3**

Sierra et al. (2009) found anger a strong predictor of sexual coercion. In the same vein, myriad studies show that trait aggression strongly predicts sexual coercion and intimate partner violence (Armenti et al., 2017; Bhogal & Corbett, 2016; Shorey et al., 2008). Based on previous research, there appears to be evidence that anger does indeed predict engagement in sexually coercive behavior.

#### CHAPTER II

### **METHOD**

# **Participants**

Five hundred and seventy-three participants were recruited via social media, and a university listserv from a medium sized public university in the American south.

Participants who failed to complete at least 80% of each instrument were removed (Tabachnick & Fidell, 2013). After removing participants who completed less than 80% of the questionnaires, the final sample size consisted of 498 participants.

Participants ranged in age between 18 and 53 years old (M = 28.8, SD = 9.6). Over half the sample at 60.5% (n = 271) identified as male, 33.5% identified as female (n = 150), 1.1% identified as a trans man (n = 5), less than .2% identified as a trans woman (n = 1), and 4.7% identified as gender non-conforming (n = 21). In this sample, 381 participants identified as White (85.6%), 26 participants identified as African American/Black (5.8%), 22 subjects identified as Latinx (4.9%), 9 participants identified as poly-racial (2.0%), 4 individuals identified themselves as Asian (0.9%), 2 participants identified as Pacific Islander 0(.4%), and 1 individual identified themselves as American Indian or Alaska Native (0.2%). This sample consisted of 344 heterosexual individuals (74.1%), 78 bisexual participants (16.8%), 13 gay men (2.8%), 11 queer individual (2.4%), 8 pansexual participants (1.7%), 6 lesbian women (1.3%), and 4 humans who identified as asexual (0.9%).

Notably, this was an educated sample, with 44.7% (n = 210) of participants having completed either a bachelor's or graduate level degree, and 31.1% of participants being currently enrolled in college (n = 146).

One-hundred and twenty-one subjects had earned a Bachelor's degree (25.8%), 89 participants reported having graduate degrees (18.9%), 14.1% of subjects had attended some college (n = 66), 24 participants reported earning Associates degrees (5.1%), 3.2% of the sample had earned a high-school diploma or GED (n = 15), 6 subjects completed vocational training (1.3%), and 2 individuals reported not completing primary education (0.4%). A summary of demographic variables can be found in Table 1.

An a priori power analysis was conducted to determine the minimum sample size necessary to produce the maximum power while simultaneously minimizing the risk for Type I and Type II errors. The analysis was conducted using G\*Power software (Faul et al., 2009) and was based on a linear multiple regression analysis. Power was set to a .80 to maximize the chances of finding a significant effect if one exists in the sample and the effect size  $f^2$  was set to .15 (Araujo & Froyland, 2007; Cohen, 1977). The *alpha* value was set at .05. Based on the power analysis, a total of 125 participants were needed to attain a generalizable finding that is robust against both Type I and Type II errors. The current study obtained a sample size well beyond the 125-participant recommendation and as such, the current findings are unlikely to be affected by Type I or Type II errors.

**Table 1**Participant Demographic Information

Demographic Variable	n	%
Gender		
Male	271	60.5
Female	150	33.5
Gender non-conforming	21	4.7
Trans-man	5	1.1
Trans-woman	1	0.2
Race		
White	381	85.6
African American	26	5.8
Latinx	22	4.9
Poly-racial	9	2.0
Asian	4	0.9
Pacific Islander	2	0.4
American Indian/Alaska Native	1	0.2
Sexual Orientation		
Heterosexual	344	74.1
Bisexual	78	16.8
Gay	13	2.8
Queer	11	2.4
Pansexual	8	1.7
Lesbian	6	1.3
Asexual	4	0.9
Education		
Currently Enrolled in	146	31.1
College		
Bachelor	121	25.8
Graduate	89	18.9
Some college	66	14.1
Associate	24	5.1
High school/GED	15	3.2
Vocational	6	1.3
Less than primary Education	2	0.4
Education		

Note. N = 498. Participants were on average 28.8 years old (SD = 9.6).

#### **Instruments**

**Demographics**. Every participant completed a demographic questionnaire that included, age, gender, ethnicity, sexual orientation, and the highest level of education achieved.

Social Desirability. The Marlowe-Crowne Social Desirability Scale (SDS) (Crowne & Marlowe, 1960) was used to assess participants' tendency to attempt to portray themselves in a socially desirable light often at the expense of honest responding. The Marlowe-Crowne consists of 33 items and is formatted as a series of true-false statements. The SDS has demonstrated satisfactory reliability with Cronbach's alphas reported at .82 (Reynolds, 1982), .78 (Sârbescu et al., 2012), and .88 (Crowne & Marlowe, 1960). The SDS produces a total score, with low scores (0-8) indicating the respondent endorsed a socially undesirable pattern of responding. Average scores (9-19) suggest the participant displayed a typical degree of care for how they may be perceived socially. High scores (20-33) suggest the participant demonstrated an excessive amount of concern for social perception and endorsed items in such a way as to minimize negative perceptions. The Cronbach's alpha for the SDS in the current study is .74.

Psychological Reactance. Psychological reactance was measured using the Therapeutic Reactance Scale (TRS) (Dowd et al., 1991). The TRS is a 28-item, self-report inventory; the instrument produces a total score (TRS:T) and two subscale scores labeled Verbal (TRS:V) and Behavioral (TRS:B) reactance; this study utilized the two subscales scores. Items on the scale are rated on a 4-point Likert scale (1 = strongly disagree to 4 = strongly agree). A score is calculated by summing the total of the 28 responses. Items 7, 11, 14, 18, 21, 24, 25, and 28 were reversed scored.

The original sample (Dowd et al., 1991) produced a mean reactance score of 66.68, with a standard deviation of 6.59. Internal consistency reliability scores were .75 (Verbal), .81 (Behavioral) and .84 (Total); test-retest reliabilities (3 weeks) were .57 (Verbal), .59 (Behavioral) and .60 (Total). Factor analysis revealed the two factors accounted for 26% of the total variance, and that those two factors minimally correlated (.37); the variance accounted for by each factor was not provided (Buboltz et al., 2002; Dowd et al., 1991). The Therapeutic Reactance Scale has high divergent and construct validity as demonstrated by Seemann et al. (2005), Lukin et al. (1985), and Swoboda et al. (1990). The current sample produced Cronbach's alphas of .6 for verbal reactance and .65 for behavioral reactance.

