

# **Impact of Individual-Level Characteristics on Perceptions of Problematic Sexual Encounters**

**by  
Unnati Patel**

MSc, Drexel University, 2015

BSc, Stockton University, 2013

Thesis Submitted in Partial Fulfillment of the  
Requirements for the Degree of  
Doctor of Philosophy

in the  
Department of Psychology  
Faculty of Arts and Social Sciences

© Unnati Patel 2021  
SIMON FRASER UNIVERSITY  
Summer 2021

Copyright in this work rests with the author. Please ensure that any reproduction or re-use is done in accordance with the relevant national copyright legislation.

## Declaration of Committee

**Name:** Unnati Patel

**Degree:** Doctor of Philosophy

**Title:** Impact of Individual-Level Characteristics on Perceptions of Problematic Sexual Encounters

**Committee:** **Chair:** Lara Aknin  
Associate Professor, Psychology

**Stephen D. Hart**  
Supervisor  
Professor, Psychology

**Deborah A. Connolly**  
Committee Member  
Professor, Psychology

**Ronald Roesch**  
Committee Member  
Professor, Psychology

**Rebecca Cobb**  
Examiner  
Associate Professor, Psychology

**Paula Barata**  
External Examiner  
Associate Professor, Psychology  
University of Guelph

## Ethics Statement

The author, whose name appears on the title page of this work, has obtained, for the research described in this work, either:

- a. human research ethics approval from the Simon Fraser University Office of Research Ethics

or

- b. advance approval of the animal care protocol from the University Animal Care Committee of Simon Fraser University

or has conducted the research

- c. as a co-investigator, collaborator, or research assistant in a research project approved in advance.

A copy of the approval letter has been filed with the Theses Office of the University Library at the time of submission of this thesis or project.

The original application for approval and letter of approval are filed with the relevant offices. Inquiries may be directed to those authorities.

Simon Fraser University Library  
Burnaby, British Columbia, Canada

Update Spring 2016

## Abstract

Rates of sexual assault remain high across university settings despite increased efforts to combat this phenomenon. This project fills a gap in the existing literature by examining how situation-specific variables (i.e. alcohol consumption by and degree of familiarity between individuals) and individual-level factors (i.e., attitudes regarding sexual instrumentality and permissiveness, rape myths, trait token resistance, history of sexual victimization and sexual perpetration) relate to ongoing third-party perceptions of a sexual scenario. The current study used a vignette methodology to portray the dynamic nature of a sexual interaction between a man and a woman that began innocently but escalated to problematic behavior by the man and finally to sexual assault. At eight points in the interaction, a sample of university students ( $n = 350$ ) reported their perceptions of comfort, safety, consent, and reportability of scenario. They further indicated the extent to which the scenario represented instances of sexual harassment, sexual assault, and state-based female token resistance. As the vignette's sexual interaction became increasingly problematic, participants reported declining perceptions of comfort, safety, and state-based female token resistance, and they were more likely to characterize the interaction as lacking consent, being worthy of reporting, and involving sexual harassment and sexual assault. An analysis of situational variables within the vignette revealed no significant associations between vignette perceptions and alcohol consumption by or degree of familiarity between characters. For individual-level factors, lower rape myth acceptance was associated with identifying the interaction as lacking consent, being worthy of reporting, and as both sexual harassment and sexual assault. Trait token resistance was also related to perceptions of comfort, safety, and state-based female token resistance. These findings add to the growing literature on university sexual assault by demonstrating that third-party perceptions of sexually problematic vignettes manifest differentially among participants based on individual-level factors but not situational variables.

**Keywords:** campus sexual assault; sexual violence; risk perception; rape myth acceptance; token resistance

## Acknowledgements

Many people helped me along the way on this journey, and I want to take a moment to thank them. First, I'd like to acknowledge the assistance of Dr. Stephen Hart, my senior supervisor, in completing this project. His scholarly knowledge and insightful suggestions were key to my success, even though my topic represented a new research area for the Mental Health, Law, and Policy Institute. I would also like to extend my sincere thanks to my committee members, Drs. Deborah Connolly and Ronald Roesch, for their unwavering support for my dissertation. They encouraged me to pursue this area of research, and their practical advice helped enrich this work immensely. I would also like to offer my special thanks to Drs. Rebecca Cobb and Paula Barata for serving as examiners during a challenging year.

I have been lucky to study with many brilliant researchers over the years and would like to extend special gratitude to Dr. David DeMatteo, who supervised my thesis at Drexel University. He was instrumental in my development as a researcher and clinician, and I owe a large part of my success to his dedication and guidance.

Dr. Tisha Gangopadhyay has been an incredible professional and personal resource for the past few years. She went beyond her role as practicum and case supervisor to provide key insights into the practice and discipline of clinical psychology, and her willingness to gently nudge and support me helped mould my clinical identity. Tisha, I apologize for all the times I misspelt your name.

Maxine, I never expected that our mutual love for Guadalupe burritos would transform into such a tight-knit relationship. You are a brilliant and hilarious woman whose capacity for compassion is boundless, and I so appreciate all our years together. Thank you for all the laughs, sour beers, and competitive board game nights we shared. I look forward to our next hike.

Marie, Amy, and Amy, I would like to express my appreciation for the long-distance support you have provided during this degree. You all have been amazing cheerleaders over the years, and I am so happy to be part of such a strong network of women.

To all my friends in Vancouver – thank you for giving me the necessary distractions from my research and making my stay in Canada memorable.

Ean, you have been a constant source of strength during this process. Thank you for being a grammar nerd and teaching me the rule of three, the pitfalls of nominalization, and the appropriate use of the Oxford comma. I am indebted to you for the many meals you cooked and all the rants you patiently listened to. This degree has been a shared experience, and I am lucky to have had you by my side through all the highs and lows. Your name should be on this dissertation as much as mine.

Reema, you are the best sister a girl can have. I am still so touched by your grace and kindness during the tough times as well as your willingness to watch Syfy original movies and Psych reruns when I needed to decompress. We can finally say that I never have to “wait for it...” again!

Finally, Jagruti and Hemant, I deeply feel the sacrifices you have made throughout my lifetime, and no words can express how grateful I am to be loved by both of you. You have selflessly supported my growth, and I could not be more honoured to be your daughter. Thank you for encouraging me to pursue knowledge no matter where the journey took me, and I am sorry for becoming the wrong kind of doctor.

# Table of Contents

Declaration of Committee.....	ii
Ethics Statement.....	iii
Abstract.....	iv
Acknowledgements.....	v
Table of Contents.....	vii
List of Tables.....	ix
List of Figures.....	x
<b>Chapter 1. Introduction.....</b>	<b>1</b>
1.1. Definitions of Sexual Assault.....	1
1.2. Consent.....	3
1.3. Sexual Activity in Emerging Adulthood.....	5
1.4. Risk Factors for Sexual Assault.....	6
1.5. Risk Perception and Management.....	8
1.6. Rape Myth Acceptance.....	10
1.7. Sexual Scripts and Token Resistance.....	11
1.8. Current Study.....	13
1.9. Research Questions.....	13
<b>Chapter 2. Methods.....</b>	<b>15</b>
2.1. Participants.....	16
2.2. Measures and Materials.....	17
2.2.1. Sexual Attitudes.....	17
2.2.2. Rape Myth Acceptance.....	18
2.2.3. Token Resistance.....	18
2.2.4. Prior Sexual Experiences.....	19
2.2.5. Demographics.....	20
2.3. Procedures.....	20
<b>Chapter 3. Results.....</b>	<b>23</b>
3.1. Preliminary Analyses.....	23
3.2. Primary Analyses.....	28
3.2.1. Research Question 1: Are there significant changes in participants' perceptions of the sexual encounter portrayed in the vignette across the various steps?.....	28
3.2.2. Research Question 2: Are participants' perceptions of the sexual encounter portrayed in the vignette influenced by characters' alcohol consumption and degree of familiarity?.....	37
3.2.3. Research Question 3: Are participants' perceptions of the sexual encounter portrayed in the vignette influenced by individual-level factors?.....	41
<b>Chapter 4. Discussion.....</b>	<b>51</b>
4.1. Summary of Major Findings.....	51

4.1.1.	Time .....	52
4.1.2.	Situational Variables .....	53
4.1.3.	Individual-level Factors .....	54
4.2.	Strengths and Limitations .....	55
4.3.	Implications .....	57
4.4.	Future Research and Conclusions.....	60
<b>References .....</b>		<b>62</b>
<b>Appendix A.</b>	<b>Demographic Survey .....</b>	<b>71</b>
<b>Appendix B.</b>	<b>Sexual Assault Vignettes.....</b>	<b>72</b>
<b>Appendix C.</b>	<b>Vignette Survey .....</b>	<b>74</b>
<b>Appendix D.</b>	<b>Sexual Experiences Survey - Short Form Perpetration.....</b>	<b>75</b>
<b>Appendix E.</b>	<b>Sexual Experiences Survey - Short Form Victimization .....</b>	<b>78</b>
<b>Appendix F.</b>	<b>Token Resistance to Sex Scale .....</b>	<b>81</b>
<b>Appendix G.</b>	<b>Acceptance of Modern Myths about Sexual Aggression (AMMSA)</b>	
<b>scale</b>	<b>.....</b>	<b>82</b>
<b>Appendix H.</b>	<b>Brief Sexual Attitudes Scale.....</b>	<b>84</b>



## List of Tables

Table 1.	Crosstabulation of Vignette Type and Demographic Characteristics .....	23
Table 2.	Prevalence of Sexual Victimization by Act.....	25
Table 3.	Prevalence of Sexual Perpetration by Act .....	26
Table 4.	Descriptive Statistics and Correlations for Individual Characteristic Variables .....	27
Table 5.	Descriptive Statistics and Correlations for Individual Characteristic Variables in Males.....	27
Table 6.	Descriptive Statistics and Correlations for Individual Characteristic Variables in Females.....	28
Table 7.	Pairwise Comparison of Comfort Levels over Steps.....	29
Table 8.	Pairwise Comparison of Safety Levels over Steps .....	30
Table 9.	Pairwise Comparison of Female Token Resistance over Steps.....	32
Table 10.	Pairwise Comparison of Mean Endorsement of Sexual Harassment over Steps.....	33
Table 11.	Pairwise Comparison of Mean Endorsement of Sexual Assault over Steps .....	34
Table 12.	Logistic Regression Predicting Likelihood of Consent based on Alcohol Consumption by and Degree of Familiarity between Vignette Characters .....	40
Table 13.	Logistic Regression Predicting Likelihood of Reporting based on Individual Characteristics .....	41
Table 14.	Regression Analysis: Individual and Situational Characteristics Predicting Global Ratings of Comfort.....	43
Table 15.	Regression Analysis: Individual and Situational Characteristics Predicting Global Ratings of Safety.....	44
Table 16.	Regression Analysis: Individual and Situational Characteristics Predicting Perceptions of Female Token Resistance .....	45
Table 17.	Regression Analysis: Individual and Situational Characteristics Predicting Perceptions of Sexual Harassment .....	46
Table 18.	Regression Analysis: Individual and Situational Characteristics Predicting Perceptions of Sexual Assault.....	48
Table 19.	Logistic Regression Predicting Likelihood of Consent based on Individual Characteristics .....	49
Table 20.	Logistic Regression Predicting Likelihood of Reporting based on Individual Characteristics .....	50

## List of Figures

Figure 1.	Mean Comfort Score over Time (95% CI).....	29
Figure 2.	Mean Safety Score over Time (95% CI) .....	30
Figure 3.	Mean Female Token Resistance Score over Time (95% CI) .....	32
Figure 4.	Mean Sexual Harassment Score over Time (95% CI) .....	33
Figure 5.	Mean Sexual Assault Score over Time (95% CI).....	34
Figure 6.	Endorsement of Lack of Consent over Time (95% CI).....	35
Figure 7.	Endorsement of Reportability over Time (95% CI).....	36

# **Chapter 1.**

## **Introduction**

Campus sexual assault is an important issue that has recently started to gain more attention in academic circles. However, gathering information on this topic is complicated by several factors: it often takes place in private, it can be challenging to recognize and identify, and it can be onerous for victims and bystanders to report. There are also many potential factors that may influence a person's decisions when viewing sexually ambiguous scenarios, such as challenges in interpreting the capacity of others to provide and receive consent, the ability to identify and aid in removing someone else from potentially risky sexual scenarios, and the endorsement of stereotypical attitudes surrounding sexual behavior.

One common method of gathering information on attitudes towards sexual assault and factors likely to influence people's decision-making is the vignette methodology given its ability to capture responses to a fictionalized depiction of sexual behavior. However, due to the changing nature of sexual behavior over time, studies that examine responses only at the end of a vignette may miss critical information on how individuals evaluate and make decisions in the moment. Examining the differences among individuals while they view how a problematic sexual encounter progresses can contribute to the literature and to a more holistic understanding of how people perceive situations that threaten the sexual safety of others.

### **1.1. Definitions of Sexual Assault**

Several terms have been used over the years to describe the concept of sexual assault. Whether it is known as rape, sexual assault, or sexual harassment, these terms revolve around the notion of an individual's personal space and sexual freedom being violated by the actions of another person. However, the behaviors and victim profiles that are associated with each of these terms differ considerably within the scientific literature. The first and most popular term for sexual assault has been rape, which has been particularly focused on female victims and often required forced vaginal penetration by a penis (Garland, 2009). Over time, this term began to meet considerable

resistance due to its focus on a male perpetrator and female victim. Further, the suggestion that this behavior was only transgressive if it reached the point of forcible penetration of a sexual organ by another sexual organ was found to be both reductive and restrictive (Spohn & Horney, 1992).

For these reasons, among others, terms like sexual assault and sexual violence began to gain more traction due to their more inclusive nature, both in terms of characteristics of the involved individuals and behavioral attributes (Donde et al., 2018). These terms are now preferred due to their increased focus on the complex nature of sexual assault, acknowledgement that an act of sexual assault or sexual violence can take place between two people who have some degree of familiarity, and recognition that sexual assault does not require the involvement of primary sexual organs. These changes also reflect that psychological injuries are still possible without coerced vaginal penetration, and they seek to validate individuals who have experienced sexual coercion and non-penetrative sexual violations (de Visser et al., 2007).

Additionally, definitions of sexual assault have alternately focused on the perpetrator and victims to a greater or lesser amount at different points in history. Clinical discourse has frequently revolved around perceived actions and thoughts of the individuals involved in these incidents, which has led to challenges in attributing culpability for professionals who encounter victims and perpetrators. Evidence supports that medical and mental health practitioners (Ward, 1995), law enforcement (O'Neal, 2019), and the judicial system (Bouffard, 2000) have historically assigned differing levels of blame to involved individuals based on characteristics of a given sexual encounter.

These characteristics are often compared against stereotypes of what *real rape* looks like, with conviction rates reflecting the reality that crimes perceived as more harmful render more guilty verdicts and longer sentences (Bouffard, 2000). Institutional messages from authorities and the media buy into these stereotypes by alerting potential victims to only one specific kind of sexual harm, in which a woman is attacked by a stranger and left bruised and battered. Although research has consistently demonstrated that this scenario is less likely than other forms of sexual assault in the United States and Canada (Kilpatrick et al., 2007; Vaillancourt, 2010), this stereotype remains pervasive. In this way, beliefs about *real rape* cause more harm than good because they encourage individuals to be fearful of scenarios that are statistically less likely. Other

violent crimes, such as robbery, do not see this degree of stereotyping (Bieneck & Krahe, 2011).

However, the standardization of language surrounding sexual assault has been found to be inconsistent, complicating both research and solutions for the issue. A systematic review of relevant research between 2000 and 2015 determined that the psychological literature has defined multiple forms of sexual assault ranging from unwanted sexual touching to forcible sexual penetration (Fedina et al., 2018). Partially due to this lack of a standard definition, there is considerable variability in the reported rates of sexual assault both within and outside of university populations (Rennison & Addington, 2014). When comparing among studies, the rate of individuals who have experienced victimization varies widely, from 3% to 19% (Koss, 1996; Krebs et al., 2007), lending credibility to the idea that the measurement of sexual assault can affect results.

The use of survey data further complicates researchers' ability to draw conclusions about prevalence and incidence of sexual assault, as demonstrated in Lyon's (2009) examination of disclosure rates in child sexual abuse cases. Lyon (2009) posited that an individual's reluctance to disclose must be accounted for when determining the true population prevalence of a given phenomenon. The issue is twofold: individuals who disclose to researchers are likely to have disclosed before, which may artificially skew rates of prior disclosure, and further, some individuals may never disclose. Although his work focuses primarily on child sexual abuse, it is applicable to sexual assault due to the high weight that is placed on victim disclosure to determine if unwanted sexual assault took place and the frequent inability to substantiate with physical evidence.

## **1.2. Consent**

Clear understanding and demonstration of consent is instrumental in mutually agreed-upon sexual activity, and the presence of consent is often used in legal settings to determine whether behavior constitutes sexual assault. However, definitions of consent vary widely by jurisdiction, particularly in the United States. This variability in definitions contributes to challenges in communicating and determining consent and boundaries, especially as one jurisdiction in the United States may legally process,

prosecute, and adjudicate the same sexual scenario differently than another. Even countries, like Canada, with a federal criminal code may have cross-jurisdictional differences in education and knowledge translation (Muehlenhard et al., 2016). These differences may lead to a discrepancy between the knowledge that individuals have surrounding sexual health despite being governed by the same laws.