Anger. Anger was measured using the Clinical Anger Scale (CAS) (Snell et al., 1995). The CAS measures chronic anger experienced now, feelings of anger about the future, failure, hostile feelings, annoying others, self-anger, misery, desire to harm others, and sexual interference. The CAS is a 21-item self-report instrument in which participants read each of the 21 groups of statements (4 statements per group) and choose the statement that best represents how they feel; a total anger score is derived from summing the 21 responses. Initial psychometric analysis yielded reliability coefficients of .94 for males and females combined, .95 for males, and .92 for females. The CAS produced satisfactory factorial validity and the test re-test reliability was .78 (Snell et al., 1995). Saleem et al. (2013) reported the CAS to demonstrate sufficient reliability and validity, with a Cronbach's Alpha value of .91. The current sample produced a Cronbach's Alpha value of .88.

Sexual Coercion. Sexual coercion was measured using the Revised Conflicts Tactics Scale (CTS2) (Straus et al., 2003). The CTS2 is a 78-item, self-report questionnaire that produces the following 5 scale scores: negotiation, psychological aggression, physical assault, sexual coercion (ranging from verbal threats to rape), and injury. Negotiation (.86), physical aggression (.79), physical assault (.86), sexual coercion (.87) and injury (.95) all produced pyrometrically sound internal consistency in the original sample; furthermore, discriminant analysis further supports the validity of the CTS2 (Signorelli et al., 2014; Straus et al., 2003). This study utilized the sexual coercion subscale specifically, for which the subscale produced an alpha of .71.

#### **Procedure**

After receiving approval from the Institutional Review Board, participants were recruited through the university listserv from a mid-sized public university in the South and by snowball sampling on social media (i.e., Twitter, Facebook). Participants accessed the survey via a link that directed them to the survey on the digital data collection platform Survey Monkey. Prior to entering the survey, participants reviewed an informed consent document and were given the choice to continue on with the survey or exit; furthermore, at any time participants had the option to opt-out of completing the survey. All participants consenting to participate completed the demographic questionnaire followed by various scales. All participants were provided with information regarding accessing counseling services, suicide prevention, and domestic violence hotlines. No financial or material incentives were offered for participation.

#### CHAPTER III

#### RESULTS

### **Data Cleaning and Missing Values**

Prior to testing the hypothesis, data was cleaned, missing data addressed, and all assumptions of regression were assessed. Participants who failed to complete at least 80% of each instrument were removed from the dataset. Notably, this dataset did not collect from any individual under 18 years of age and as such, no participants were removed for reportedly being underage. Little's Missing Completely at Random (MCAR) test was conducted on the remaining data to determine if data were missing completely at random. Results of Little's MCAR revealed data was not missing completely at random  $(x^2 [481] = 643.248, p < .000)$ . Tabachnick and Fidell (2013) assert data can be categorically understood as missing completely at random (MCAR) or missing not completely at random (MNCAR). However, only data missing completely at random can be evaluated via statistical testing. All missing values in this dataset fell below the 5% missingness threshold suggested by Tabachnick and Fidell (2013) and Schafer (1999). For missing data that represents a minute portion of a larger dataset, Tabachnick and Fidell suggest keeping the cases with missing data and performing a data placement method, with the understanding that all inferences should be interpreted with caution. This study utilized the expectation maximization method. According to Tabachnick and

Fidell, this method is superior to other data replacement options (i.e., mean replacement, multiple imputation) as it calculates the maximum likelihood value for missing data; Kang (2013) also asserted expectation maximization is a suitable option for missing data.

The mean score on the Social Desirability Scale (SDS) (Crowne & Marlowe, 1960) was 15.5 (SD = 4.7) and fell within the average range, indicating this sample did not attempt to portray themselves in an excessively positive or pathological manner (for means, see Table 2). Therefore, evidence suggests most participants did not approach the survey with impression management as a priority.

The mean scores for verbal and behavioral reactance were 30.7 (SD = 2.9) and 38.2 (SD = 5.1) respectively. The average score on the sexual coercion subscale was 3.2 (SD = 8.7), and 7.7 (SD = 6.6) for the clinical anger variable; for a summary of mean, standard deviations, and Cronbach's alphas, see Table 2.

#### **Assessing Assumptions**

A preliminary analysis was conducted to determine if all regression assumptions were met. After initial screening, it was discovered that several outliers existed in the dataset. However, removing outliers did not normalize the distribution of the residuals or affect significance, therefore, the outliers were retained. Additionally, logarithmic transformations did not produce normally distributed residuals, although the transformations did improve homoscedasticity and as such all regressions were performed using the logarithmic transformed variables (Tabachnick & Fidell, 2013). Prior to testing the model, analyses were conducted to determine if the assumptions of regression were met. The Durbin-Watson value was 1.76, suggesting the independence of

errors assumption was satisfied. VIF values for the independent factors behavioral reactance (1.62), verbal reactance (1.45), and clinical anger (1.13) indicate there is no problematic multicollinearity in the dataset as all values were less than four (Tabachnick & Fidell, 2013). Outliers were assessed using the Mahalanobis, Cooks, and leverage values (3p/n). The critical Mahalanobis value was 11.34 (Chi-squared table, df = 3,  $\alpha = .01$ ) which is greater than 8.87, the maximum Mahalanobis value in the data. The average leverage value was .02, a value smaller than the maximum leverage value of .06. Additionally, the Cooks value was less than 1. Based on the Mahalanobis, Cooks value, and centered leverage values, it does not appear that problematic outliers existed in the data. Scatterplot analysis showed a loose pattern, indicting some possible issues with linearity and homoscedasticity.

Residual normality was assessed by examining the skewness, kurtosis, and Shapiro-Wilks, and Kolmogorov-Smirnov values. The residuals skewness value was .241 and the kurtosis value was -1.246, suggesting a platykurtic distribution. The Shapiro-Wilks and Kolmogorov-Smirnov value was significant. Therefore, it can be assumed the residuals are not normally distributed. However, the Central Limit Theorem posits that with large enough sample sizes normality within a distribution will correct itself and, as such, is robust against violations of normality.

 Table 2

 Descriptive Statistics, Cronbach's Alphas, and Bivariate Correlations Matrix

7	/ariable	n	М	SD	α	1	2	3	4	5
1.	Verbal Reactance	469	30.7	2.9	.60	-	.50*	.20*	.10*	05
2.	Behavioral Reactance	469	38.2	5.1	.65		-	.35*	.12*	38*
3.	Clinical Anger	468	7.7	6.6	.88			-	.07	34*
4.	Sexual Coercion	469	3.2	8.7	.71				-	05
5.	Social Desirability	469	15.5	4.7	.74					-

<sup>\*</sup> Denotes significance at the p < .01 (1 and 2 tailed tests)

### **Hypothesis Testing**

Hypothesis 1A, 1B, 2A, and 2B were examined by running bivariate correlations (see Table 2). Hypothesis 1A and 1B predicted that verbal (1A) and behavioral (1B) reactance will positively correlate to sexual coercion. Hypothesis 2A and 2B asserted verbal (2A) and behavioral (2B) reactance will positively correlate to clinical anger. Verbal reactance showed a positive, significant correlation to sexual coercion; hypothesis 1A was confirmed in that the correlation showed a significant relationship, albeit a weak one. Hypothesis 1B was confirmed. Behavioral reactance significantly correlated to sexual coercion, though the relationship was positive, it was generally weak. Verbal reactance significantly and positively correlated to clinical anger, confirming hypothesis 2A; however, again, the relationship was weak. Behavioral reactance also had a significant and positive relationship with anger, confirming hypothesis 2B.

Hypothesis 3 predicted that clinical anger would moderate the relationship between psychological reactance and sexual coercion, such that highly clinical angry individuals will endorse behaving more sexually coercively. Hypothesis 3 was tested using the PROCESS macro introduced by Hayes (2013). Prior to testing the moderation hypothesis, all predictors (verbal reactance, behavioral reactance) and moderators (clinical anger) were standardized. Two models were tested to determine if clinical anger moderated the relationship between the predictor variables, verbal and behavioral reactance, and the outcome variable, sexual coercion. Model 1 tested the hypothesis that clinical anger would moderate the relationship between verbal reactance and sexual coercion, such that individuals endorsing higher clinical anger will also endorse engaging in more sexually coercive behavior. Overall, model 1 was not significant ( $R^2 = .03$ , F (3,148) = 2.04, p = .11); clinical anger did not moderate the relationship between verbal reactance and sexual coercion. A second model was tested to determine if clinical anger strengthened the relationship between behavioral reactance and sexual coercion such that those reporting higher clinical anger would endorse higher engagement in sexually predatory behavior. The second model did not produce a significant interaction effect ( $R^2$ = .04, F(3,148) = 2.49, p = .06); clinical anger did not moderate the relationship between behavioral reactance and sexual coercion. Notably, clinical anger's moderating role between behavioral reactance and sexual coercion was close to achieving significance, suggesting that clinical anger may have a moderating role under different circumstances (i.e., different instruments, or with a larger sample). Overall, these results fail to confirm hypothesis 3, indicating clinical anger does not moderate the relationship between reactance (verbal and behavioral) and sexual coercion.

Because no significant interaction term was observed using Hayes' method, an ordinary least squares multiple regression was run to evaluate the relationship between the *predictor* variables verbal of reactance, behavioral reactance, and clinical anger on the outcome variable of sexual coercion (Table 3). An ordinary least squares regression was conducted to determine if verbal reactance, behavioral reactance, and clinical anger, significantly predict sexual coercion. Results of the regression suggested the three predictors as a whole accounted for little variance (2.6%) in sexual coercion, and that the variance explained by these predictors was not significant,  $R^2 = .261$ , F(3, 148) = 1.31, p = .271. Interestingly, clinical anger missed the threshold for significance slightly (B = .220,  $\beta = .13$ , p = .11, 95% CI [-.494, .054]), while verbal reactance (B = .995,  $\beta = .084$ , p = .394, 95% CI [-1.307, 3.296]), and behavioral reactance (B = .441, B = .046, B = .656, 95% CI [-1.512, 2.393) had no meaningful bearing on sexual coercion. In summary, hypothesis 3 was not supported.

**Table 3**Clinical Anger as Moderator of the Relationship Between Verbal and Behavioral Reactance and Sexual Coercion

Testing Steps in Moderation	В	SE	Model	95% CI		p
Models	Ъ	SE		LL	UL	
Psychological Reactance						
Verbal Reactance	-2.14	2.44	$R^2 = .03, F(3,148) = 2.04$	-6.97	2.68	.11
Behavioral Reactance	-2.82	3.50	$R^2 = .04, F(3,148) = 2.49$	-6.77	1.12	.06

CI = Confidence Interval \* p < .01. \*\* p < .05

Table 4

Least Squares Multiple Regression Coefficients of Verbal Reactance, Behavioral Reactance, and Clinical Anger on Sexual Coercion

Variable	В	SE	t	p	95% CI
Verbal Reactance	.995	1.164	0.85	.39	[-4.40, 1.70]
Behavioral Reactance	.441	.988	0.44	.65	[-1.51, 2.39]
Clinical Anger	220	.139	0.05	.11	[49, .05]

CI = Confidence Interval \* p < .01. \*\* p < .05

## **Chapter IV**

### **DISCUSSION**

#### **Principal Findings**

The current study aimed to expand the research on sexual coercion and examine if anger moderates the relationship between psychological reactance and sexual coercion. A sample of 498 participants was collected via social media and a university list-serve. The final sample consisted of 60.5% men, 33.5% women, and 6% trans/gender non-conforming individuals. Participants were between the ages of 18 and 53, the mean age being 28 years old. Of note, 44.7% of participants in this sample reported completing a bachelor's or graduate level degree, making this a relatively well-educated sample.