Unwanted sex has been documented as a problem across several settings and is likely in part due to the impact of the cultural climate on relevant discussion and education. Presently, cultural shifts and increased public discussion around the nature and role of consent suggest that explicit communication, also known as affirmative consent, is necessary for sexual activity to take place. Beres (2014) adds more nuance to this idea by suggesting that consent can be seen as a multifaceted, ongoing process rather than a binary evaluation of its presence or absence. One conceptualization of consent holds that it is three unique processes –internal willingness to engage in sexual activity, agreement of the individuals involved to a given act or behavior, and behavior that can be construed as willingness – that occur near-simultaneously (Beres, 2014).

There has been considerable focus on preventing sexual assault by acknowledging and obtaining consent, but relatively little research has examined the varied demonstration and appraisal of consent in sexual encounters, especially based on the more nuanced views of consent given above (Jozkowski et al., 2014). Jozkowski et al.'s (2014) study suggested that gender differences in the interpretation of consent may contribute to miscommunications in sexual behavior between men and women. Similarly, Hust et al. (2017) demonstrated that communication about sexual consent varies by gender and the presence of stereotype endorsement. They found that participants who internalized gender roles and accepted media content such as degrading music were less likely to believe that they should negotiate healthy sexual boundaries, which could lead to reduced expectations for giving and receiving consent as part of sexual activity.

In recognition of the gender differences in communication about consent, some researchers have proposed instituting a universal model for individuals to follow when engaging in sexual behavior. However, such a goal may be unrealistic as sexual activity often occurs in private locations, and set procedures stemming from university policy are therefore impossible to enforce (Humphreys & Herold, 2003). Nonetheless, it remains

the case that conducting research on consent has presented a unique set of challenges given the inherently private nature of most sexual behavior, leading to considerable variability in research results (Muehlenhard et al., 2016). Although the extant literature does not alleviate the concerns associated with the lack of a universal definition of consent, it has been able to provide valuable perspectives and promote meaningful discourse on combating issues of non-enforceability (Emmers-Sommer, 2016; Humphreys & Herold, 2003).

### **1.3. Sexual Activity in Emerging Adulthood**

Going to university often results in a shift in values for incoming students. For many such individuals, university life means spending less time with parental authorities and other adult figures and increased time with peers and dating partners. Indeed, regarding sexual values specifically, research suggests that parental influences on students decrease considerably over the first year, whereas peer influences significantly increase (Morgan & Zurbriggen, 2012). Morgan and Zurbriggen (2012) also found that students begin to gain more dating experience during this time and thus may be more likely to re-evaluate their sexual values. This potential change in sexual values may influence their attitudes towards romantic partners and inform their views on sex and dating. Such findings highlight the growth in autonomy and independence that many students experience in university. Although these changes may be beneficial in some ways, they can also cause individuals to engage in behaviors that lead to or make them more susceptible to sexual violence or assault (Cranney, 2015).

Research indicates that as many as one in five women will experience sexual assault in their lifetime (Krebs et al., 2007). The likelihood of victimization increases for university-aged women, one in two of whom self-reported having experienced at least one form of sexual assault, with few reporting to authorities, whereas formative research indicates 25% of university-aged male respondents endorsed engaging in some degree of sexual assault (Koss et al., 1987). Two recent systematic reviews examining research from 2000 onward support Koss's (1987) self-report perpetration statistics (Anderson et al., 2017; Fedina et al., 2018). First-year students, particularly women, remain at highest risk for sexual victimization, especially when intoxicated or spending unstructured time with men (Cranney, 2015). Sexual assault has been widely documented across

university campuses (Abbey et al., 1996; Brener et al., 1999; Mellins et al., 2017) and remains a pressing issue for institutions to address.

Results of a study by Nickerson et al. (2013) found that in the immediate aftermath of a sexual assault, some female victims presented with post-traumatic stress, depressive, and anxiety symptoms in the community setting. Similar psychological harms have been documented for unwanted sexual experiences during university years. Increased levels of anxiety and depression were associated with the experience of sexual assault in the first semester of university, and poorer mental health outcomes were found to be associated with sexual assault experiences (Carey et al., 2018; Patel & Roesch, 2018; Zinzow et al., 2010). Given the wide range of sequelae associated with sexual assault and the particular vulnerabilities of the university-aged population, an improved understanding of its risk factors will help address the ongoing concerns presented by its occurrence (Moylan & Lindhorst, 2015).

Another issue relating to understanding and prevention is that universities differ in the quality of information they provide to students on healthy sexual behaviors and resources for sexual assault. Lund and Thomas (2015) found that although most universities disseminated some information via their campus websites, it was often limited in scope, even though sexual education has been shown to be instrumental in the development of appropriate sexual boundaries. Findings such as these call into question the quality of knowledge that students have when they begin university, especially as evidence suggests social processes play a significant role in sexual decision-making (Cheney et al., 2014).

## **1.4. Risk Factors for Sexual Assault**

Alcohol consumption is one of a number of important factors that has been demonstrated its relevance in both the occurrence and third-party perception of sexual assault. Rates of alcohol use increase when students attend university for the first time, and the resultant unfamiliarity with alcohol and its effects may lead to substantive behavioral changes for individuals who are not equipped to handle it (Merrill & Carey, 2016). Sexual assault scenarios in which either or both the victim and perpetrator had been drinking are more likely than situations in which involved parties were sober (Abbey et al., 1996). For example, a majority of respondents have indicated that they



were under the influence of alcohol or drugs at the time of their sexual assault (Kilpatrick et al., 2007; Mellins et al., 2017). These results extend to when participants are under the influence and tasked with evaluating synthetic situations of sexual violence, with findings reflecting an impaired ability to identify a scenario that held the potential for sexual aggression as such (Testa et al., 2000).

Intoxication can and frequently does impair mental state, in turn affecting a person's ability to give and recognize consent to sexual activity. However, legal bodies do not always recognize intoxication as having these effects, and some states have statutes in which voluntary consumption of alcohol or drugs indicates a person is automatically able to consent (DeMatteo et al., 2015). These judgements are not limited to legislative bodies: respondents judged a vignette scenario in which a perpetrator used alcohol to engage in sexual assault less harshly than a scenario in which a perpetrator used physical force (Romero-Sánchez et al., 2012). This discrepancy highlights that the context in which the non-consensual encounter occurs changes with the addition of alcohol, which can reduce the perceived culpability of the perpetrator.

Another important risk factor for sexual assault is the relationship between the victim and the perpetrator. Despite the stereotype that perpetrators of sexual assault are likely to be strangers, the majority of victims know the person who sexually assaulted them (Vaillancourt, 2010). Gartner and Macmillan (1995) found that rates of reporting decrease when perpetrators are known to the victim, and this dyad represents the most common relationship between two individuals involved in a scenario of sexual assault. Khan et al. (2018) suggested that victims may seek to avoid the negative feelings associated with labelling an experience as *sexual assault* versus *rape* or to preserve the relationship with the assailant, thus decreasing their likelihood of reporting. This phenomenon has also been discussed by Littleton et al. (2007), who summarized research hypothesizing that victims who know their assailants are less likely to acknowledge their victimization as a crime. Third-party perceptions of sexual assault are likewise sensitive to the degree of familiarity between the victim and the perpetrator, with scenarios between more highly-acquainted persons being judged as less sexually problematic than ones between less familiar counterparts (Ben-David & Schneider, 2005; Persson et al., 2018).

Alcohol use and degree of familiarity between victim and perpetrator are two factors that have been found to be associated with increased rates of sexual assault, stronger perceptions of victims' blameworthiness, and reduced likelihood of endorsing an incident as sexual assault. The resultant secondary victimization can be particularly damaging, especially as research suggests victim blame increases in scenarios where the perpetrator is a familiar party and the victim has consumed alcohol (Gravelin et al., 2019). The failure of third-party observers to validate experiences of sexual assault as criminal, traumatic, or transgressive harms victims and masks the true prevalence of these behaviors, which is likely already underestimated due to pre-existing societal and institutional pressures that encourage victims to downplay or not report their assaults.

## **1.5. Risk Perception and Management**

Risk research has received considerable empirical focus over the last several decades from the fields of psychology, sociology, and cognition. Individuals must construct and interpret risk assessments regularly to aid in their everyday decision-making, and there is evidence to suggest that this process is complex and multifaceted (Taylor-Gooby & Zinn, 2006). Research has found that university-aged women remain at a high risk of sexual victimization (Mitchell et al., 2017). Although specific factors that contribute to individual risk levels remain unclear, an emerging body of literature suggests that a person's engagement in risk perception, widely defined as the ability to recognize risk and act accordingly to minimize it, may be one such factor (Walsh et al., 2012). Prior traumatic or sexual victimization experiences have been linked to an increased risk of sexual assault (Marx et al., 1999; Melkonian et al., 2017; Wilson et al., 1999), suggesting that the subset of women who have experienced either or both are more likely to experience subsequent victimization. However, not all research has found a link between prior victimization and risk perception, with broader definitions of sexual victimization finding little to no relationship, and definitions limited to unwanted intercourse finding a stronger correlation (Messman-Moore & Brown, 2006). These results substantiate commentary indicating that prior victimization is a complex topic, with several factors contributing to the variance in the results. It is also a possibility that these findings can partly be explained by the lack of standardization in the psychological literature and how varying definitions of sexual assault can lead to significantly different findings.

At this time, the relationships among prior victimization, risk perception, and propensity for bystander intervention remains unclear. For instance, Marcantonio and colleagues (2020) found that more severe sexual assault victimization experiences predicted a higher likelihood of intervening in risky scenarios as a bystander. Other scholarly works have found that third-party observers with more recent victimization who viewed a hypothetical encounter of sexual violence were less likely to identify it as inappropriate or illegal behavior, suggesting that risk identification strategies manifest similarly for self and others (Haugen et al., 2019). Conversely, one study reported that although participants articulated their ability to notice an event taking place, they did not perceive it as being potentially problematic and/or risky (Pugh et al., 2016).

Although sexual assault is always the responsibility of the individuals who perpetrate it, there remain some benefits to increasing awareness on the part of potential victims and observers. In particular, women who are able to identify risky situations and avoid or leave them can reduce their risk of sexual victimization. Given that most sexual assaults take place with acquaintances or persons familiar to the victim rather than strangers (Norris et al., 1999; Vaillancourt, 2010), early recognition is important because the cues given may be more subtle or less overtly aggressive than those delivered by a less familiar perpetrator. Messman-Moore and Brown's (2006) study of acquaintance rape scenarios found that a delay in identifying risk significantly predicted victimization, whereas the results were not significant in stranger scenarios, suggesting that women tend to be more guarded when interacting with a stranger but are less sensitive to risk cues when the situation contains a familiar or known person.

Risk perception is a multilayered process. For a woman to perceive risk in sexually ambiguous situations, a thorough assessment of her vulnerability—both in a given situation and globally—as well as engaging in situational awareness and being prepared to engage in "flight" are often necessary. Because an individual's ability to know her own vulnerabilities, recognize situational risk, and act in an assertive manner that helps her achieve her needs are interrelated phenomena, it can be challenging to parse out these distinct aspects of risk appraisal and behavior. Of the studies that have examined the relationship between cognitive awareness of risk and behavioral change to mitigate that risk, Gidycz et al. (2006) concluded that women are likely to recognize a situation as risky for a significant period of time before attempting to leave or diffuse it.

Female participants in Norris et al.'s (1999) study recognized that women are at high risk for sexual assault globally, but they endorsed their own risk levels as lower than that of their peers. This endorsement may be in part due to cognitive bias that they are less vulnerable than other women (Gidycz et al., 2006). Whereas this bias can often lead to increased quality of life in other domains, it can also reduce a person's inclination to behave in a manner that mitigates her risk. Consequently, it may contribute to individuals not engaging in self-protective behaviors, which can in turn lead to an increased risk of sexual assault. Overall, strengthening individuals' ability to recognize sexually risky scenarios for themselves and others remains an important aspect of sexual assault prevention, especially in an interconnected postsecondary environment.

## **1.6. Rape Myth Acceptance**

Rape myths refer to the set of false beliefs and attitudes about sexual assault, victims, and perpetrators that has been linked to increased risk for sexual assault perpetration (O'Connor et al., 2018). These perceptions are often not grounded in empirical knowledge and tend to perpetuate harm to victims by minimizing the responsibility of the perpetrator. This concept was first documented in the scholarly literature by Burt (1980), who characterized these attitudes as problematic due to upholding traditional gender roles and blaming victims for their own victimization. Her exploration of this topic challenged many assumptions of sexual behavior and allowed future researchers to further unpack attitudinal factors related to this belief set.

Adherence to rape myth ideologies, also known as rape myth acceptance, has been linked to male gender (Davies et al., 2012; Hayes et al., 2016); increased sexual assault perpetration (Trottier et al., 2019; Yapp & Quayle, 2018); hostility towards women (Suarez & Gadalla, 2010); and traditional gender role norms (Burt, 1980; Davies et al., 2012). Traditional sexual attitudes have been found to be associated with stronger perceptions of women as submissive and of victims as more responsible for situations in which they are assaulted (Hillier & Foddy, 1993; Wells & Twenge, 2005). These findings have remained consistent across a variety of sub-cultural groups, including university athletes, incarcerated populations, law enforcement, and military settings (Suarez & Gadalla, 2010).

As research in this arena has developed, a growing awareness of the subtlety of these beliefs has become apparent. Like the term “rape,” the definition of what constitutes a rape myth attitude has become broader and more extensive over time to incorporate more covert beliefs with the same ideological underpinnings as the first wave of phrases identified, such as “women enjoy rape” (Burt, 1980). One example includes holding victims somewhat responsible for sexual assault if they are under the influence of alcohol (Payne et al., 1999). These less overt myths reflect shifts in modern culture that are notably less permissive of severe forms of sexual assault towards women, but remain tolerant of more subtle rape myth attitudes (O’Connor et al., 2018). However, instruments that measure rape myth acceptance have not caught up to reality, as they remain highly heteronormative. Rape myths typically depict a female victim, male perpetrator, and traditional notions of how the two genders should behave. Therefore, it is difficult to separate the relationships among victimization and gender. Although sexual assault has historically been and remains primarily a women’s health issue, the experiences of men and gender non-comforting individuals remain valuable to study. For this reason, research on rape myths should be interpreted with caution, as existing frameworks are not yet inclusive of all possible victimization experiences.

## **1.7. Sexual Scripts and Token Resistance**

There is a consensus in the literature that sexual scripts play an important role in sexual activity. Although prior research emphasized the biological nature of sexual behavior, Simon and Gagnon (1986) explored the role of social scripts as they are applied to sexual activity. These scripts include behaviors, values, or perceptions held by individuals within a particular cultural group or society at large that are influential because they are put into place by both participants and mass media. Modern research supports the notion that sexual scripts are frequently used to guide behavior in sexual interactions, with traditional, heterosexual scripts dictating that men are expected to initiate and escalate sexual acts, whereas women are expected to respond and engage in gatekeeping behaviors such as saying no and expressing disinterest through body language (Emmers-Sommer, 2016). One study found that community members reported that deviations by a female vignette character from a gendered sexual script were associated with negative evaluations of her behavior, suggesting that people hold

expectations that the sexual activity of others should follow a traditional and normative direction (Klein et al., 2019).

Several studies have attested to sexual scripts centered on the notion that men often initiate and control romantic or sexual encounters (Sakaluk et al., 2014). Results of the Sakaluk et al. (2014) study found strong support for traditional, gendered scripts from both male and female participants, including the idea that men tend to view sex as a physical act whereas women hold a more emotional view. It seems clear that these endorsed scripts have been passed through Western culture for generations, and despite some less gendered and more equitable scripts coming into play in recent years (Klein et al., 2019), this traditional binary script remains in place for the majority of university students and is broadly applied to sexual activity by themselves and others.

One of the most prevalent scripts in heterosexual encounters is that of token resistance, defined as the notion that individuals, typically women, often say "no" to escalating sexual activity despite their willingness to engage in it (Muehlenhard & Hollabaugh, 1988). Although resistance or refusal to participate is understood to be contrary to their desires to engage in sexual activity, women in particular are expected to gatekeep sexual behavior due to internal and external pressures, which manifest in following sexual scripts (Emmers-Sommer, 2016). These pressures can also come from sex-negative viewpoints, which hold that women should not be sexual, or from the fear about consequences of sexual intercourse, which can include unplanned pregnancy and sexually transmitted infections (Moylan & Lindhorst, 2015; Muehlenhard & Hollabaugh, 1988). Furthermore, a previous study found that men with strong trait-based token resistance beliefs were more likely to hold the position that a stereotypical scenario of heteronormative sexual behavior did not represent an instance of rape, regardless of whether the female character said "yes" or "no" to intercourse (Osman, 2003).

Other works suggest this behavior is not specific to one gender and that both men and women endorse engaging in token resistance (Muehlenhard & Hollabaugh, 1988; Sprecher et al., 1994). Although motives for the endorsement of token resistance may differ between men and women, all genders have been known to use it, a behavior that contributes to unclear communication around sexual consent. One study found that more men indicated engaging in token resistance within the past year than did women, suggesting that traditional stereotypes of men as pursuers may not always hold true

(O'Sullivan & Allgeier, 1994). Therefore, it is also important to look at the role that endorsement of token resistance may play in individuals' perceptions of sexual behavior when the ongoing dynamic is presented in an ambiguous manner.