Hypothesis 1A predicted that verbal reactance will positively and significantly correlate to sexual coercion. Hypothesis 1B predicted behavioral reactance will positively and significantly correlate to sexual coercion. Hypothesis 2A and 2B asserted verbal (2A) and behavioral (2B) reactance will significantly correlate to clinical anger. Hypothesis 1A, 1B, 2A, and 2B were tested using bivariate correlations (see Table 2). Verbal reactance showed a small, significant correlation to sexual coercion, indicating that an increase in verbal reactance shows small increases in sexually coercive behavior; hypothesis 1A was supported. Hypothesis1B was supported as behavioral reactance did positively and significantly correlate to sexual coercion, though the relationship was weak. This finding supports the hypothesis that those higher in behavioral reactance are likely to behave in a more sexually coercive way.

Put another way, when triggered, individuals prone toward correcting for threats to their freedom by acting out (i.e., physical force, intimidation) showed a higher tendency toward *behaving* in a sexually predatory manner (i.e., using physical force, violence).

Verbal reactance positively correlated with clinical anger, supporting hypothesis 2A, indicating that individuals endorsing high levels of verbal reactance (i.e., belligerence, verbal combativeness) are likely to report higher levels of clinical anger. Simply put, verbally reactive participants were more likely to be afflicted with chronic anger. Finally, behavioral reactance had a positive relationship with clinical anger, confirming hypothesis 2B, indicating highly behaviorally reactive people are likely to endorse elevated amounts of clinical anger, meaning those with the tendency toward behaviorally attempting to restore their freedoms also had high levels of chronic anger.

Hypothesis 3 predicted that clinical anger will moderate the relationship between reactance and sexual coercion such that those will high clinical anger will beave more sexually coercively. The moderation hypothesis was tested using Hayes' (2013) PROCESS macros. Two models were tested to determine if clinical anger moderated the relationship between the predictor variables, verbal and behavioral reactance, and the outcome variable, sexual coercion. Model 1 tested if clinical anger moderated the relationship between verbal reactance and sexual coercion such that individuals' higher clinical anger would also report increased sexually predatory behavior. Overall, model 1 was not significant ( $R^2 = .039$ , F(3,148) = 2.04, p = .11); clinical anger did not moderate the relationship between verbal reactance and sexual coercion. Given that verbal reactance was not a significant predictor of sexual coercion, no relationship existed for a

moderation to occur, meaning, clinical anger did not have a bearing on the strength of the relationship between verbal reactance and sexual coercion, because no meaningful relationship was found.

A few reasons are possible for why this study failed to show anger moderated the relationship between verbal reactance and sexual coercion. First, individuals prone to restore freedoms through snappy remarks or belligerence may not be triggered or willing to cross physical boundaries to attain something they want. Also, chronic anger did not moderate the relationship between sexual coercion and verbal reactance, but trait anger may (Sierra et al., 2009; Thomas & Gorzalka, 2012). Finally, this study examined reactance from two different dimensions (verbal and behavioral) using the Therapeutic Reactance Scale (TRS) (Dowd et al., 1991); perhaps another reactance measure, such as the Hong Psychological Reactance Scale (Hong & Faedda, 1996) combined with exploring trait, rather than chronic anger using the STAXI-2 (Spielberger, 1999) would yield a different finding.

A second model was tested to assess if clinical anger moderated the relationship between behavioral reactance and sexual coercion such that those reporting higher clinical anger would endorse higher involvement in sexually coercive behavior. The second model did not produce a significant interaction effect ( $R^2 = .04$ , F(3,148) = 2.04, p = .06). That is, clinical anger did not moderate the relationship between behavioral reactance and sexual coercion. These non-confirming results indicate clinical anger did not moderate the relationship between reactance (verbal and behavioral) and sexual coercion.

One reason this study failed to find moderation may be that this sample was low in clinical anger, with the average clinical anger value being 7.69, while Saleem et al. (2013) reported an average clinical anger score of 23.47, an average over twice that found in this study. Perhaps examining the relationship between behavioral reactance and sexual coercion using different measurements of reactance and sexual coercion would produce a different result, as this study focused on chronic anger and two dimensions of reactance. However, behavioral reactance did show a significant correlation to sexual coercion, indicating a relationship between the two constructs that merits further exploration.

After running the proposed models, an ordinary least squares multiple regression was run to evaluate the relationship between the predictor variables and sexual coercion. Results of the multiple regression indicated neither verbal nor behavioral reactance predicted sexually coercive behavior. Anger was not a significant predictor of sexual coercion, though accounted for most of the variance in the regression (B = -.220,  $\beta = -1.37\%$ ). These findings suggest that anger plays a role in the perpetuation of sexually coercive behavior, though this study failed to show that anger was a significant predictor of sexually predatory behavior. As mentioned before, this study focused on a specific type of anger: clinical anger; the more general trait anger may be helpful in finding significant results in the future.

Several factors may have contributed to the findings. First, this study focuses on the role of clinical anger. Clinical anger is different from trait anger in that it is conceptualized as a more chronic and severe form of anger experience and expression (Gardner & Moore, 2008). While clinical anger did not significantly predict sexual

coercion, less pathological forms of anger, like trait anger, may have more predictive value. Additionally, the current study measured psychological reactance using the Therapeutic Reactance Scale (TRS) (Dowd et al., 1991). Different scales measuring reactance, such as the Hong Psychological Reactance Scale (Hong & Faedda, 1996) may have more success in understanding the link between reactance and sexual coercion, as the Hong scale captures different dimensions of reactance.

Similarly, other measures to assess for sexually coercive behavior such as the Sexual Experiences Survey – Short Form Perpetration (Koss et al., 2007) may yield different results, as the CTS2 (Straus et al., 2003) is overt in its face validity and as such, susceptible to manipulation. Additionally, this sample produced much smaller clinical anger values than found in previous research. This sample did not attempt to positively impression manage to a compromising degree; however, the sexual coercion scale is highly face valid and as such, may trigger some to not fully reveal their sexual behavior. Yet another reason, the Cronbach's alphas for the reactance scales was not ideal, indicating compromised reliability from inconsistent results. Finally, this study employed only one, self-report measurement for each variable, which could have resulted in monomethod bias (Donaldson & Grant-Vallone, 2002).

### **Practical Implications**

The current study showed that despite having positive correlations, the correlation between psychological reactance and sexual coercion was small, with verbal reactance having a correlation of .1 and behavioral reactance having a correlation of .12; however, this information still points to potential red flags when assessing for sexual violence risk. Namely, highly reactive individuals may be more likely to behave in a sexually predatory

manner. Furthermore, anger did not moderate the relationship between sexual coercion and verbal reactance but did approach significance in the relationship between behavioral reactance and sexual coercion, suggesting behavioral reactance appears to influence the perpetuation of sexually coercive behavior. In the same vein, the regression showed that anger did account for most of the variance found between the predictor and outcome variable, suggesting anger does predict sexually coercive behavior to some degree.

These findings suggest that further understanding anger's role in sexual coercion is necessary to addressing and preventing sexually predatory behavior. However, other personality variables such as callousness or narcissism may be better predictors of such behavior as these traits may indicate a proclivity toward sexually coercive behavior. Finally, though the correlations between reactance (verbal and behavioral) and sexual coercion were small, they were significant, indicating when evaluating the potential for sexually predatory behavior, reactance is a factor worth some consideration. Meaning, when conceptualizing the risk for sexual violence or sexual coercion, it could be worth recognizing reactance as a potential risk factor.

#### **Limitations and Suggestion for Future Research**

This study had several limitations. First, anger was measured using the CAS (Snell et al., 1995), a unidimensional instrument that measures clinical anger. Future research may wish to examine from a broader conceptualization, such as exploring trait anger, the less pathological and chronic form of anger. Additionally, this study used unidimensional anger measurement. Future research may wish to use the State Trait Anger Expression Inventory (Spielberger, 1999) an instrument that examines anger from a multidimensional perspective. Secondly, this sample consisted of overwhelmingly

cisgender individuals. To gain a more comprehensive and culturally sensitive understanding of the relationship between anger and sexual coercion, future research with trans and gender non-conforming populations is necessary. In the same vein, this sample was largely educated, and future research would benefit from including a more educationally diverse sample.

Further research exploring predictors of sexual coercion is also necessary. For example, control and jealousy were found to be predictors of sexual coercion (Snead & Babcock, 2019). Future research may wish to identify strategies that aim to reduce controlling behavior and jealousy. The role of rejection as a potential predictor also warrants inclusion in the research and would serve to fill a gap in the existing literature. In the same vein, feelings of sexual inadequacy would also be a worthwhile addition to the sexual assault literature.

Finally, future research may wish to examine sexual coercion, psychological reactance, and anger using a mediation model. This study hypothesized that anger would moderate or strengthen the relationship between reactance and sexual coercion, but perhaps the relationship could be better understood as a series of reactions in which reactance leads to anger, which in turn leads to sexually coercive behavior.

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### APPENDIX A: DEMOGRAPHICS QUESTIONAIRRE

#### Please indicate the following

- 1. How old are you?
- 2. Please indicate your gender.
  - a. Male
  - b. Female
  - c. Trans male/Trans man
  - d. Trans female/Trans woman
  - e. Nonbinary/Gender non-conforming
- 3. What race/ethnicity best identifies you?
  - a. Native American/First Nation
  - b. Black/African American/African
  - c. Hispanic/Latinx
  - d. White/Eurpoean non-Hispanic/Latinx
  - e. Asian/Asian American/Pacific Islander
  - f. Bi- or Multiracial/Ethnic
  - g. Other-Please specify
- 4. Please indicate your sexual orientation
  - a. Heterosexual/Straight
  - b. Gay

c.	Lesbian					
d.	Bisexual					
e.	Asexual					
f.	Other (please specify)_					
g.	Asexual					
h.	Other (please specify)					
5. Please indicate your highest level of educational attainment.						
a.	Some high school					
b.	High school diploma or GED					
c.	Some college					
d.	Currently enrolled in university/college					
e.	Associates degree					
f.	Bachelor's degree					
g.	Some graduate training					
h.	Graduate degree					
i.	Vocational Training					
6. Please indicate your highest level of educational attainment.						
a.	Some high school					
b.	High school diploma or GED					
c.	Some college					
d.	Currently enrolled in university/college					
e.	Associates degree					
f.	Bachelor's degree					

- g. Some graduate training
- h. Graduate degree
- i. Vocational Training
- 7. As a juvenile have you ever been placed in state foster care?
- 8. Have you ever been incarcerated in a juvenile detention facility
- 9. Please indicate your highest level of educational attainment.
  - a. Some high school
  - b. High school diploma or GED
  - c. Some college
  - d. Currently enrolled in university/college
  - e. Associates degree
  - f. Bachelor's degree
  - g. Some graduate training
  - h. Graduate degree
  - i. Vocational Training
- 10. As a juvenile have you ever been placed in state foster care?
- 11. Have you ever been incarcerated in a juvenile detention facility?

#### APPENDIX B: CLINICAL ANGER SCALE (CAS)

#### Circle which you most identify with

- 1. A. I do not feel angry.
  - B. I feel angry.
  - C. I am angry most of the time now.
  - D. I am so angry and hostile all the time that I can't stand it.
- 2. A. I am not particularly angry about my future.
  - B. When I think about my future, I feel angry.
  - C. I feel angry about what I have to look forward to.
  - D. I feel intensely angry about my future, since it cannot be improved.
- 3. A. It makes me angry that I feel like such a failure.
  - B. It makes me angry that I have failed more than the average person.
  - C. As I look back on my life, I feel angry about my failures.
  - D. It makes me angry to feel like a complete failure as a person.
- 4. A. I am not all that angry about things.
  - B. I am becoming more hostile about things than I used to be.
  - C. I am pretty angry about things these days.
  - D. I am angry and hostile about everything.
- 5. A. I don't feel particularly hostile at others.
  - B. I feel hostile a good deal of the time.
  - C. I feel quite hostile most of the time.
  - D. I feel hostile all of the time