## **1.8. Current Study**

The scope of this current project sought to determine if individual-level attitudes, prior non-consensual sexual experiences, and situation-level factors impacted third-party perceptual differences when viewing a hypothetical scenario of sexual violence. Although risk perception has been explored recently, there is still limited research in this area, particularly on the differences that may emerge among individuals when viewing an encounter centered on the dynamic nature of sexual activity. Few prior studies have combined individuals' understanding of consent, risk perception, risk management, and both state and trait-based perceptions of token resistance when examining their prior experiences of sexual violence. As such, the purpose of this project was to examine whether endorsement of sex-negative attitudes, as well as history of non-consensual sexual experiences, and vignette characteristics affected third-party perceptions of personal comfort, female vignette character safety, female token resistance, endorsement of the event as sexual harassment and sexual assault, consent, and reportability. In an effort to capture the dynamic nature of sexual activity over time, especially in matters of consent and risk perception, a unique vignette methodology that outlines a sexual assault scenario in a stepwise fashion was employed.

## **1.9. Research Questions**

My research questions were as follows:

1. Are there significant changes in participants' third-party perceptions of the sexual encounter portrayed in the vignette across the various steps? Specifically:

1.1. Are there significant changes in participants' global ratings of comfort and safety with the sexual encounter and perceptions of the sexual encounter as representing female token resistance, sexual harassment, and sexual assault?

1.2. At what step in the sexual encounter portrayed in the vignette do the majority of participants deem it to be non-consensual or worthy of reporting?

2. Are participants' third-party perceptions of the sexual encounter portrayed in the vignette influenced by characters' alcohol consumption and degree of familiarity?

Specifically:

2.1. Does alcohol consumption by and degree of familiarity between characters influence participants' global ratings of comfort and safety with the sexual encounter and perceptions of the sexual encounter as representing female token resistance, sexual harassment, and sexual assault?

2.2. Does alcohol consumption by and degree of familiarity between characters influence participants' perceptions of consent or reportability?

3. Are participants' third-party perceptions of the sexual encounter portrayed in the vignette influenced by individual-level factors? Specifically:

3.1. To what extent do individual-level factors (i.e., rape myth acceptance, attitudes on sexual instrumentality and sexual permissiveness, beliefs in trait token resistance, and presence of sexual victimization history and sexual perpetration history) influence participants' global ratings of comfort and safety with the sexual encounter and perceptions of the sexual encounter as representing female token resistance, sexual harassment, and sexual assault?

3.2. Do individual-level factors influence participants' perceptions of consent or reportability?



## **Chapter 2.**

### **Methods.**

To study this topic, a vignette design was used so that participants were able to react to the behavioral progression of a sexual encounter between two university students, one male and female, that ended in sexual assault. This information was analyzed to examine participants' judgments of the sexual encounter as well as the impact of their attitudes and experiences on those judgments. The vignettes all portrayed a sexual assault in a stepwise manner and were modelled on two similar studies (Messman-Moore & Brown, 2006; Tuliao et al., 2017). Step 1 portrayed consensual and mutual intimate contact between the characters. In the subsequent steps, the encounter escalated to: Step 2, touching by the male; Step 3, verbal coercion by the male; Step 4, attempted boundary or limit setting by the female; Step 5, more verbal coercion by the male; Step 6, verbal and physical coercion by the male; Step 7, more verbal to physical coercion by the male; and Step 8, physical coercion and forced sex by the male. After reading each stage, participants were asked about their perceptions of comfort, safety, consent, and token resistance, as well as whether they considered the encounter to constitute sexual harassment or sexual assault.

As prior research suggests the presence of alcohol and the degree of familiarity may impact perceptions of problematic sexual encounters as sexual assault, I created six different versions of the same basic vignette that varied the students' alcohol consumption before the encounter (no or yes) and their prior degree of familiarity (strangers, acquaintances, or prior sexual relationship). As the study looked to examine situational characteristics, the use of multiple vignettes was intended to increase the generalizability of the findings. It was my goal to study the individual factors above and beyond situational characteristics.

Each participant was randomly assigned to one of the six versions of the vignette (with the degrees of alcohol consumption and familiarity varying in the pre-vignette exposition). With the vignettes, each unique step was presented over eight separate pages using a web-based design. At the bottom of each step, participants were asked a series of questions. Serving as a proxy for risk identification and risk management,

comfort levels (“As an observer, to what degree are you comfortable with this interaction?”) and female safety estimations (“How safe is the woman to remain in this situation?”) were assessed on a ten-point scale (e.g., 1 = *very uncomfortable/unsafe* and 10 = *very comfortable/safe*). Endorsement of the degree to which these acts are considered sexual harassment (“To what degree is the man’s behavior sexual harassment?”) and endorsement of the degree to which these acts are considered sexual assault (“To what degree is the man’s behavior sexual assault?”) were evaluated using a similar ten-point scale (e.g., 1 = *not at all sexual harassment/assault* and 10 = *very much so sexual harassment/assault*). State-based perceptions of token resistance (“What is the probability the woman wants to have sex at this point?”) was assessed using ratings ranging from 0% to 100%.

Perception of consent (“Is this situation consensual?”) and reportability (“Should the woman report this incident?”) were evaluated with a yes/no answer. Participants were able to read through the entire vignette regardless of their responses to the risk identification and risk management questions to minimize curiosity effects. Due to the lack of consensus in the literature on the definition of sexual assault, this study aimed to examine it using an inclusive approach that incorporated and categorized multiple types of negative sexual experiences by capturing and parsing out specific behaviors that have occurred. These experiences range in severity from unwanted sexual comments to forcible penetration.

## **2.1. Participants**

A power analysis was calculated using G\*Power 3.1 (Faul et al., 2009). A medium effect size was chosen as there are no effect sizes reported in the literature and it is the effect size typically used in novel research approaches. Using a medium effect size (.25) and an alpha level of .05, the results suggested 135 participants were required to obtain adequate statistical power (.80) for the bulk of statistical analyses. Participants were recruited from several undergraduate courses in the Simon Fraser University Department of Psychology and School of Criminology during the summer 2020 term due to COVID-19-related changes to online research participation by students completing undergraduate psychology courses. During fall 2020, a total of 394 participants enrolled in Psychology 100 or 102 were able to access the survey through the Research Participation System (RPS) created by the Department of Psychology. Respondents

were removed from various analyses in a listwise fashion due to missing data. Although multiple imputation was explored as an option to produce missing values, the large sample size and exploratory nature of this study were sufficient to proceed with a complete case analysis for each statistical test, especially as it could not be known that the data were not missing completely at random. Inclusion criteria were being enrolled in university-level coursework at the time of survey completion and English language fluency.

Although 394 participants were originally recruited and participated to some degree in the survey, data from 44 participants were discarded due to some degree of incomplete responses for the purpose of reporting descriptive statistics (88.8% response rate). This left a sample size of 350 participants who provided all demographic information. Participants were 350 students from a large public university in Western Canada (78.2% female, 21.8% male) from diverse racial backgrounds (63.9% Asian, 31.8% White, 1.9% Black/African, 2.2% Latinx, and 0.3% Indigenous). Ages ranged from 17 to 41 years ( $M = 20.17$ ,  $SD = 3.34$ ). Participants had completed a wide range of post-secondary schooling thus far, with the majority (96.6%) completing their first undergraduate degree and nearly two-thirds in either their first or second year of university. Most students (65.3%) were born and raised in Canada and 86.5% identified as domestic students. The majority (57.2%) of students were not in a romantic or sexual relationship at the time of survey completion. The majority (69.5%) of students identified as exclusively heterosexual.

## **2.2. Measures and Materials**

### **2.2.1. Sexual Attitudes**

The Brief Sexual Attitudes Scale (BSAS; Hendrick et al., 2006) is a self-report survey designed to measure multidimensional attitudes towards sex and includes four subscales: Permissiveness (“Sex as a simple exchange of favors is okay if both people agree to it”), Birth Control (“Birth control is part of responsible sexuality”), Communion (“Sex is a very important part of life”), and Instrumentality (“Sex is primarily the taking of pleasure from another person”). The items were rated on a five-point Likert scale ranging from ‘strongly agree’ to ‘strongly disagree.’ The four subscale scores were derived from the mean score of that particular subscale. The BSAS has demonstrated solid

psychometric properties, with test-retest reliability alpha values ranging from .57 (Birth Control) to .92 (Permissiveness) and internal consistency values ranging from .71 to .93, indicating that it is a reliable measure of the four primary sexual attitudes (Hendrick et al., 2006).

### **2.2.2. Rape Myth Acceptance**

The Acceptance of Modern Myths about Sexual Aggression (AMMSA) scale (Gerger et al., 2007) is a 30-item self-report scale that examines both subtle and overt endorsement of rape myth acceptance beliefs. Research on modern racist and sexist attitudes influenced the development of this tool, which therefore includes more subtle endorsements of sexual aggression. Items were presented on a seven-point Likert scale ranging from completely agree to completely disagree. Lower scores, calculated using the mean score across the 30 items and ranging from 1 to 7, indicated greater acceptance of contemporary myths about sexual violence, including victim-blaming and perpetrator-exonerating viewpoints. The Cronbach alpha values for the original study range from .90 to .95, suggesting excellent internal consistency, and it has acceptable test-retest reliability ranging from .67 to .88 (Gerger et al., 2007). Another work found that the scale approximated the normal curve well (Eyssele & Bohner, 2008).

### **2.2.3. Token Resistance**

The self-report Token Resistance to Sex Scale (TRSS; Osman, 1995) measures the degree to which individuals endorse the trait-based belief that women use token resistance in response to sexual advances by another party. Items on this measure were rated on a seven-point Likert scale ranging from strongly agree to strongly disagree. Scores ranged from 1 to 7, and in keeping with the scoring guidelines established with the other measures (i.e., AMMSA), the scale responses were modified so that lower scores would reflect higher levels of token resistance beliefs. No changes were made to the content of the scale items, thus preserving the psychometric properties of this protocol. The original version has demonstrated good internal consistency (Cronbach alpha = .87) and construct validity by accurately predicting perceptions of date rape (Osman & Davis, 1999).

#### **2.2.4. Prior Sexual Experiences**

The Sexual Experiences Survey - Short Form Perpetration (SES-SFP; Koss et al., 2007) is a modified version of a self-report survey that measures the propensity to use sexually aggressive or coercive strategies or engage in perpetration. Items from the Sexual Experiences Survey-Long Form Perpetration were incorporated into this questionnaire, along with the elimination of certain items. The language was also revised to reflect sexual behaviors that are more in line with modern research. Individual items examined several sexual acts (e.g., oral sex) and asked questions about which of five particular non-consensual methods were used in order to engage in that act. Non-consensual methods include verbal pressure, showing displeasure and criticism, incapacitation of the victim, threats of force, and using physical force. Participants were able to endorse multiple forms of perpetration. Studies have shown the original SES-SFP to have good internal consistency and convergent validity in college-aged men (Anderson et al., 2017; Johnson et al., 2017).

The Sexual Experiences Survey - Short Form Victimization (SES-SFV; Koss et al., 2007) is a modified version of the long form victimization survey that captures the scope of victimization of unwanted sexual contact. Like the SES-SFP, items of interest (e.g., forms of non-penetrative sexual harassment) were incorporated into this survey from the SES-Long Form Victimization, with the removal of redundant items. Additionally, the language was modernized to reflect more prevalent sexual activities of current university students. Individual items examined unwanted sexual acts and asked questions about which of five particular non-consensual methods were used in order to engage in those behaviors. Similar to the SES-SFP, participants were able to endorse which non-consensual methods were used, which include verbal pressure, showing displeasure and criticism, incapacitation of the victim, threats of force, and using physical force. Participants were also able to endorse multiple forms of victimization. There is evidence to support strong reliability and validity for the original version of the SES-SFV for college-aged women (Johnson et al., 2017), but test-retest reliability was noted to be poorer for college-aged men, with reliability correlation values of .49 (Anderson et al., 2018). It was noted that changes to the original SES-SFP may lead to changes in the validity and reliability of the modified form.

A comprehensive and multi-pronged approach was used to score the SES-SFV and SES-SFP for both female and male participants. Participants received a score for each type of sexual behavior reported, including sexual harassment (e.g., sexual comments), sexual contact (e.g., unwanted kissing, groping, and fondling), attempted sexual assault (i.e., attempted vaginal, oral, or anal penetration), and completed sexual assault (i.e., completed vaginal, oral, or anal penetration). Endorsement of each possible act of sexual harassment received a value of 1, sexual contact received 2, attempted sexual assault received 3, and completed sexual assault received 4. This scoring scheme allows for multiple types of sexual behavior to be reported, not just the most severe forms of victimization and perpetration, and also permits the creation of continuous data (Davis et al., 2014). The minimum score was 0, indicating no experience of sexual harassment, sexual contact, attempted sexual assault, and completed sexual assault in either domain of victimization or perpetration. The maximum score on the SES-SFV and SES-SFP was 58, with that score indicating that each act had taken place at minimum once. Further, participants were also able to indicate the tactics that were used, including verbal coercion, intoxication, and physical force. Given the low base rates of more severe forms of sexual victimization and perpetration, a dichotomous approach was used for the purposes of the subsequent regression models.

### **2.2.5. Demographics**

The demographics questionnaire encompassed several facets of an individual's identity. These facets include how participants view their gender (self-identified as male, female, other), age, year in university (1<sup>st</sup>, 2<sup>nd</sup>, 3<sup>rd</sup>, etc.), type of degree (undergraduate/graduate), Canadian-born (yes/no), race (White/Black/Asian/Latino/Indigenous, and a fill-in option for Other) and student status (international/domestic). Participants were also asked about their sexual orientation and at the time of survey completion, whether they were in a current romantic and/or sexual relationship.

## **2.3. Procedures**

This study examined the relationship between sexual attitudes, situational factors, and the perceptions of a sexual assault vignette. Recruitment took place during

two distinct stages due to COVID-19 related changes in research participation. During the first wave in the summer 2020 term, course instructors in Psychology and Criminology classes were contacted and provided the SurveyMonkey link for students to participate in this study to share via email or a secure virtual classroom platform (e.g., Canvas). They were informed at that time that they could be entered into a draw for \$25 gift cards at the time of study completion if they provided their emails. For the second wave, enrolled students in Psychology 100 or 102 (introductory-level psychology courses) gained access to an online portal that allowed researchers to post links to ongoing studies. All participants from both waves were instructed that they could only participate in the survey once and were provided a brief description of the study before agreeing to participate.

This study received approval from SFU Research Ethics Board (REB), and although identifying information was collected if students chose to participate in the draw, there was no requirement to complete the survey or provide an email address for students participating in the first wave. Necessary contact information was collected in a manner that eliminated the possibility of connecting survey responses to a particular participant. After the draw was completed, all email addresses were destroyed to eliminate the risk of linking participants back to their study responses. Students who participated in the RPS system during the second wave were contacted through their school email addresses once they signed up for the study, and emails were destroyed once course credit was assigned to participants. Respondents were only asked to provide minimal and topic-relevant information during the survey that could potentially be used to identify them, and information such as IP address and location were not collected to maintain confidentiality.

For participants who chose to take part in this research, they were directed to follow a hyperlink to self-administer the study online using SurveyMonkey, which opened with a consent form. The decision to use an online platform was informed by research that suggests lower levels of social inhibition were present when completing online instead of in-person surveys (Booth-Kewley et al., 2007). Participants were notified that they were able to end their participation at any time without penalty if they chose to do so, and they were provided with contact information for campus-provided mental health resources at multiple time points during the survey.

After providing consent, participants completed the demographic questionnaire and then were presented with one of six forms of a sexual assault vignette in a step-by-step, straightforward pattern of events. There is evidence to suggest the presentation of attitudinal measures may affect participant ratings on their perceptions of acquaintance rape vignettes (Murdoch & Gonsalkorale, 2017); therefore, the vignette scenario was presented first to minimize the effects of such biases on vignette responses. Each of the eight steps consisted of a phrase or several phrases that denoted a particular form of sexual interaction, starting with flirtatious comments and ending in forced, completed intercourse. After each of the eight steps were presented, participants answer several questions about the outcome variables, which includes their degree of comfort, female character's perception of safety, perceptions of token resistance, and degree of endorsement of the scenario as sexual harassment and sexual assault. These variables were captured continuously (using a 1-10 Likert scale and percentages) to allow for a variety of statistical analyses. Two variables concerning presence of consent and need to report the incident were captured categorically with a yes or no response.

Participants then completed all of the questionnaires assessing their prior sexual experiences and attitudes, in the following order: SES-SFP, SES-SFV, TRSS, AMMSA, and BSAS. These questionnaires were always be presented in the same order on the survey platform in order to maintain consistency between participants as order effects have been demonstrated in other studies using survey software as the primary means of data collection (Auspurg & Jäckle, 2017). For participants who did not endorse either a history of victimization or perpetration, skip logic was used to minimize fatigue effects. Skip logic is a survey feature that allows respondents to skip ahead to questions based on their response to a prior question. For example, if a participant did not consent to participate in the study, they were skipped forward to the debrief page at the end of the study. Once data collection was completed, statistical analyses were conducted using SPSS Version 27 to assess the research questions.



## Chapter 3.

### Results

#### 3.1. Preliminary Analyses

Chi-square tests for association were conducted to examine gender differences between both victimization and perpetration. For both analyses, all expected cell frequencies were greater than five. There was a moderately strong association between gender and victimization,  $\chi^2(1, N = 349) = 34.11, p < .001, \phi = 0.31$ . Similarly, the results of a chi-square test that examined the association between gender and perpetration was significant  $\chi^2(1, N = 349) = 17.15, p < .001, \phi = -0.22$ . Overall, both victimization and perpetration experiences were unevenly distributed in this sample of men and women. Specifically, more women than would be expected had at least one victimization experience, and more men than would be expected endorsed at least one perpetration experience.