- 6. A. I don't feel that others are trying to annoy me.
  - B. At times I think people are trying to annoy me.
  - C. More people than usual are beginning to make me feel angry.
  - D. I feel that others are constantly and intentionally making me angry.
- 7. A. I don't feel angry when I think about myself.
  - B. I feel more angry about myself these days than I used to.
  - C. I feel angry about myself a good deal of the time.
  - D. When I think about myself, I feel intense anger.
- 8. A. I don't have angry feelings about others having screwed up my life.
  - B. It's beginning to make me angry that others are screwing up my life.
  - C. I feel angry that others prevent me from having a good life.
  - D. I am constantly angry because others have made my life totally miserable.
- 9. A. I don't feel angry enough to hurt someone.
  - B. Sometimes I am so angry that I feel like hurting others, but I would not really do it.
  - C. My anger is so intense that I sometimes feel like hurting others.
  - D. I'm so angry that I would like to hurt someone.
- 10. A. I don't shout at people any more than usual.
  - B. I shout at others more now than I used to.
  - C. I shout at people all the time now.
  - D. I shout at others so often that sometimes I just can't stop.
- 11. A. Things are not more irritating to me now than usual.
  - B. I feel slightly more irritated now than usual.
  - C. I feel irritated a good deal of the time.
  - D. I'm irritated all the time now.
- 12. A. My anger does not interfere with my interest in other people.
  - B. My anger sometimes interferes with my interest in others.

- C. I am becoming so angry that I don't want to be around others.
- D. I'm so angry that I can't stand being around people.
- 13. A. I don't have any persistent angry feelings that influence my ability to make decisions.
  - B. My feelings of anger occasionally undermine my ability to make decisions.
  - C. I am angry to the extent that it interferes with my making good decisions.
  - D. I'm so angry that I can't make good decisions anymore.
- 14. A. I'm not so angry and hostile that others dislike me.
  - B. People sometimes dislike being around me since I become angry.
  - C. More often than not, people stay away from me because I'm so hostile and angry.
  - D. People don't like me anymore because I'm constantly angry all the time.
- 15. A. My feelings of anger do not interfere with my work.
  - B. From time to time my feelings of anger interfere with my work. it
  - C. I feel so angry that it interferes with my capacity to work.
  - D. My feelings of anger prevent me from doing any work at all.
- 16. A. My anger does not interfere with my sleep.
  - B. Sometimes I don't sleep very well because I'm feeling angry.
  - C. My anger is so great that I stay awake 1—2 hours later than usual.
  - D. I am so intensely angry that I can't get much sleep during the night.
- 17. A. My anger does not make me feel anymore tired than usual.
  - B. My feelings of anger are beginning to tire me out.
  - C. My anger is intense enough that it makes me feel very tired.
  - D. My feelings of anger leave me too tired to do anything.
- 18. A. My appetite does not suffer because of my feelings of anger.
  - B. My feelings of anger are beginning to affect my appetite.
  - C. My feelings of anger leave me without much of an appetite.
  - D. My anger is so intense that it has taken away my appetite.

- 19. A. My feelings of anger don't interfere with my health.
  - B. My feelings of anger are beginning to interfere with my health.
  - C. My anger prevents me from devoting much time and attention to my health.
  - D. I'm so angry at everything these days that I pay no attention to my health and wellbeing.
- 20. A. My ability to think clearly is unaffected by my feelings of anger.
  - B. Sometimes my feelings of anger prevent me from thinking in a clear-headed way.
  - C. My anger makes it hard for me to think of anything else.
  - D. I'm so intensely angry and hostile that it completely interferes with my thinking.
- 21. A. I don't feel so angry that it interferes with my interest in sex.
  - B. My feelings of anger leave me less interested in sex than I used to be.
  - C. My current feelings of anger undermine my interest in sex.
  - D. I'm so angry about my life that I've completely lost interest in sex.

# APPENDIX C: MARLOW-CROWNE SOCIAL DESIRABILITY SCALE

#### T = True F = False

- 1. T F Before voting I thoroughly investigate the qualifications of all the candidates.
- 2. T F I never hesitate to go out of my way to help someone in trouble.
- 3. T F It is sometimes hard for me to go on with my work if I am not encouraged.
- 4. T F I have never intensely disliked anyone.
- 5. T F On occasions I have had doubts about my ability to succeed in life.
- 6. T F I sometimes feel resentful when I don't get my way.
- 7. T F I am always careful about my manner of dress.
- 8. T F My table manners at home are as good as when I eat out in a restaurant.
- 9. T F If I could get into a movie without paying and be sure I was not seen, I would probably do it.
- 10. T F On a few occasions, I have given up something because I thought too little of my ability. 11. T F I like to gossip at times.
- 12. T F There have been times when I felt like rebelling against people in authority even though I knew they were right.
- 13. T F No matter who I'm talking to, I'm always a good listener

- 14. TF I can remember "playing sick" to get out of something.
- 15. T F There have been occasions when I have taken advantage of someone.
- 16. T F I'm always willing to admit it when I make a mistake.
- 17. T F I always try to practice what I preach.
- 18. T F I don't find it particularly difficult to get along with loudmouthed, obnoxious people.
- 19. TFI sometimes try to get even rather than forgive and forget.
- 20. T F When I don't know something I don't mind at all admitting it.
- 21. T F I am always courteous, even to people who are disagreeable.
- 22. T F At times I have really insisted on having things my own way.
- 23. T F There have been occasions when I felt like smashing things.
- 24. T F I would never think of letting someone else be punished for my wrong-doings.
- 25. T F I never resent being asked to return a favor.
- 26. T F I have never been irked when people expressed ideas very different from my own.
- 27. T F I never make a long trip without checking the safety of my car.
- 28. T F There have been times when I was quite jealous of the good fortune of others.

- 29. T F I have almost never felt the urge to tell someone off.
- 30. TFI am sometimes irritated by people who ask favors of me.
- 31. T F I have never felt that I was punished without cause.
- 32. T F I sometimes think when people have a misfortune they only got what they deserved.
- 33. T F I have never deliberately said something that hurt someone's feelings.

## APPENDIX D: THE THERAPEUTIC REACTANCE SCALE

	Strongly Disagree			Agree	Strongly Agree		
	1			3	4		
1.	If I receive a lukewarm dish at a restaurant, I make an attempt to let that be known.						
	1	2	3	4			
2.	I resent authority figures who try to tell me what to do.						
	1	2	3	4			
3.	I find that I often have to question authority.						
	1	2	3	4			
4.	I enjoy seeing someone else do something that neither of us is supposed to do.						
	1	2	3	4			
5.	I have a strong desire to maintain my personal freedom.						
	1	2	3	4			
6.	I enjoy playing "devil's advocate" whenever I can.						
	1	2	3	4			
7.	In discussions, I am easily persuaded by others.						
	1	2	3	4			
8.	Nothing turns me on as much as a good argument!						
	1	2	3	4			

9.	2. It would be better to have more freedom to do what I want on a job.									
	1	2	3	4						
10	10. If I am told what to do, I often do the opposite.									
	1	2	3	4						
11	11. I am sometimes afraid to disagree with others.									
	1	2	3	4						
12	. It really bothe	ers me whe	n police offi	cers tell peo	pple what to do.					
	1	2	3	4						
13	. If does not up	set me to c	hange my p	lans because	e someone in the group wants to do					
	something els	se.								
	1	2	3	4						
14	. I don't mind	other peopl	e telling me	what to do.						
	1	2	3	4						
15	. I enjoy debate	es with oth	er people.							
	1	2	3	4						
16	. Nothing turns	me on as i	much as a go	ood argumer	nt!					
	1	2	3	4						
17	. It would be be	etter to hav	e more freed	dom to do w	hat I want on a job.					
	1	2	3	4						
18	. It would be be	etter to hav	e more freed	dom to do w	hat I want on a job.					
	1	2	3	4						
19	. If I am told w	hat to do, I	often do the	e opposite.						
	1	2	3	4						

20. I am sometimes afraid to disagree with others.										
1	2	3	4							
21. It really both	ners me whe	n police off	icers tell peop	ple what to do.						
1	2	3	4							
22. If does not upset me to change my plans because someone in the group wants to do										
something e	lse.									
1	2	3	4							
23. I don't mind other people telling me what to do.										
1	2	3	4							
24. I enjoy deba	ites with other	er people.								
1	2	3	4							
25. If someone	asks a favor	of me, I wil	l think twice	about what this person is really after.						
1	2	3	4							
26. I am not ver	y tolerant of	other's atte	mpts to persu	aade me.						
1	2	3	4							
27. I often follo	w the sugges	stions of oth	ers.							
1	2	3	4							
28. I am relatively opinionated.										
1	2	3	4							
29. I am relative	ely opinionat	ted.								
1	2	3	4							

30. If I receive a lukewarm dish at a restaurant, I make an attempt to let that be known.										
	1	2	3	4						
31. I resent authority figures who try to tell me what to do.										
	1	2	3	4						
32. I find	32. I find that I often have to question authority.									
	1	2	3	4						
33. I enje	by seeing se	omeone else	e do someth	ning that neither of us is supposed to do.						
	1	2	3	4						
34. I hav	e a strong o	desire to ma	intain my p	personal freedom.						
	1	2	3	4						
35. I enj	oy playing	"devil's adv	vocate" who	enever I can.						
	1	2	3	4						
36. In di	scussions, l	am easily	persuaded b	by others.						
	1	2	3	4						
37. Noth	ing turns m	ne on as mu	ch as a goo	d argument!						
	1	2	3	4						
38. It wo	ould be bett	er to have n	nore freedo	m to do what I want on a job.						
	1	2	3	4						
39. If I a	m told wha	t to do, I of	ten do the o	opposite.						
	1	2	3	4						
40. I am	sometimes	afraid to di	sagree with	others.						
	1	2	3	4						

41. It really bothers me when police officers tell people what to do.										
	1	2	3	4						
42. If does not upset me to change my plans because someone in the group wants to do										
somet	hing else.									
	1	2	3	4						
43. I don'	43. I don't mind other people telling me what to do.									
	1	2	3	4						
44. I enjo	y debates v	with other p	eople.							
	1	2	3	4						
45. If som	neone asks	a favor of n	ne, I will th	ink twice about what this person is really after.						
	1	2	3	4						
46. I am r	ot very tol	erant of oth	er's attemp	ts to persuade me.						
	1	2	3	4						
47. I ofter	n follow the	e suggestion	ns of others							
	1	2	3	4						
48. I am r	elatively o	pinionated.								
	1	2	3	4						
49. It is in	nportant to	me to be in	a powerfu	l position relative to others.						
	1	2	3	4						
50. I am v	ery open to	o solutions	to my probl	ems from others.						
	1	2	3	4						
51. I enjo	y "showing	g up" people	e who think	they are right.						
	1	2	3	4						

52. I consider myself more competitive than cooperative.								
	1	2	3	4				
53. I don't mind doing something for someone even when I don't know why I'm doing it.								
	1	2	3	4				
54. I usi	ually go aloi	ng with othe	ers' advice					
	1	2	3	4				
55. I fee	el it is better	to stand up	for what I	believe than to be silent.				
	1	2	3	4				
56. I am	very stubbo	orn and set	in my ways	•				
	1	2	3	4				
57. It is very important for me to get along well with the people I work with.								
	1	2	3	4				

## APPENDIX E: CONFLICTS TACTICS SCALE-1

## How often did this happen in the past year

- 1.I showed my partner I cared even though we disagreed.
- 2. my partner showed care for me even though we disagreed.
- 3. I explained my side of a disagreement to my partner.
- 4. My partner explained his/her side of a disagreement to me.
- 5. I insulted or swore at my partner.
- 6. My partner insulted or swore at me.
- 7. I threw something at my partner that could hurt.
- 8. My partner threw something at me that could hurt.
- 9. I twisted my partners arm or hair.
- 10. My partner twisted my arm or hair.
- 11. I had a sprain, bruise, or small cut because of a fight with my partner.
- 12. My partner had a sprain, bruise, or small cut because of a fight with me.
- 13. I showed respect for my partner's feelings about an issue.
- 14. My partner showed respect for my feelings about an issue.
- 15. I made my partner have sex without a condom.