I also examined whether between-group differences were present in participants' demographic characteristics. A one-way ANOVA was conducted to determine if mean age was different between vignette types, revealing that the differences between these vignettes groups was not statistically significant,  $F(5, 339) = 1.40, p = .22$ . For categorical variables, Chi-square tests of independence were used to examine whether the vignettes were demographically equivalent. A number of chi-square tests of independence were conducted between vignette and the following demographic variables: gender, race, degree type, year in school, citizenry, student status, sexual orientation, and relationship status. No statistically significant associations between vignette type and any demographic characteristics were found (see Table 1 for detailed results).

**Table 1. Crosstabulation of Vignette Type and Demographic Characteristics**

	<b>n</b>	<b>df</b>	<b><math>\chi^2</math></b>	<b>p</b>
Gender	349	5	8.57	.13
Race	321	20	16.36 <sup>a</sup>	.69
Degree type	348	10	8.22 <sup>a</sup>	.61
Year in school	346	25	21.40 <sup>a</sup>	.67
Citizenry	349	5	4.61	.47

Student status	349	5	6.02	.30
Sexual orientation	348	20	19.94 <sup>a</sup>	.46
Relationship status	348	5	4.27	.51

N = 350

Note.

<sup>a</sup> Cells had expected count less than 5.

Prevalence rates of victimization of sexual harassment, sexual contact, attempted sexual assault, and completed sexual assault are reported by total and gender for all participants who completed the SES-SFP in Table 2. The overall prevalence rate for respondents reporting experiences of any type of sexual assault victimization (sexual harassment, sexual contact, attempted oral, vaginal, or anal penetration, and completed oral, vaginal, or anal penetration) over their lifetime was 66%. The most frequently reported act was being stared at in a sexual manner or receiving sexual comments (51.4%), followed closely by unwanted touching (43.4%). Rates of perpetration were considerably lower. 9.7% of participants indicated that they had stared at or made sexual comments towards someone, and 4% reported that they had touched at least one person without permission. Further sexual perpetration rates are reported in Table 3. Pearson correlation coefficients among victimization, perpetration, attitudes about sex, token resistance, and endorsement of sexual assault myths are reported by total and gender in Tables 4, 5, and 6. Across all genders, prior perpetration was negatively correlated with sexual communion and token resistance, indicating that perpetration was significantly linked to individuals who endorsed lower levels of sexual activity for bonding purposes and higher levels of token resistance belief. Rape myth acceptance was positively associated with token resistance, sexual communion, and sexual instrumentality. Unexpectedly, there was a significant association between perpetration and victimization in female participants.

**Table 2. Prevalence of Sexual Victimization by Act**

Act	Total		Male		Female	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Sexual harassment						
Someone stared at me in a sexual way or made sexual comments	180	51.4	14		166	
Someone sent me sexual or obscene messages, photos, or videos	122	34.9	15		107	
Someone watched or took photos/videos of me while I was undressing, nude, or having sex	25	7.1	1		24	
Someone showed me their genitals or made sexual motions towards me	77	22	6		71	
Someone masturbated in front of me	27	7.7	1		26	
Sexual contact						
Someone fondled, kissed, touched, or rubbed up against my lips, breast/chest, genitals, or anus/butt	152	43.4	15		137	
Someone removed some or all of my clothing	59	16.9	5		54	
Attempted sexual assault						
Someone tried to perform oral sex on me	36	10.3	2		34	
Someone tried to penetrate my mouth with hands/objects	19	5.4	2		17	
Someone tried to penetrate my vagina with hands/objects	54	15.4	1		52	
Someone tried to penetrate my anus with hands/objects	12	3.4	1		11	
Someone tried to penetrate my mouth with a penis	22	6.3	2		20	
Someone tried to penetrate my vagina with a penis	31	8.9	1		30	
Someone tried to penetrate my anus with a penis	10	2.9	1		9	
Sexual assault						
Someone performed oral sex on me	21	6	2		19	
Someone penetrated my mouth with hands/objects	11	3.1	2		9	
Someone penetrated my vagina with hands/objects	40	11.4	1		39	
Someone penetrated my anus with hands/objects	5	1.4	1		4	
Someone penetrated my mouth with a penis	16	4.6	3		13	
Someone penetrated my vagina with a penis	29	8.3	0		29	
Someone penetrated my anus with a penis	5	1.4	1		4	

N = 350

**Table 3. Prevalence of Sexual Perpetration by Act**

Act	Total		Male		Female	
	<i>n</i>	%	<i>n</i>	%	<i>n</i>	%
Sexual harassment						
Stared at someone in a sexual way or made sexual comments	34	9.7	13		21	
Sent someone sexual or obscene messages, photos, or videos	12	3.4	3		9	
Watched or took photos/videos of someone while they were undressing, nude, or having sex	0		0		0	
Showed someone my genitals or made sexual motions towards them	2	0.6	2		0	
Masturbated in front of someone	1	0.3	1		0	
Sexual contact						
Fondled, kissed, touched, or rubbed up against someone's lips, breast/chest, genitals, or anus/butt	14	4	7		7	
Removed some or all of someone's clothing	3	.9	0		3	
Attempted sexual assault						
Tried to perform oral sex on someone	1	.3	1		0	
Tried to penetrate someone's mouth with hands/objects	2	.6	2		0	
Tried to penetrate someone's vagina with hands/objects	4	1.1	4		0	
Tried to penetrate someone's anus with hands/objects	1	.3	1		0	
Tried to penetrate someone's mouth with a penis	1	.3	1		0	
Tried to penetrate someone's vagina with a penis	2	.6	2		0	
Tried to penetrate someone's anus with a penis	1	.3	1		0	
Sexual assault						
Performed oral sex on someone	1	.3	1		0	
Penetrated someone's mouth with hands/objects	4	1.1	4		0	
Penetrated someone's vagina with hands/objects	5	1.4	4		1	
Penetrated someone's anus with hands/objects	0		0		0	
Penetrated someone's mouth with a penis	3	0.9	3		0	
Penetrated someone's vagina with a penis	2	.6	2		0	
Penetrated someone's anus with a penis	0		0		0	
Been accused of sexual assault by someone	6	1.7	4		2	

N = 350

**Table 4. Descriptive Statistics and Correlations for Individual Characteristic Variables**

Variable	M	SD	1	2	3	4	5	6	7	8
1. Victimization	5.63	8.6	–	.05	-.01	-.05	-.18**	.01	-.002	.11
2. Perpetration	.57	2.9		–	-.05	-.06	-.04	-.15**	-.23**	-.06
3. Attitudes about sex (BSAS-Birth control)	1.73	.92			–	.004	.28**	.09	.003	-.05
4. BSAS-Instrumentality	3.24	.77				–	.21**	.21**	.21**	.25**
5. BSAS-Permissiveness	3.13	.87					–	.04	.08	-.01
6. BSAS-Communion	2.62	.95						–	.18	.23**
7. Token resistance (TRSS)	6.52	.67							–	.65**
8. Sexual assault myth acceptance (AMMSA)	5.53	.88								–

N = 298

Note.

\*\*p < .01.

**Table 5. Descriptive Statistics and Correlations for Individual Characteristic Variables in Males**

Variable	M	SD	1	2	3	4	5	6	7	8
1. Victimization	2.09	6.09	–	.19	-.15	-.14	-.22	-.04	.11	.21
2. Perpetration	1.81	5.76		–	-.14	-.08	-.02	-.21	-.21	.08
3. Attitudes about sex (BSAS-Birth control)	1.76	.91			–	-.05	.20	-.16	-.07	-.05
4. BSAS-Instrumentality	3.29	.86				–	.23	.21	.38**	.20
5. BSAS-Permissiveness	2.90	.84					–	-.07	.17	.13
6. BSAS-Communion	2.26	.88						–	.17	.26*
7. Token resistance (TRSS)	6.19	.88							–	.61**
8. Sexual assault myth acceptance (AMMSA)	5.06	.98								–

N = 69

Note.

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

**Table 6. Descriptive Statistics and Correlations for Individual Characteristic Variables in Females**

Variable	M	SD	1	2	3	4	5	6	7	8
1. Victimization	6.7	8.96	–	.25**	.03	-.02	-.22	-.04	-.13	.002
2. Perpetration	.19	.68		–	.05	-.15*	-.06	-.07	-.29**	-.19**
3. Attitudes about sex (BSAS-Birth control)	1.72	.92			–	.02	.31**	.17**	.04	-.05
4. BSAS-Instrumentality	3.23	.74				–	.21**	.23**	.15	.31**
5. BSAS-Permissiveness	3.2	.87					–	.03	-0.02	-.12
6. BSAS-Communion	2.73	.95						–	.12	.15*
7. Token resistance (TRSS)	6.62	.56							–	.63**
8. Sexual assault myth acceptance (AMMSA)	5.67	.8								–

*N* = 229

Note.

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

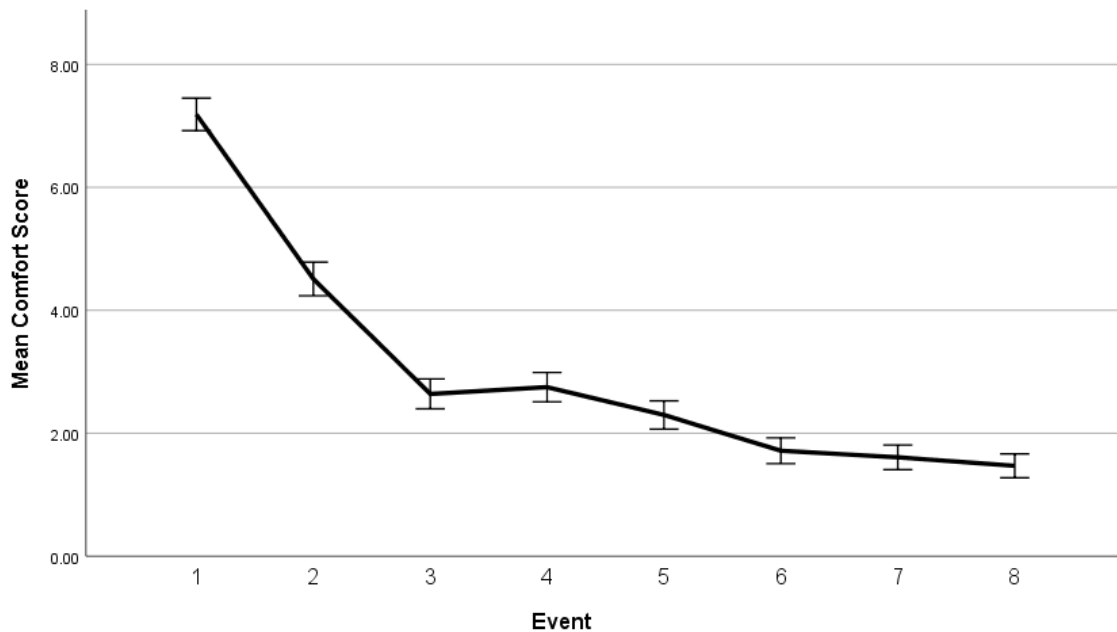
## 3.2. Primary Analyses

### 3.2.1. Research Question 1: Are there significant changes in participants' perceptions of the sexual encounter portrayed in the vignette across the various steps?

Repeated measures ANOVAs were used to analyze the mean differences from the multiple responses collected throughout the vignette, with the independent variable as step (i.e., time across an escalation of sexual violence over the course of Steps 1 through 8) and the dependent variables as composite scores of a) comfort, b) safety, c) female token resistance, d) endorsement of sexual harassment, and e) endorsement of sexual assault. As the data collection does not measure only a single outcome (i.e., stopping point, typically defined as the point at which the respondent stops the interaction from continuing), these multiple responses can be used to determine if the response pattern in risk perception, endorsement of unwanted sexual behaviors, and token resistance changes significantly over time.

**Comfort.** Shapiro-Wilk's tests (*p* < .001) revealed violations of normality, indicating that comfort score was not normally distributed at each time point.

Examinations of boxplots also revealed significant outliers. It was decided to run the test regardless because one-way repeated measures ANOVAs are generally robust to deviations from normality. Additionally, transformation of the data along with removal of extreme outliers did not change normality or outlier statistics. Mauchly's test of sphericity indicated that the assumption of sphericity had been violated,  $\chi^2(27) = 0.05, p < .001$ , so a Greenhouse-Geisser correction was used ( $\epsilon = .53$ ). Comfort levels were statistically significantly different at different time points during the vignette,  $F(3.70, 1279.1) = 461.77, p < .001$ , partial  $\eta^2 = .57$ . Table 7 contains the results of eight Bonferroni post-hoc tests to examine significant differences in comfort between two time points during the vignette procedure.



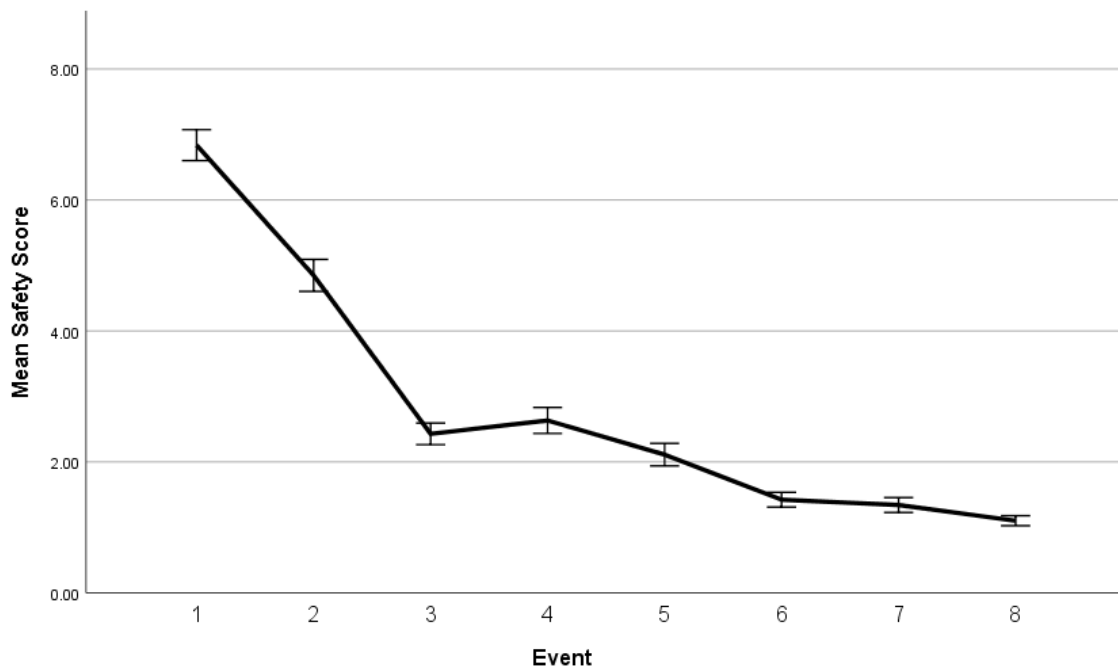
**Figure 1. Mean Comfort Score over Time (95% CI)**

**Table 7. Pairwise Comparison of Comfort Levels over Steps**

Step Comparison	Mean Difference	95% CIs
1, 2	2.68*	[2.18, 3.18]
2, 3	1.87*	[1.46, 2.28]
3, 4	-.11	[-.43, .21]
4, 5	.45*	[.16, .75]
5, 6	.58*	[.34, .83]
6, 7	.11	[-.07, .28]
7, 8	.14	[-.4, .32]
1, 8	5.72*	[5.17, 6.26]

N = 343  
 Note.  
 \* $p < 0.05$ .

**Safety.** Although outliers were examined using a boxplot and non-normality was identified using Shapiro-Wilk's normality tests, no outliers were removed given the repeated measure ANOVA design's robustness to deviations from normality. Mauchly's test of sphericity indicated that the assumption of sphericity had been violated,  $\chi^2(27) = 0.04$ ,  $p < .001$ , so a Greenhouse-Geisser correction was used ( $\epsilon = .54$ ). The results of the one-way repeated-measures ANOVA showed that there was a significant main effect of step on the average safety score,  $F(3.76, 1268.69) = 754.27$ ,  $p < .001$ , partial  $\eta^2 = .69$ . Bonferroni post-hoc tests were conducted and indicated a number of significant differences in safety between the first and last and also consecutive time points during the vignette procedure (see Table 8).