- 16. My partner made me have sex without a condom.
- 17. I pushed or shoved my partner.
- 18. My partner pushed or shoved me.
- 19. I used force (like hitting, holding down, or using a weapon) to make my partner have oral or anal sex.
- 20. My partner used force to make me have oral or anal sex.
- 21.I used a knife or gun on my partner
- 22. My partner used a knife or gun on me.
- 23.I passed out from being hit on the head by my partner in a fight.
- 24. My partner passed out from being hit on the head by me in a fight.
- 25. I called my partner fat or ugly.
- 26. My partner called me fat or ugly.
- 27. I punched or hit my partner with something that could hurt
- 28. My partner punched or hit me with something that could hurt
- 29. I destroyed something belonging to my partner
- 30. My partner destroyed something that belonged to me
- 31.I went to a doctor because of a fight with my partner
- 32. My partner went to a doctor because of a fight with me.
- 33. I choked my partner.
- 34. My partner choked me

- 35. I shouted or yelled at my partner.
- 36. My partner shouted or yelled at me.
- 37.I slammed my partner against a wall.
- 38. My partner slammed me against a wall.
- 39.I said I was sure we could work out a problem.
- 40. My partner was sure we could work it out
- 41. I needed to see a doctor because of a fight I had with my partner, but didn't.
- 42. My partner needed to see a doctor because of a fight with me, but didn't.
- 43. I beat up my partner.
- 44. My partner beat me up.
- 45. I grabbed my partner.
- 46. My partner grabbed me.
- 47. I used force (like hitting, holding down, or using a weapon) to make my partner have sex.
- 48. My partner used forced to make me have sex.
- 49. I stomped out of the room, or house, or yard during a disagreement.
- 50. My partner stomped out of the room, or house, or yard during a disagreement.
- 51. I insisted on sex when my partner did not want to (but did not use physical force).
- 52. My partner insisted on sex when I did not want to (but did not use physical force).
- 53. I slapped my partner.

- 54. My partner slapped me.
- 55. I had a broken bone from a fight with my partner.
- 56. My partner had a broken bone from a fight with me.
- 57. I used threats to make my partner have oral or anal sex.
- 58. My partner used threats to make me have oral or anal sex.
- 59. I suggested a compromise to a disagreement.
- 60. My partner suggested a compromise to a disagreement.
- 61. I burned or scalded my partner on purpose.
- 62. My partner burned or scalded me on purpose.
- 63. I insisted my partner have oral or anal sex (but did not use physical force).
- 64. My partner insisted I have oral or anal sex (but did not use physical force).
- 65. I accused my partner of being a lousy lover.
- 66. My partner accused me of being a lousy lover.
- 67. I did something to spite my partner.
- 68. My partner did something to spite me.
- 69. I threatened to hit or throw something at my partner.
- 70. My partner threatened to hit or throw something at me.
- 71. I felt physical pain that still hurt the next day because of a fight with my partner.
- 72. My partner still felt physical pain the next day because of a fight we had.

- 73. I kicked my partner.
- 74. My partner kicked me.
- 75. I used threats to make my partner have sex.
- 76. My partner used threats to make me have sex.
- 77. I agreed to try a solution to a disagreement my partner suggested
- 78. My partner agreed to try a solution I suggested.

## **APPENDIX F: TABLES**

**Table F1**Participant Demographic Information

Demographic Variable	n	%
Gender		
Male	271	60.6
Female	150	33.5
Gender non-conforming	21	4.7
Trans-man	5	1.1
Trans-woman	1	.2
Race		
White	381	85
African American	26	5.8
Latinx	22	4.9
Poly-racial	9	2
Asian	4	.9
Pacific Islander	2	.4
American Indian/Alaska	1	.2
Native		
Sexual Orientation		
Heterosexual	344	73
Bisexual	78	16.6
Gay	13	2.8
Queer	11	2.4
Pansexual	8	1.7
Lesbian	6	1.3
Asexual	4	.9
Education		
Bachelor	121	25.8
Graduate	89	19
Some college	66	14.1
Associate	24	5.1
High school/GED	15	3.2
Vocational	6	1.3
Less than primary	2	.4
education		

*Note.* N = 498. Participants were on average 28.88 years old (SD = 9.5)

Table F2

Descriptive Statistics, Cronbach's Alphas, and Bivariate Correlations Matrix

7	Variable	n	M	SD	α	1	2	3	4	5
1.	Verbal Reactance	469	30.7	2.9	.60	-	.50*	.20*	.10*	05
2.	Behavioral Reactance	469	38.2	5.1	.65		-	.35*	.12*	38*
3.	Clinical Anger	468	7.7	6.6	.88			-	.07	34*
4.	Sexual Coercion	469	3.2	8.7	.71				-	05
5.	Social Desirability	469	15.5	4.7	.74					-

<sup>\*</sup> Denotes significance at the p < .01 (1 and 2 tailed tests)

Table F3

Clinical Anger as Moderator of the Relationship Between Verbal and Behavioral Reactance and Sexual Coercion

Testing Steps in Moderation Models	В	SE	Model	95% CI LL UL	p
Psychological Reactance					
Verbal Reactance	-2.14	2.44	$R^2 = .03, F(3,148) = 2.04$	-6.97 2.68	.11
Behavioral Reactance	-2.82	3.50	$R^2 = .04, F(3,148) = 2.49$	-6.77 1.12	.06

CI = Confidence Interval \* p < .01. \*\* p < .05

Table F4

Least Squares Multiple Regression Coefficients of Verbal Reactance, Behavioral Reactance, and Clinical Anger on Sexual Coercion

Variable	В	SE	t	p	95% CI
Verbal Reactance	.995	1.164	.85	.39	[-4.40, 1.70]
Behavioral Reactance	.441	.988	.44	.65	[-1.51, 2.39]
Clinical Anger	220	.139	.05	.11	[49, .05]

CI = Confidence Interval \* p < .01. \*\* p < .05.