**Figure 2. Mean Safety Score over Time (95% CI)**

**Table 8. Pairwise Comparison of Safety Levels over Steps**

Step Comparison	Mean Difference	95% CIs
1, 2	1.99*	[1.61, 2.36]
2, 3	2.42*	[2.09, 2.75]
3, 4	-.20	[-.49, .08]
4, 5	.52*	[.28, .77]
5, 6	.69*	[.47, .91]



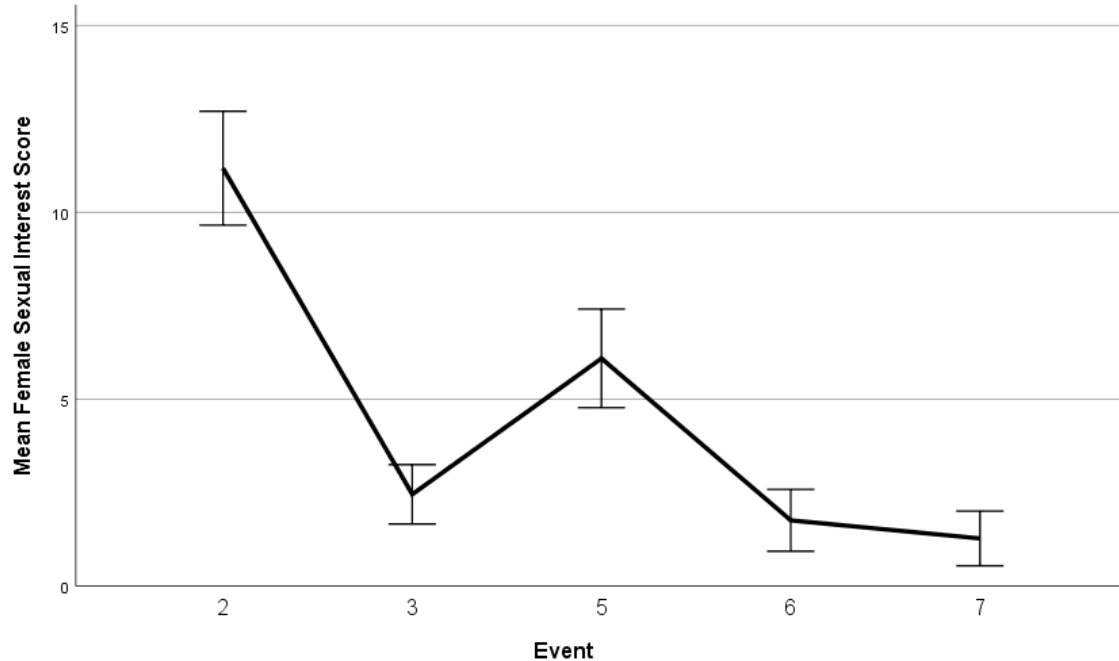
6, 7	.08	[-.05, .21]
7, 8	.24*	[.07, .41]
1, 8	5.74*	[5.34, 6.13]

N = 343

Note.

\* $p < 0.05$ .

**Female Token Resistance.** To assess state-based token resistance, Steps 2, 3, 5, 6, and 7 were used in the following one-way repeated-measures ANOVA. These five steps (i.e., 2, 3, 5, 6, 7) capture the female character engaging in boundary-setting behaviors, which means participant responses to the question “what is the probability the woman wants to have sex at this point?” capture the evaluation of her refusal or resistance within the vignette. Events 1, 4, and 8 do not contain boundary-setting behaviors and were thus not appropriate for evaluation. Shapiro-Wilk’s tests ( $p < .001$ ) revealed violations of normality, indicating that mean sexual interest score (capturing token resistance) was not normally distributed at each of the five time points. Examinations of boxplots also revealed significant outliers. However, the test was run without any transformation because this design is typically robust to deviations from normality. Mauchly’s test indicated that the assumption of sphericity had been violated,  $\chi^2(9) = .12, p < .001$ ; therefore, Greenhouse-Geisser corrected tests are reported ( $\epsilon = .56$ ). The results showed that perception of female token resistance was significantly affected by the step,  $F(2.24, 735.60) = 80.84, p < .001, \text{partial } \eta^2 = .20$  (see Table 9).



**Figure 3. Mean Female Token Resistance Score over Time (95% CI)**

**Table 9. Pairwise Comparison of Female Token Resistance over Steps**

Step Comparison	Mean Difference	95% CIs
2, 3	8.23*	[6.94, 10.51]
3, 5	-3.64*	[-5.52, -1.75]
5, 6	4.33*	[2.77, 5.90]
6, 7	.49	[-.11, 1.07]

N = 330

Note.

\* $p < 0.05$ .

**Sexual Harassment.** Shapiro-Wilk's tests ( $p < .001$ ) revealed violations of normality, indicating that mean endorsement of sexual harassment score was not normally distributed at each time point. Examinations of boxplots also revealed significant outliers. Like the other ANOVAs, the test was run without any transformations or removal of outliers because one-way repeated measures ANOVA are generally robust to deviations from normality. Mauchly's test of sphericity indicated that the assumption of sphericity had been violated,  $\chi^2(27) = 0.7, p < .001$ , so a Greenhouse-Geisser correction was used ( $\epsilon = .72$ ). Endorsement of sexual harassment scores were statistically significantly different at different time points during the vignette,  $F(5.03, 1719.36) =$

565.97,  $p < .001$ , partial  $\eta^2 = .62$ . Table 10 contains the results of eight Bonferroni post-hoc tests that examined significant differences in endorsement of sexual harassment between two time points during the vignette procedure.

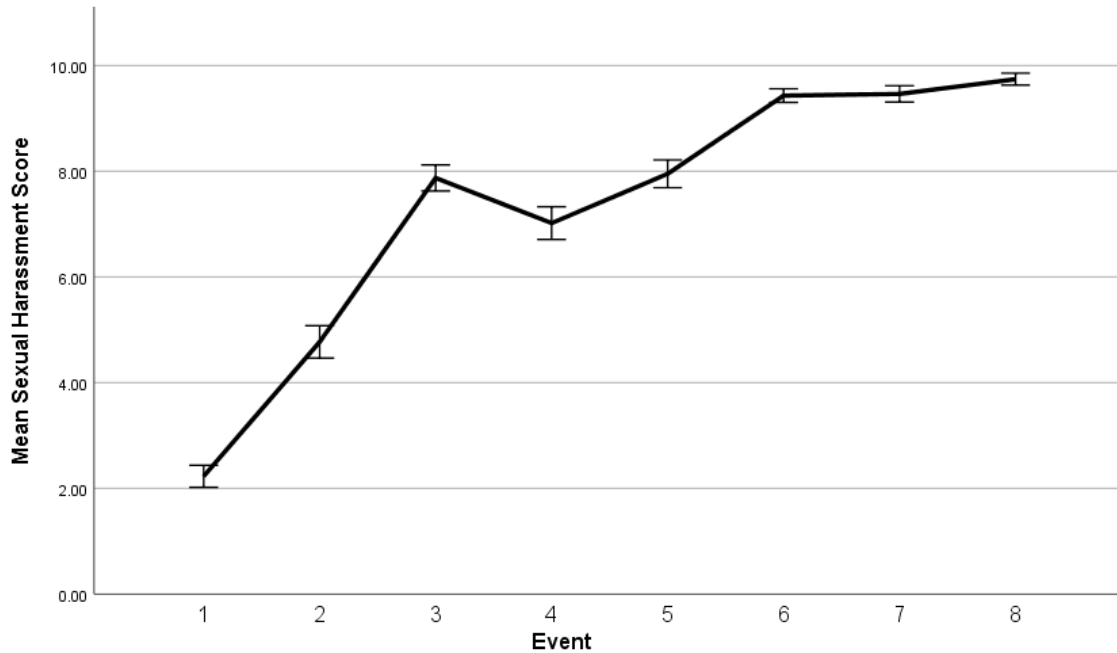


Figure 4. Mean Sexual Harassment Score over Time (95% CI)

Table 10. Pairwise Comparison of Mean Endorsement of Sexual Harassment over Steps

Step Comparison	Mean Difference	95% CIs
1, 2	-2.16*	[-2.59, -1.73]
2, 3	-2.73*	[-3.19, -2.29]
3, 4	.62*	[.12, 1.11]
4, 5	-.01	[-.45, .43]
5, 6	-2.48*	[-2.96, -2.00]
6, 7	.04	[-.27, .34]
7, 8	-1.08*	[-1.45, -.70]
1, 8	-7.81*	[-8.19, -7.42]

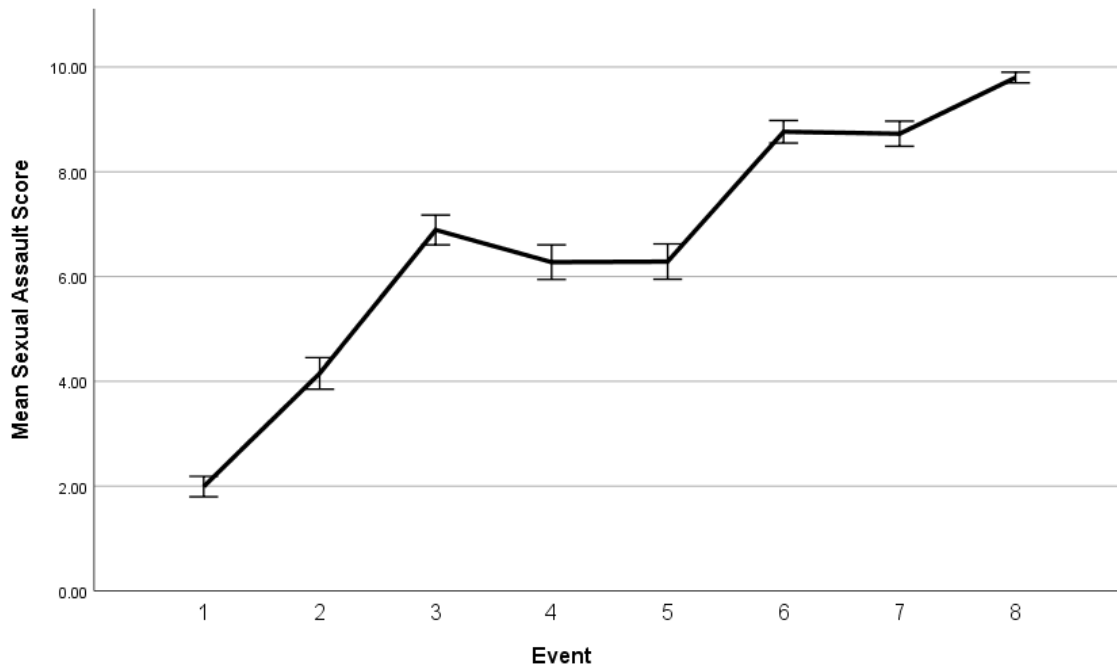
$N = 343$

Note.

\* $p < 0.05$ .

**Sexual Assault.** Shapiro-Wilk's tests ( $p < .001$ ) revealed violations of normality, indicating that mean endorsement of sexual assault score was not normally distributed at each time point. Examinations of boxplots also revealed significant outliers. Given the robustness to deviations of normality of the one-way repeated measures ANOVA design,

the test was run regardless. Mauchly's test indicated that the assumption of sphericity had been violated,  $\chi^2(27) = 0.09, p < .001$ ; therefore, Greenhouse-Geisser corrected tests are reported ( $\epsilon = .59$ ). The results showed that endorsement of sexual assault was significantly affected by the step,  $F(4.12, 1413.27) = 679.85, p < .001, \text{partial } \eta^2 = .67$ . Bonferroni post-hoc tests revealed a number of significant differences in the perception of sexual assault between the first and last and also consecutive time points during the vignette procedure (see Table 11).



**Figure 5. Mean Sexual Assault Score over Time (95% CI)**

**Table 11. Pairwise Comparison of Mean Endorsement of Sexual Assault over Steps**

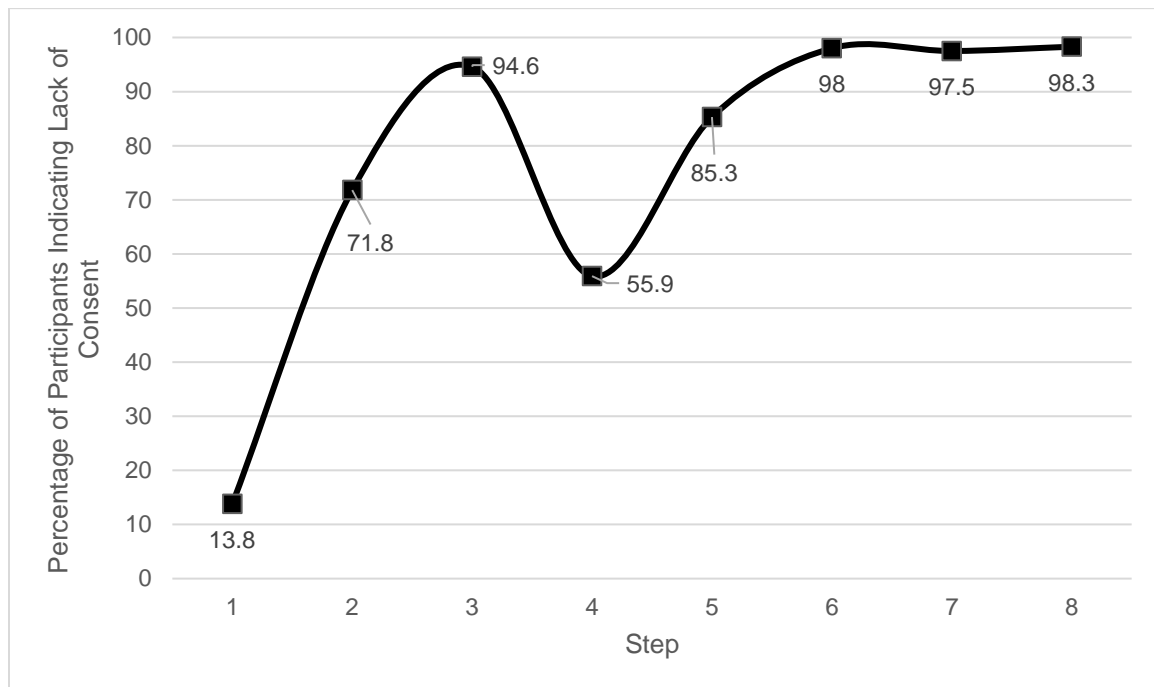
Step Comparison	Mean Difference	95% CIs
1, 2	-2.54*	[-2.98, -2.11]
2, 3	-3.10*	[-3.60, -2.60]
3, 4	.86*	[.40, 1.31]
4, 5	-.93*	[-1.30, -0.56]
5, 6	-1.48*	[-1.83, -1.13]
6, 7	-.03	[-.25, .18]
7, 8	-.28*	[-.52, -.04]
1, 8	-7.52*	[-7.93, -7.10]

N = 344

Note.

\* $p < 0.05$ .

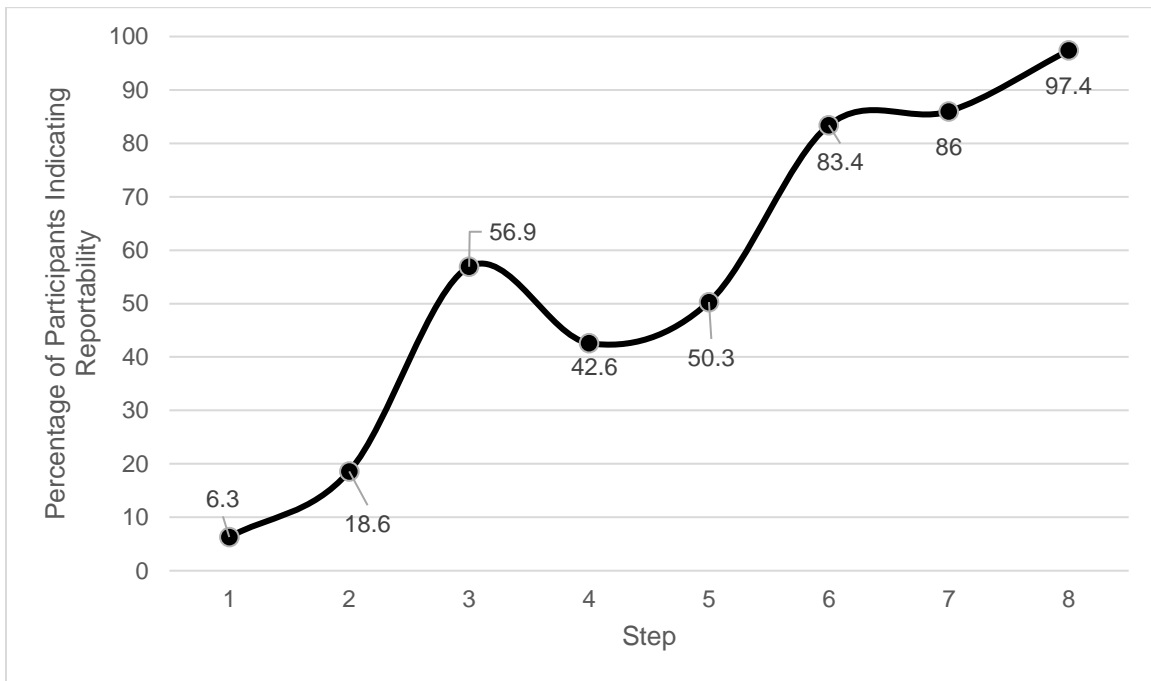
**Consent.** The question regarding at which point do the majority of participants (i.e., above 50%) deem the sexual encounter to be non-consensual was analyzed using descriptive statistics. A visual examination of frequency tables and graphs depicting percentages for endorsement of the vignette as non-consensual revealed that the majority of participants (i.e., above 50%) endorsed lack of consent after the presentation of Step 2, in which the female character establishes sexual boundaries for the first time (see Figure 6).



**Figure 6. Endorsement of Lack of Consent over Time (95% CI)**

**Reportability.** The question regarding at which point do over 50% of participants rate the sexual encounter to be worthy of reporting was examined using descriptive statistics. Frequency tables and graphs depicting percentages revealed that endorsement of the vignette as worthy of reporting also took place for the majority of participants after Step 3. During this step, the male character responds to the female's boundary-setting with some degree of verbal coercion. However, in Step 4, fewer participants indicated that the vignette should be reported by the female. This value once again rose above 50% after Step 5 and remained there for the remainder of the vignette. On average, a greater number of participants first noted lack of consent, with a smaller but still sizeable majority viewing the same scenario as worthy of reporting. Some

participants did not endorse perceptions of lack of consent and reportability at the end of the vignette presentation, which depicted a forced sex scenario.



**Figure 7. Endorsement of Reportability over Time (95% CI)**

**Summary.** Research question 1 examined the change in perception over the presentation of the eight steps of the vignette, and results indicated that people reported that the situation was more problematic at the end than it was the beginning, but the change between each step was not a linear increase across the board. From Step 1 to 8 there was a significant main effect of step, but the change did not look the same between each set of consecutive steps (i.e., between step 1 and 2, 2 and 3, and so on). This was the expected finding due to how the vignette was intentionally designed to depict a non-linear representation of sexual aggression. Evidence of verbal and physical coercion reduced participant comfort levels, perceived safety of the female vignette character, and female token resistance. Similarly, removing coercive actions by the male character increased participants' positive perceptions of the situation, including their indications that it was less representative of sexual violence.

### 3.2.2. Research Question 2: Are participants' perceptions of the sexual encounter portrayed in the vignette influenced by characters' alcohol consumption and degree of familiarity?

A 2 (alcohol: presence vs. absence) x 3 (vignette character relationship: strangers vs. acquaintances vs. former romantic partners) factorial ANOVA was employed to test whether the main effects of alcohol consumption by and degree of familiarity between characters and the interaction effect between alcohol consumption by and degree of familiarity between characters influenced participants' global ratings of a) comfort, b) safety, perceptions of the sexual encounter as representing c) female token resistance, d) sexual harassment, and e) sexual assault.<sup>1</sup> A composite score (i.e., a summary score of Steps 1 through 8) rather than final score (i.e., after Step 8 is presented) was created for each dependent variable based on the responses to each of the eight steps as it was predicted that little variability in the DVs would exist between participants after a forced sex encounter has been presented. This composite score may vary as a function of the independent variables and each step in the vignette, with higher scores likely reflecting more immediate perceptions of the vignette scenario as sexual harassment, sexual assault, etc. An alpha level of .05 was used for these analyses.

**Comfort.** Homogeneity of variances was present, as examined by Levene's test ( $p = .92$ ). Although outliers were inspected using a boxplot and non-normality was identified using Shapiro-Wilk's normality test for each cell of the design, no outliers were removed given the ANOVA design's robustness to deviations from normality. There was no statistically significant interaction between alcohol consumption and degree of familiarity for comfort score,  $F(2, 341) = .43, p = .65, \text{partial } \eta^2 = .003$ . Main effects analyses revealed no significant main effects for both alcohol consumption,  $F(1, 341) = .86, p = .35, \text{partial } \eta^2 = .003$  and degree of familiarity,  $F(2, 341) = .98, p = .38, \text{partial } \eta^2 = .006$  on perceptions of comfort.

**Safety.** Outliers were assessed by inspection of a boxplot, normality was assessed using Shapiro-Wilk's tests, and homogeneity of variances was assessed by Levene's test. Although homogeneity of variances was present ( $p = .37$ ), an examination

---

<sup>1</sup> Initial consideration was given to mixed model analyses of variance, but the data did not lend themselves well to that particular design. Because assumptions were violated and no clear patterns of findings emerged, I decided to proceed with simpler analyses to address research question 2.

of the residuals revealed that they were not normally distributed for several cells of the design and two extreme outliers (case IDs = 391 and 329) were present. The extreme outliers were removed from the subsequent analyses. Results found that the interaction effect between alcohol consumption and degree of familiarity on perceptions of safety was not statistically significant,  $F(2, 335) = .65, p = .52, \text{partial } \eta^2 = .004$ . Main effects analyses revealed no significant main effects for both alcohol consumption,  $F(1, 335) = .35, p = .56, \text{partial } \eta^2 = .001$  and degree of familiarity,  $F(2, 335) = .49, p = .62, \text{partial } \eta^2 = .003$  on perceptions of safety.

**Female Token Resistance.** An examination of studentized residuals indicated three extreme outliers (case IDs = 61, 297, and 346), so both were removed. Upon re-running the analysis, there were no significant outliers and the assumption of homogeneity of variances was met ( $p = .65$ ). Although the majority of residuals remained non-normally distributed ( $p < .05$ ), no further outliers were removed given ANOVA design's robustness to deviations from normality. There was no statistically significant interaction between alcohol consumption and degree of familiarity on perception of female token resistance,  $F(2, 251) = 0.14, p = .87, \text{partial } \eta^2 = .001$ . Main effects analyses revealed no significant main effects for both alcohol  $F(1, 251) = .10, p = .76, \text{partial } \eta^2 < .001$  and relationship  $F(2, 251) = 1.10, p = .33, \text{partial } \eta^2 = .009$  on endorsement of perceived female token resistance.

**Sexual Harassment.** No significant outliers were detected, and homogeneity of variances was established using Levene's test ( $p = .19$ ). Although not all residuals were normally distributed ( $p > .05$ ), a scan of a scatterplot revealed that the spread of the residuals remained somewhat constant with changes in the predicted values, so the dependent variable was not transformed. The interaction between alcohol consumption and degree of familiarity on endorsement of sexual harassment was not statistically significant,  $F(2, 338) = 1.14, p = .32, \text{partial } \eta^2 = .007$ . Main effects analyses revealed no significant main effects for both alcohol consumption,  $F(1, 338) = .45, p = .50, \text{partial } \eta^2 = .001$  and degree of familiarity,  $F(2, 338) = .03, p = .97, \text{partial } \eta^2 < .001$  on endorsement of sexual harassment.

**Sexual Assault.** An examination of studentized residuals indicated five outliers with values exceeding  $\pm 2.5$  (case IDs = 234, 242, 255, 302, and 305), so they were removed. Upon re-running the analysis, there were no significant outliers, the



assumption of homogeneity of variances was met ( $p = .24$ ), and the majority of residuals were normally distributed. The interaction effect between alcohol consumption and degree of familiarity on endorsement of sexual assault was not statistically significant,  $F(2, 332) = .31, p = .74$ , partial  $\eta^2 = .002$ . Main effects analyses revealed no significant main effects for both alcohol consumption,  $F(1, 332) = .03, p = .88$ , partial  $\eta^2 < .001$  and degree of familiarity,  $F(2, 332) = .83, p = .44$ , partial  $\eta^2 = .005$  on endorsement of sexual assault.

**Consent.** A binomial logistic regression was conducted to determine whether alcohol consumption by and degree of familiarity between vignette characters influences participants' perceptions of consent via the progression of a sexual encounter portrayed in the vignette. Specifically, Step 4 was chosen as the most appropriate point at which to conduct this analysis as it is the last step in the vignette that does not depict ongoing verbal coercion by the male character. The following steps (i.e., Steps 5, 6, 7, and 8) all showcase varying degrees of verbal and physical coercion, and results from prior analyses indicated that the majority of participants viewed the situation as non-consensual starting with Step 5 and onward.

Testing for outliers revealed no cases with standardized residuals with values exceeding 2.5. The logistic regression model was not statistically significant,  $\chi^2(3) = 1.60, p = .66$ . The inferential goodness-of-fit test, the Hosmer-Lemeshow test, yielded a  $\chi^2(4)$  of .89, which was not statistically significant. The model explained only 0.6% (Nagelkerke  $R^2$ ) of the variance in perception of consent and correctly classified 55.3% of cases. Of the three independent variables (presence of alcohol and two dummy coded variables representing degree of familiarity), none were statistically significant (see Table 12).

**Table 12. Logistic Regression Predicting Likelihood of Consent based on Alcohol Consumption by and Degree of Familiarity between Vignette Characters**

	B	SE	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Alcohol consumption <sup>a</sup>	-.13	.22	3.76	1	.54	.88	.58	1.34
Degree of familiarity (strangers) <sup>b</sup>	-.13	.26	.25	1	.62	.88	.53	1.47
Degree of familiarity (acquaintances) <sup>b</sup>	-.28	.26	1.14	1	.29	.76	.45	1.26
Constant	.56	.34	2.71	1	.10	1.75		

N = 358

Note.

<sup>a</sup> Coded as 1 = no alcohol consumption, 2 = alcohol consumption.

<sup>b</sup> Degree of familiarity (dated) served as the reference group for this analysis.

**Reportability.** A binomial logistic regression was performed to assess the impact of alcohol consumption by and degree of familiarity between vignette characters influences participants' perceptions of reportability via the progression of a sexual encounter portrayed in the vignette. As with the previous regression model, Step 4 was chosen given its focus on inappropriate behaviors that do not yet met the threshold of illegality. Therefore, it was determined that participants' choices to report after Step 4 would be more likely to reflect situational variables (i.e., alcohol consumption by and degree of familiarity between vignette characters) regarding sexual behavior. All assumptions of this model, including multicollinearity, independent error, linearity, and outliers were met. The model contained three independent variables (presence of alcohol and two dummy coded variables representing degree of familiarity). The full model containing all predictors was not statistically significant,  $\chi^2(3) = 1.02$ ,  $p = 0.80$ , indicating that the model was not able to distinguish between respondents who recommended reporting and those who did not recommend reporting. The model as a whole explained approximately 0.4% (Nagelkerke  $R^2$ ) of the variance in reporting decision. None of the independent variables made a unique statistically significant contribution to the model (see Table 13).

**Table 13. Logistic Regression Predicting Likelihood of Reporting based on Individual Characteristics**

	B	SE	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Alcohol consumption <sup>a</sup>	-.03	.22	.02	1	.88	.97	.63	1.48
Degree of familiarity (strangers) <sup>b</sup>	-.12	.27	.21	1	.64	1.13	.67	1.90
Degree of familiarity (acquaintances) <sup>b</sup>	.26	.26	1.01	1	.32	1.30	.78	2.18
Constant	.02	.34	.01	1	.95	1.02		

N = 358

Note.

<sup>a</sup> Coded as 1 = no alcohol consumption, 2 = alcohol consumption.

<sup>b</sup> Degree of familiarity (dated) served as the reference group for this analysis.

**Summary.** Research question 2 examined how situation-level factors, like alcohol consumption and degree of familiarity between characters, are associated with global perceptions and labels of a sexually transgressive scenario. In this case, the finding was that the situational characteristics do not make a significant difference on participants' overall ratings of the event.

### 3.2.3. Research Question 3: Are participants' perceptions of the sexual encounter portrayed in the vignette influenced by individual-level factors?

The research question examining the extent to which individual-level factors influence participants' global ratings of comfort and safety with the sexual encounter and perceptions of the sexual encounter as representing female token resistance, sexual harassment, and sexual assault was evaluated via general linear models. Specifically, five hierarchical multiple regressions, for the purposes of including multiple response variables within a model, were used to determine whether individual-level factors contribute to explanatory power of participants' global ratings of comfort and safety as well as participants' decisions to indicate the vignette scenario represents female token resistance, sexual harassment, and sexual assault. The individual-level factors that comprised the predictor variables were the extent of endorsement of rape myth acceptance (i.e., AMMSA), attitudes towards sex regarding instrumentality and permissiveness (i.e., two scores on the BSAS), beliefs in trait token resistance (i.e., TRSS), and presence of sexual victimization history and sexual perpetration history (i.e., SES-SFV and SES-SFP).

**Comfort.** Hierarchical multiple regression was applied to formulate a model for ratings of comfort based on a composite score from the eight steps that comprise the sexual encounter. This method is used to determine how well a set of continuous and/or categorical variables can predict a particular outcome after previous variables have been controlled for. The assumptions of a hierarchical multiple regression are as follows: normality, no multicollinearity or singularity, linearity, and homoscedasticity. The Durbin-Watson value fell within an acceptable range (1.64), suggesting that the data met the assumption of independent errors. An analysis of standard residuals, Cook's distance, Mahalanobis distance, leverage, and the scatterplot of the regression leverage and studentized deleted residuals was carried out, indicating that the data contained a number of outliers. However, given the escalating nature of the vignette and its differential impact on participants' global ratings of comfort, no outliers were removed from the analysis at this time. An examination of the histogram and normal P-P plot of standardized residuals showed relatively normal distribution and close fit to the line ( $M < -0.001$ ,  $SD = .99$ ). Tolerance and VIF statistics were observed to be above 0.01 and below 10, respectively, indicating the assumption of no multicollinearity was met. Lastly, the scatterplot of standardized residuals revealed that the data was not significantly impacted by heteroscedasticity and linearity.

Results from the hierarchical multiple regression assessed the influence of situational variables on the participants' global ratings of comfort after controlling for the situational variables (i.e., alcohol consumption by and degree of familiarity between vignette characters). Situational variables within the vignette (i.e., alcohol consumption by and degree of familiarity between vignette characters) were entered in Model 1, explaining 1.8% of the variance in participants' global ratings of comfort. After entry of individual characteristics (i.e., presence of prior victimization, presence of prior perpetration, scores on attitudes about sex regarding instrumentality and permissiveness, scores on trait token resistance, and scores on endorsement of sexual assault myths) the total variance explained by Model 2 as a whole was 5.4%,  $F(9, 288) = 1.81$ ,  $p = .07$ . Individual characteristics explained an additional 3.5% of the variance in participants' global ratings of comfort after controlling for situational variables (alcohol consumption by and degree of familiarity between characters),  $R^2$  change = .04,  $F$  change (6, 288) = 1.79,  $p = .10$ . In the final model, only trait token resistance was

statistically significant in predicting global ratings of comfort. Regression statistics located are in Table 14.

**Table 14. Regression Analysis: Individual and Situational Characteristics Predicting Global Ratings of Comfort**

Variable	Model 1			Model 2		
	B	SE	$\beta$	B	SE	$\beta$
Constant	2.56***	.31		5.24***	.99	
Degree of familiarity (strangers) <sup>a</sup>	.01	.23	.003	-.004	.23	-.001
Degree of familiarity (acquaintance) <sup>a</sup>	.35	.22	.11	.37	.22	.11
Alcohol consumption <sup>b</sup>	.25	.19	.08	.29	.19	.09
Rape myth acceptance <sup>c</sup>				.13	.14	.07
Trait token resistance <sup>d</sup>				-.39*	.18	-.17
Sexual attitudes: permissiveness <sup>e</sup>				-.12	.11	-.06
Sexual attitudes: instrumentality <sup>e</sup>				-.16	.13	-.08
Perpetration <sup>f</sup>				.08	.26	.02
Victimization <sup>f</sup>				-.02	.21	-.005
$R^2$		.02			.05	
$F$		1.81			1.81	
$p$		.15			.07	

$N = 298$

Note.

\* $p < 0.05$ . \*\*\* $p < 0.001$ .

<sup>a</sup> Degree of familiarity (dated) served as the reference group for this analysis.

<sup>b</sup> Coded as 1 = no alcohol consumption, 2 = alcohol consumption.

<sup>c</sup> Measured by AMMSA, with lower scores indicating higher rape myth acceptance.

<sup>d</sup> Measured by TRSS, with lower scores indicating stronger token resistance beliefs.

<sup>e</sup> Measured by BSAS.

<sup>f</sup> Coded as 1 = indicating no history, 2 = indicating history.

**Safety.** A hierarchical multiple regression was performed to assess the influence of individual-level factors (i.e., prior victimization, prior perpetration, attitudes about sex regarding instrumentality and permissiveness, token resistance, and endorsement of sexual assault myths) on participants' global ratings of safety after controlling for situational variables. Prior to conducting this hierarchical multiple regression, relevant assumptions were tested. Preliminary analyses revealed no violation of the assumptions of multicollinearity, singularity, normality, linearity, homoscedasticity, and unusual points. The sample size of 294 was deemed adequate given eight independent variables that were included in the analysis. The independence of residuals, as assessed by a Durbin-Watson statistic of 2.06, was noted to be acceptable.

The full model of individual and situational characteristics to predict global ratings of safety (Model 2) was statistically significant,  $R^2 = .09$ ,  $F(9, 284) = 3.16$ ,  $p = .001$ . The results of Block 1 indicated that  $R^2$  equaled .007 (adjusted  $R^2 = -.004$ ), which was not

significantly different from zero,  $F(3, 290) = .64, p = .59$ . In Block 2, the individual characteristics were entered into the regression equation. The change in variance accounted for ( $\Delta R^2$ ) was equal to .08, which was significantly different from zero,  $F(9, 284) = 4.40, p < .001$ . In the final model, endorsement of trait token resistance contributed significantly to the global ratings of safety. See Table 15 for full details on the regression model.

**Table 15. Regression Analysis: Individual and Situational Characteristics Predicting Global Ratings of Safety**

Variable	Model 1			Model 2		
	B	SE	$\beta$	B	SE	$\beta$
Constant	2.61***	.21		5.18***	.65	
Degree of familiarity (strangers) <sup>a</sup>	.07	.15	.03	.09	.15	.04
Degree of familiarity (acquaintance) <sup>a</sup>	.14	.15	.06	.13	.15	.06
Alcohol consumption <sup>b</sup>	.12	.12	.06	.12	.12	.06
Rape myth acceptance <sup>c</sup>				-.07	.09	-.06
Trait token resistance <sup>d</sup>				-.28*	.12	-.18
Sexual attitudes: permissiveness <sup>e</sup>				-.08	.07	-.07
Sexual attitudes: instrumentality <sup>e</sup>				-.03	.08	-.02
Perpetration <sup>f</sup>				.31	.17	.11
Victimization <sup>f</sup>				-.09	.14	-.04
$R^2$		.007			.09	
$F$		.64			3.16	
$p$		.59			.001	

$N = 294$

Note.

\* $p < 0.05$ . \*\*\* $p < 0.001$ .

<sup>a</sup> Degree of familiarity (dated) served as the reference group for this analysis.

<sup>b</sup> Coded as 1 = no alcohol consumption, 2 = alcohol consumption.

<sup>c</sup> Measured by AMMSA, with lower scores indicating higher rape myth acceptance.

<sup>d</sup> Measured by TRSS, with lower scores indicating stronger token resistance beliefs.

<sup>e</sup> Measured by BSAS.

<sup>f</sup> Coded as 1 = indicating no history, 2 = indicating history.

**Female Token Resistance.** A hierarchical multiple regression was carried out to assess the impact of individual-level factors on perceptions of the sexual encounter as representing female token resistance after controlling for situational variables. Relevant assumptions were tested using preliminary analyses, indicating no violation of the assumptions of multicollinearity, singularity, normality, linearity, and homoscedasticity. These assumptions were met except for unusual points as three outliers (case IDs = 5, 70, 289) had standardized residual values above 3. These outliers (case IDs = 5, 70, 289) were removed from the analysis. The sample size of 225 was deemed adequate

with the number of independent variables that were assessed in this model. A Durbin-Watson value of 1.86 established independence of residuals.

The full model of individual and situational characteristics to predict the degree of endorsement as female token resistance (Model 2) was statistically significant,  $F(9, 215) = 2.62, p = .007$ . The results of Block 1 indicated that  $R^2$  equaled .009 (adjusted  $R^2 = -.005$ ), which was not significantly different from zero,  $F(3, 221) = .64, p = .59$ . In Block 2, the individual characteristics were entered into the regression equation. The change in variance accounted for ( $\Delta R^2$ ) was equal to .1, which was significantly different from zero,  $F(6, 215) = 3.58, p = .002$ . In the final model, trait token resistance beliefs and sexual attitudes regarding permissiveness contributed significantly to the perception of the sexual encounter as representing female token resistance. Table 16 contains full details on the regression model.

**Table 16. Regression Analysis: Individual and Situational Characteristics Predicting Perceptions of Female Token Resistance**

Variable	Model 1			Model 2		
	B	SE	$\beta$	B	SE	$\beta$
Constant	11.24***	1.54		25.79***	5.32	
Degree of familiarity (strangers) <sup>a</sup>	-.82	1.14	-.06	-.83	1.11	-.06
Degree of familiarity (acquaintance) <sup>a</sup>	-1.53	1.11	-.11	-.13	-1.66	.10
Alcohol consumption <sup>b</sup>	.06	.93	.01	.76	.93	.06
Rape myth acceptance <sup>c</sup>				-.19	.73	-.02
Trait token resistance <sup>d</sup>				-2.07*	.93	-.02
Sexual attitudes: permissiveness <sup>e</sup>				1.13*	.56	.14
Sexual attitudes: instrumentality <sup>e</sup>				-1.03	.63	-.11
Perpetration <sup>f</sup>				-.48	1.24	-.03
Victimization <sup>f</sup>				-1.41	1.02	-.10
$R^2$		.009			.10	
$F$		.64			2.62	
$p$		.59			.007	

$N = 225$

Note.

\* $p < 0.05$ . \*\*\* $p < 0.001$ .

<sup>a</sup> Degree of familiarity (dated) served as the reference group for this analysis.

<sup>b</sup> Coded as 1 = no alcohol consumption, 2 = alcohol consumption.

<sup>c</sup> Measured by AMMSA, with lower scores indicating higher rape myth acceptance.

<sup>d</sup> Measured by TRSS, with lower scores indicating stronger token resistance beliefs.

<sup>e</sup> Measured by BSAS.

<sup>f</sup> Coded as 1 = indicating no history, 2 = indicating history.

**Sexual Harassment.** A hierarchical multiple regression model was used to assess the impact of individual-level factors on perceptions of the sexual encounter as portrayed in the vignette as representing sexual harassment after controlling for

situational variables (i.e., alcohol consumption by and degree of familiarity between vignette characters). Prior to conducting this hierarchical multiple regression, a number of assumptions were tested. Preliminary analyses revealed no violation of the assumptions of multicollinearity, singularity, normality, linearity, and homoscedasticity. An analysis of standard residuals was carried out, indicating that the data contained three outliers with standardized residuals below -3. However, they were not removed from the analysis at this time as it was assumed that the prediction equation may not function well for particular values of the independent variables. Further, these outliers did not have large leverage or high influence values. The sample size of 295 was deemed appropriate with eight independent variables that were included in the analysis. There was independence of residuals, as assessed by a Durbin-Watson statistic of 1.89.

The full model of individual-level factors and situational characteristics to predict the perceptions of the sexual encounter as representing sexual harassment (Model 2) was statistically significant,  $F(9, 285) = 3.05, p = .002$ . The results of Block 1 indicated that situational variables (i.e., alcohol consumption by and degree of familiarity between vignette characters) did not significantly influence participant perceptions of the vignette as representing sexual harassment,  $F(3, 291) = .26, p = .86, R^2 = .003$ . In Block 2, the individual-level factors were entered into the regression equation. The change in variance accounted for ( $\Delta R^2$ ) was equal to .09, which was significantly different from zero,  $F(6, 285) = 4.44, p < .001$ . In the final model, endorsement of rape myth acceptance beliefs contributed significantly to the recognition of the vignette as sexual harassment. Regression statistics located are in Table 17.

**Table 17. Regression Analysis: Individual and Situational Characteristics Predicting Perceptions of Sexual Harassment**

Variable	Model 1			Model 2		
	B	SE	$\beta$	B	SE	$\beta$
Constant	11.27***	.24		4.64***	.75	
Degree of familiarity (strangers) <sup>a</sup>	-.003	.18	-.001	-.04	.17	-.02
Degree of familiarity (acquaintance) <sup>a</sup>	-.11	.17	-.05	-.11	.17	-.04
Alcohol consumption <sup>b</sup>	.07	.14	.03	.08	.14	.03
Rape myth acceptance <sup>c</sup>				.29**	.11	.21
Trait token resistance <sup>d</sup>				.18	.14	.10
Sexual attitudes: permissiveness <sup>e</sup>				-.04	.08	-.03
Sexual attitudes: instrumentality <sup>e</sup>				.03	.10	.02
Perpetration <sup>f</sup>				-.09	.20	-.03
Victimization <sup>f</sup>				-.18	.16	-.07
$R^2$		.003			.09	



<i>F</i>	.26	3.05
<i>p</i>	.86	.002

*N* = 295

Note.

\*\**p* < 0.01. \*\*\**p* < 0.001.

<sup>a</sup> Degree of familiarity (dated) served as the reference group for this analysis.

<sup>b</sup> Coded as 1 = no alcohol consumption, 2 = alcohol consumption.

<sup>c</sup> Measured by AMMSA, with lower scores indicating higher rape myth acceptance.

<sup>d</sup> Measured by TRSS, with lower scores indicating stronger token resistance beliefs.

<sup>e</sup> Measured by BSAS.

<sup>f</sup> Coded as 1 = indicating no history, 2 = indicating history.

**Sexual Assault.** A hierarchical multiple regression was carried out to assess the impact of individual-level factors on perceptions of the sexual encounter as representing sexual assault after controlling for situational variables. Prior to conducting this hierarchical multiple regression, relevant assumptions were tested. Preliminary analyses revealed no violation of the assumptions of multicollinearity, singularity, normality, linearity, homoscedasticity, and unusual points, with no outliers removed from this analysis. Independence of residuals was found by evaluating a Durbin-Watson statistic of 2.06. The sample size of 296 was deemed appropriate given the number of independent variables in the analysis.

The full model of individual and situational characteristics to predict the degree of endorsement as sexual assault (Model 2) was statistically significant,  $F(9, 286) = 2.27, p = .02$ . The results of Block 1 indicated that  $R^2$  equaled .009 (adjusted  $R^2 = -.001$ ), which was not significantly different from zero,  $F(3, 292) = .91, p = .44$ . In Block 2, the individual characteristics were entered into the regression equation. The change in variance accounted for ( $\Delta R^2$ ) was equal to .07, which was significantly different from zero,  $F(6, 286) = 2.94, p = .009$ . In the final model, endorsement of rape myth acceptance beliefs contributed significantly to participants' endorsement of the vignette as sexual assault. See Table 18 for full details on the regression model.

**Table 18. Regression Analysis: Individual and Situational Characteristics Predicting Perceptions of Sexual Assault**

Variable	Model 1			Model 2		
	B	SE	$\beta$	B	SE	$\beta$
Constant	6.72***	.31		3.93***	.98	
Degree of familiarity (strangers) <sup>a</sup>	.04	.23	.01	.009	.22	.003
Degree of familiarity (acquaintance) <sup>a</sup>	-.29	.22	-.09	-.29	.22	-.09
Alcohol consumption <sup>b</sup>	-.006	.18	-.002	.01	.18	.004
Rape myth acceptance <sup>c</sup>				.29*	.14	.16
Trait token resistance <sup>d</sup>				.16	.18	.07
Sexual attitudes: permissiveness <sup>e</sup>				.04	.11	.02
Sexual attitudes: instrumentality <sup>e</sup>				.07	.12	.03
Perpetration <sup>f</sup>				-.18	.25	-.04
Victimization <sup>f</sup>				-.27	.20	-.08
$R^2$		.009			.07	
$F$		.91			2.27	
$p$		.44			.02	

$N = 296$

Note.

\* $p < 0.05$ . \*\*\* $p < 0.001$ .

<sup>a</sup> Degree of familiarity (dated) served as the reference group for this analysis.

<sup>b</sup> Coded as 1 = no alcohol consumption, 2 = alcohol consumption.

<sup>c</sup> Measured by AMMSA, with lower scores indicating higher rape myth acceptance.

<sup>d</sup> Measured by TRSS, with lower scores indicating stronger token resistance beliefs.

<sup>e</sup> Measured by BSAS.

<sup>f</sup> Coded as 1 = indicating no history, 2 = indicating history.

**Consent.** A binomial logistic regression was conducted to predict whether a situation is viewed as consensual after the presentation of Step 4 based on individual characteristics such as prior victimization, prior perpetration, rape myth acceptance, two scores on sexual attitudes reflecting sexual permissiveness and sexual instrumentality, and belief in token resistance. Two scores on sexual attitudes regarding birth control and communion were not analyzed. Step 4 was chosen as it is the final step in the vignette that does not depict ongoing verbal coercion by the male character. The following steps (i.e., Steps 5, 6, 7, and 8) all showcase varying degrees of verbal and physical coercion, and it was determined that the majority of participants would view the situation as non-consensual. Linearity of the continuous variables with respect to the logit of the dependent variable was assessed via the Box-Tidwell procedure using a Bonferroni adjustment to the  $p$ -value. All continuous independent variables met this assumption, and no outliers were detected.

The logistic regression model was statistically significant,  $\chi^2(6) = 14.59$ ,  $p = .02$ . The inferential goodness-of-fit test, the Hosmer-Lemeshow test, yielded a  $\chi^2(8)$  of 3.32,

which was not statistically significant. The model explained 6.4% (Nagelkerke  $R^2$ ) of the variance in perception of consent and correctly classified 61% of cases. Sensitivity was 85.1% and specificity was 27.8%, which may be attributed to the pattern of responses by participants. Only one of the six predictor variables was statistically significant: rape myth acceptance (as shown in Table 19). The odds that participants with greater rape myth acceptance beliefs would view the situation as consensual were 1.49 times higher than those with lower rape myth acceptance beliefs.

**Table 19. Logistic Regression Predicting Likelihood of Consent based on Individual Characteristics**

	<i>B</i>	<i>SE</i>	<i>Wald</i>	<i>df</i>	<i>p</i>	<i>Odds Ratio</i>	<i>95% CI for Odds Ratio</i>	
							<i>Lower</i>	<i>Upper</i>
Rape myth acceptance <sup>a</sup>	.40	.19	4.41	1	.04	1.49	1.03	2.15
Trait token resistance <sup>b</sup>	.11	.24	.21	1	.65	1.12	.70	1.78
Sexual attitudes: permissiveness <sup>c</sup>	-.16	.15	1.26	1	.26	.85	.64	1.13
Sexual attitudes: instrumentality <sup>c</sup>	.18	.17	1.16	1	.28	1.20	.86	1.65
Victimization <sup>d</sup>	-.05	.27	.03	1	.86	.95	.56	1.62
Perpetration <sup>d</sup>	.30	.34	.75	1	.39	1.35	.69	2.63
Constant	-2.64	1.29	4.21	1	.04	.07		

*N* = 300

Note.

<sup>a</sup> Measured by AMMSA, with lower scores indicating higher rape myth acceptance.

<sup>b</sup> Measured by TRSS, with lower scores indicating stronger token resistance beliefs.

<sup>c</sup> Measured by BSAS.

<sup>d</sup> Coded as 1 = indicating no history, 2 = indicating history.

**Reportability.** A binomial logistic regression was performed to assess the impact of individual factors on the likelihood that respondents would indicate that the female character should report the situation in the vignette after Step 4. Similar to the prior regression model, Step 4 was chosen to its focus on transgressive and uncomfortable behaviors that do not yet met the threshold of illegality. Therefore, it was determined that participants' choices to report after Step 4 would be more likely to reflect individual characteristics and attitudes regarding sexual behavior. All assumptions of this model, including multicollinearity, independent error, linearity, and outliers were met. The model contained six independent variables (prior victimization, prior perpetration, rape myth acceptance, two scores on sexual attitudes reflecting sexual permissiveness and sexual instrumentality, and belief in token resistance). The full model containing all predictors was statistically significant,  $\chi^2(6) = 13.12$ ,  $p = 0.04$ , indicating that the model was able to

distinguish between respondents who recommended reporting and those who did not recommend reporting. As a whole, the model explained approximately 5.7% (Nagelkerke  $R^2$ ) of the variance in the perception that the female character should report and correctly classified 60.3% of cases. Sensitivity was 72.6%, whereas specificity was 45.6%. The only independent variable to make a unique statistically significant contribution to the model was rape myth acceptance (see Table 20).

**Table 20. Logistic Regression Predicting Likelihood of Reporting based on Individual Characteristics**

	B	SE	Wald	df	p	Odds Ratio	95% CI for Odds Ratio	
							Lower	Upper
Rape myth acceptance <sup>a</sup>	-.44	.19	5.42	1	.02	.64	.44	.93
Trait token resistance <sup>b</sup>	-.04	.24	.03	1	.87	.96	.60	1.55
Sexual attitudes: permissiveness <sup>c</sup>	.001	.14	< .001	1	.99	1.00	.76	1.33
Sexual attitudes: instrumentality <sup>c</sup>	-.14	.17	.70	1	.40	.87	.63	1.20
Victimization <sup>d</sup>	.28	.27	1.05	1	.31	1.32	.78	2.25
Perpetration <sup>d</sup>	-.46	.34	1.85	1	.17	.63	.33	1.22
Constant	3.27	1.34	5.80	1	.02	25.17		

N = 300

Note.

<sup>a</sup> Measured by AMMSA, with lower scores indicating higher rape myth acceptance.

<sup>b</sup> Measured by TRSS, with lower scores indicating stronger token resistance beliefs.

<sup>c</sup> Measured by BSAS.

<sup>d</sup> Coded as 0 = indicating no history, 1 = indicating history.

**Summary.** In research question 3, three individual-level variables served as significant predictors of how people perceived the vignette scenario. Rape myth acceptance, trait token resistance, and sexual attitudes regarding permissiveness were associated with stronger global perceptions of the scenario as acceptable and/or permissible. Participants who endorsed sex-negative attitudes more strongly were found to judge the scenario less harshly than their peers who held weaker sex-negative beliefs.

## Chapter 4.

### Discussion

#### 4.1. Summary of Major Findings

Given the limited number of studies that have examined emerging adults' individual-level risk factors and situational variables associated with sexual assault, this study aimed to contribute to the literature by providing insight on whether the endorsement of sex-negative attitudes, histories of non-consensual sexual experiences, and vignette characteristics impacted third-party perceptions of situational safety, situational comfort, female character token resistance, labelling the scenario as sexual harassment sexual assault, consensual, and reportable using a unique vignette methodology. Mixed results, including no, partial, and full support, were found for both individual-level factors and situational variables that prior research has associated with varying perceptions of sexual assault in university populations.

Nearly two-thirds of participants reported some degree of sexual victimization in this study. This finding contrasts with prior research, which generally provides prevalence rates of approximately 15 to 20 percent (Cantor et al., 2019; Conley et al., 2017). One key difference may be that the definition of sexual violence in this study was all-encompassing and included behaviors ranging from receiving unwanted sexual commentary to forced sexual intercourse. Many participants indicated that they had received unwanted comments and physical contact, such as sexual touching, on at least one occasion. Fewer participants reported more harmful and violent forms of sexual assault, which included attempted or completed penetrative acts. These values fall more in line with historical and current prevalence rates reported in other studies (Breiding et al., 2014) and provides further evidence that sexual violence in university settings remains an ongoing concern.

Less than 10% of participants in this sample had engaged in some form of sexual perpetration. Other studies have found variable rates of offending amongst university students, with some sources reporting approximately 10% engaging in forced penetration (Hackman et al., 2017; Swartout et al., 2015) and others reporting rates between 30 and 40% for perpetrating unwanted sexual activity (Flack et al., 2016). The

sensitive nature of this topic and/or survey instrument (i.e., SES-SFP) may have led to underreporting by participants who had engaged in some form of unwanted sexual attention or misconduct towards others, which may artificially deflate the true prevalence rate in this sample. Although care was taken to ensure responses could not be linked back to individuals, social desirability may still have affected reporting (Visschers et al., 2017).

Several interesting associations between participants' non-consensual sexual histories and individual-level characteristics emerged. These findings suggest that meaningful associations exist among various domains of sexual behavior, including implicit bias and cognitive decision-making, and may manifest differently across gender. Further, one explanation for the relationship between perpetration and victimization that was found in females but not males may be the normalization and expectation of unwanted sexual attention or behavior (e.g., catcalling) in mainstream culture as a standard component of making romantic or sexual advances towards another person that is deemed less transgressive when a self-identified woman engages in these behaviors.

#### **4.1.1. Time**

An evaluation of Steps 1 through 8 of the vignette depicting a sexual scenario for changes in risk perception and management (evaluated by ongoing ratings of comfort and safety) indicated a significant vignette step effect for perceptions of comfort and safety and endorsement of the scenario as sexual harassment and sexual assault. As expected, participant ratings on perceptions of comfort and safety significantly dropped as the eight vignette steps progressed and became more prototypical of sexual assault scenarios. Conversely, ratings of sexual harassment and sexual assault increased during this same time span. These findings support the argument for third-party risk perception as an ongoing, dynamic process that manifests itself throughout situations of sexual misconduct and sexual violence.

A similar design found that perception of female token resistance varied across several time points. After the introduction of verbal and/or physical coercion in Steps 3, 4, 6, and 7, participant responses to the degree of female token resistance present in the vignette changed significantly. As the male character grew more verbally coercive,

endorsement of the belief that the woman was interested in sexual activity initially dropped. However, the degree of this belief rose during Step 5, at which point the female character expressed hesitance, indicating that participants were more likely to perceive that she was interested in sexual activity despite her body language and verbal statements. However, this value dropped in the subsequent step wherein the male character became more verbally aggressive. Notably, the introduction of physical coercion did not introduce a significant decrease in the perception of female token resistance. This pattern of results supports the finding that perceptions of verbal coercion may be enough to meaningfully lower perceptions of victim token resistance.

In examining categorical variables related to participants' perceptions, the results also showed that the majority of participants deemed the sexual encounter to represent lack of consent after Step 2 wherein the female character re-establishes sexual boundaries. However, Step 3 was the point at which over 50% of participants indicated that the present situation was worthy of reporting. A greater number of participants recognized the situation as lacking consent than being worthy of reporting but demonstrated flexibility with whether they perceived the step to be more or less likely to represent consent. These fluctuations add merit to the argument that the conceptualization of consent remains iterative throughout sexual scenarios rather than being determined at the onset of sexual activity. Interestingly, a minority of participants still indicated that they did not perceive the vignette as lacking consent and being worthy of reporting after the completion of the final step, which presented physical coercion and forcible sexual intercourse. These findings point to the majority of individuals experiencing similar internal, ongoing processes of risk perception and risk management that shift with the presentation of new information, such as boundary-setting and verbal and/or physical coercion.

#### **4.1.2. Situational Variables**

Contrary to prior findings, presence of alcohol, degree of familiarity vignette characters, and their interaction effect had no significant effect on subsequent perceptions of comfort, female safety, and female token resistance or on endorsement of the vignette as sexual harassment or sexual assault. Participant perceptions and endorsements were found to be highly similar across the six vignette types, indicating that situational variables at both the main and interaction levels did not significantly

contribute to changes in third-party risk perception and management in this sample. This result was replicated in evaluations of whether judgements of lack of consent and reportability were impacted by situational variables, with results indicating that no evidence for a relationship between participants' perceptions of a problematic sexual scenario and relevant vignette characteristics. These contradictory findings may be explained by the introduction of the situational variables at only one time point during the vignette presentation (i.e., in a single, brief statement before the introduction of the individual steps). Alternatively, it may suggest that situational variables do not have a substantial bearing on participant responses.

### **4.1.3. Individual-level Factors**

Trait token resistance was demonstrated to be predictive of the extent to which participants perceived the vignette as comfortable for themselves and safe for the female vignette character, along with global beliefs that the female continued to be interested in engaging in sexual activity regardless of how she was reacting within the vignette scenario (i.e., female state-based token resistance). Interestingly, sexual permissiveness was also associated with state-based token resistance. Thus, the degree of token resistance belief and attitudes surrounding sexual permissiveness remain important to study in this population as they demonstrate influence on how risk is perceived and managed.

Examinations of perceptions of the vignette as representing a scenario of sexual harassment and sexual assault revealed that endorsement of rape myth beliefs emerged as the sole individual-level factor that improved these predictions after controlling for situational variables. Belief in trait token resistance, attitudes toward sex regarding instrumentality and permissiveness, prior victimization, and prior perpetration did not contribute to the explanatory power of participant decision-making. These results suggest that the degree of rape myth acceptance held by university students is especially important to evaluate as it significantly contributes to how they view sexually ambiguous scenarios and define a transgressive situation as potentially meeting the threshold of a criminal offense.

Further analyses evaluated whether the vignette was seen as consensual and reportable at the vignette midway point, wherein the female character expresses



hesitance and the male character engages in verbal coercion. Those with higher rape myth acceptance beliefs were more likely to view the vignette as consensual. This finding is similar across other studies that have found sex-negative attitudes, such as rape myth acceptance, to be associated with a reduced likelihood of recognizing a scenario as sexually transgressive (O'Connor et al., 2018). These findings were also replicated regarding the decision to report. Similarly to the decision to indicate lack of consent in the sexual scenario, rape myth acceptance beliefs emerged as the sole individual-level variable that significantly predicted whether participants thought the female character should report.

## **4.2. Strengths and Limitations**

This study has a number of strengths. First, vignette studies are recommended for studies where ethical and other guidelines prohibit the use of true or in-vivo experimentation. The stepwise design of this vignette allows for a more realistic depiction of how sexual scenarios between two individuals may occur in real time, especially regarding dynamic shifts in third-party perceptions of consent, body language, boundary-setting, and coercion. The ongoing evaluation of the risk perception and risk management processes provided rich content to analyze and was able to show how shifts in the behavior of the vignette characters resulted in changing perceptions of safety and comfort for individuals who comprised this sample. Other studies using this methodology have noted similar strengths in using this step-based approach to evaluation and analyzing multiple outcomes throughout the course of a vignette (Tuliao et al., 2017).

Another strength is that the sample contains significant racial diversity, with nearly seven out of 10 respondents indicating a race other than Caucasian. Considering the study's focus on emerging adulthood, especially for those who entering university during this life stage, the mean age of the sample was appropriate for the research questions. Often, university samples lack appropriate generalizability to the general population given the substantial differences between the prototypical participants who are attending university for the first time during late adolescence and early adulthood and those who may have had significantly different life experiences (e.g., parenthood). In this study, the use of a university sample was well-informed and intentional given the

emphasis on gathering perspectives from students within their first two years of post-secondary schooling.

However, findings should be considered within the study's limitations. Because this study uses a text-based vignette format, it is limited by the lack of audio and video output that could be utilized to showcase a similar scenario. Such modifications may provide unique and distinct observations but were not feasible to perform given constraints related to COVID-19. Future research using stimuli (e.g., virtual reality technology) instead of written narrative vignettes would allow for a different examination of participant responses, including behavioral measures and physiological components (e.g., eye trackers, galvanic skin response) to develop more specific and temporally based indicators of perceptions of sexual violence. It is important to highlight the importance of generalizability in these types of studies, as sexual violence varies in its forms, and it is critical to not depict only vignette scenarios that may be highly unlikely to be replicated in real life.

Another limitation that should be addressed is the lack of variation in the elements of this particular narrative vignette. The scenario focused on a heterosexual interaction in which a man behaved in a sexually violent manner towards a woman. Future studies could consider varying selective factors within the vignette design, including but not limited to the genders of victim and perpetrator. Additionally, research on sexual assault and consent largely focuses on the dominant population, which is cisgender and heterosexual. Future directions could include expanding research on issues related to sexual assault, including consent and risk perception, with sexual and gender minorities encompassing a greater percentage of the sample, as evidence suggests these groups experience victimization at a higher rate (Coulter & Rankin, 2017; de Heer & Jones, 2017; Lombardi et al., 2002).

Lastly, additional work is needed to identify the societal factors that contribute to current rates of sexual assault. This study is limited by its narrow sample from one public university in Western Canada, and it may help to increase the generalizability by replicating it at other Canadian institutions. Future sampling pools collected outside of North America may be also able to provide a comparison between Western and non-Western populations in terms of prior non-consensual sexual experience as well as third-party perceptions of problematic sexual behavior. Furthermore, meaningful and

substantive differences may exist between different types of post-secondary education settings that were not able to be captured as all participants who responded to this survey gained access through only one university platform.

### **4.3. Implications**

The primary goals of this study were to identify how the severity of a sexual scenario was associated with third-party perceptions of risk identification and risk management, determine whether situational-level characteristics (e.g., alcohol consumption within vignette environment) were related to risk identification and risk management, and ascertain whether individual-level factors (including history of sexual victimization and history of sexual perpetration) were associated with participants' decision-making throughout the vignette. To date, no other research has examined individual and situational-level variables and their relationship to risk evaluations during sexually ambiguous scenarios using a stepwise vignette methodology. Some findings were unexpected, demonstrating the importance of studying how people view unwanted sexual behavior in a university-based emerging adult population given the variability within institutions.

The results also suggest that it is important to broadly define and capture the behaviors that constitute unwanted sexual gestures and actions. The present study demonstrated a wide range of unwanted behavior in victimization experiences, with the majority of participants experiencing some degree of unwanted sexual attention and a minority experiencing higher severity crimes. Some legal definitions of sexual assault, such as those found in the Criminal Code of Canada, have expanded beyond more severe forms of sexual violence, such as forcible penetration, to include a spectrum of problematic and transgressive behaviors. To the extent that these data are consistent with findings in the literature, they support the view that narrow definitions of sexual offending as they are currently codified in law and policy do not match the lived experiences of individuals who report non-consensual sexual experiences. It may be useful in future studies to analyze whether separating participants into mutually-exclusive victimization and perpetration groups (e.g., by implementing a cut-off score) leads to meaningful differences in their responses to sexually ambiguous scenarios.

Likewise, the use of a stepwise vignette allowed for a closer examination of onlooker risk perception as scenario severity proceeded. In the given vignette, the scenario proceeded from more innocuous and consensual to increasingly ambiguous and violent, with sexual violence depicted in the manner of most previous studies, with a male perpetrator and female victim. The main effect of step was an expected finding, and these results fall in line with prior research that has tracked responses to vignettes over time (Tuliao et al., 2017). One departure from previous studies is that the vignette was not presented as a continuous escalation of sexual violence in a linear fashion. Instead, the man temporarily stops pushing boundaries partway through the vignette and agrees to the woman's request to engage in sexual activity that feels comfortable to her. This novel approach was taken to evaluate whether shifts in risk identification and risk management would manifest after the increase in coercion was temporarily halted.

Results found that that participant responses only somewhat reflected this temporary pause in male coercion, as they continued to endorse heightened discomfort and lack of female character safety, along with higher degrees of recognizing the preceding step as representing sexual harassment and sexual assault. This slight discrepancy may suggest that other factors (e.g., the speech of vignette characters, the setting, etc.) that were not explicitly examined may be associated with the decision-making process for individuals who are participating in or witnessing a similar situation. Evaluating the specific variables that are linked to risk identification and management is critical so that interventions can be formed to target those specific, empirically-supported factors.

Various sex-negative attitudes (e.g., instrumental views about sexual behavior, rape myth acceptance, token resistance) were found to be associated with each other, indicating that individuals who hold one form of stereotyped beliefs about sexuality are more likely to hold similar views. The pattern and specific associations did differ based on gender. Given this information, it is recommended that evaluation of these attitudes extends beyond what may be perceived as a primary belief (e.g., "women often say no to having sex because they do not want to appear promiscuous") and gather more information about related attitudes before forming more targeted interventions. These findings are corroborated by prior research that has examined the relationships among these beliefs in university settings (Canan et al., 2018).

A positive association between perpetration and victimization was found in female participants in this study. Of note, the correlation model that was used to evaluate this association cannot determine causality, leaving it unclear whether victimization experiences preceded or were followed by perpetration experiences. Examining the directionality of an individual's sexual history on future victimization and perpetration using a longitudinal or prospective study design would elucidate this unique finding that was not replicated with the males in this study. Extant literature has found that childhood sexual abuse was associated with perpetration in adulthood (Loh & Gidycz, 2006), but those results examined an exclusively male sample. Expanding this study to include women and those who are currently enrolled in post-secondary academic institutions would be a useful follow-up to provide clarity on the nature and directionality of the relationship between victimization and perpetration.

In contrast to prior research, neither of the situational factors examined (i.e., alcohol consumption by and degree of familiarity between vignette characters) changed how individuals identified risk to the vignette characters in this study. The vignette methodology may have been a contributing factor, since the presence of alcohol and relationship between the vignette characters was only mentioned at one point during the scenario. Another explanation may be that repeated exposure to the situational variables, such as mentions of the characters' inebriation levels or consumption of alcohol during the vignette, could have contributed to differing perceptions regarding either the presence or absence of alcohol. Future research should examine whether this finding was anomalous or if situational or interpersonal-level variables play a smaller role in perceptions of risk identification and management than participants' attitudinal variables.

The only individual-level variable that was predictive of recognizing the vignette as sexual harassment, sexual assault, lacking consent, and being worthy of reporting was the endorsement of rape myth beliefs. Thus, instruments that are designed to capture predispositions towards sex-negative attitudes, such as the AMMSA, may be more appropriate in evaluating participants' propensity to *label* a sexually transgressive scenario. It may also be the case that social desirability played less of a role in this measure than in measures that more explicitly captured overt attitudes. However, the individual-level factor that consistently demonstrated a link to behavioral cues such as risk identification and risk management (i.e., perceptions of comfort and safety), was

trait-based token resistance. This variable, along with sexually permissive attitudes, was also associated with participants' reports of the scenario as depicting female state-based token resistance. These three individual-level factors should be more closely examined in future research, as this study established a link between these particular sex-negative attitudes and a differential likelihood of perceiving a sexually transgressive vignette as comfortable, safe, representing female token resistance, sexual harassment, sexual assault, lacking consent, and being worthy of reporting.

#### **4.4. Future Research and Conclusions**

The results of the present study found that three individual-level variables – endorsement of rape myth acceptance, attitudes towards sexual permissiveness, and beliefs about token resistance – were significantly associated with how an ambiguous sexual scenario was perceived by a third party. However, situational variables such as alcohol consumption by and relationship between vignette characters were not associated with any perceptions of the scenario. These findings indicate some degree of problematic conceptualizations of sexual behavior related to individual-level factors, and they can be used to support further research and resources that acknowledge and address the complex attitudinal factors involved in sexual behavior among university populations. The results can also inform future research in this area and support interventions and education plans that give individuals the skills and awareness they need to recognize consensual, safe sexual behavior in private locations.

This study supports the finding that many university students endorse some degree of sex-negative beliefs. Whether they come to university with these attitudes or develop them during their university careers, the university setting may be an excellent context in which to counteract these beliefs. Future work should continue to investigate the high rates of sexual violence perpetrated against and by students during their post-secondary education years. Prior research indicates that sexual roles and identities are first explored by many individuals during university, making early university years an excellent time to provide interventions that target factors known to be linked to sexual violence, especially given high rates of victimization and perpetration amongst students.

The data in this study have illuminated some of the complex (i.e., both significant and non-significant) relationships among prior sexual experience, including victimization

and perpetration, individual-level factors, situational factors, and perceptions of sexually ambiguous scenarios. The pattern of results in this study supports the findings in the greater body of literature that indicate meaningful differences exist among participants with varying degrees of sex-negative attitudes in their third-party perceptions of risk identification and risk management. Continuing to expand research in this area may provide some unique perspectives in the quest to ultimately reduce the occurrence of sexual violence in university populations.

## References

- Abbey, A., Ross, L. T., McDuffie, D., & McAuslan, P. (1996). Alcohol and dating risk factors for sexual assault among college women. *Psychology of Women Quarterly, 20*(1), 147–169. <https://doi.org/10.1111/j.1471-6402.1996.tb00669.x>
- Anderson, R. E., Cahill, S. P., & Delahanty, D. L. (2017). Initial evidence for the reliability and validity of the sexual experiences survey-short form perpetration (SES-SFP) in college men. *Journal of Aggression, Maltreatment & Trauma, 26*(6), 626–643. <https://doi.org/10.1080/10926771.2017.1330296>
- Anderson, R. E., Cahill, S. P., & Delahanty, D. L. (2018). The psychometric properties of the Sexual Experiences Survey–Short Form Victimization (SES-SFV) and characteristics of sexual victimization experiences in college men. *Psychology of Men & Masculinity, 19*(1), 25–34. <https://doi.org/10.1037/men0000073>
- Auspurg, K., & Jäckle, A. (2017). First equals most important? Order effects in vignette-based measurement. *Sociological Methods & Research, 46*(3), 490–539. <https://doi.org/10.1177/0049124115591016>
- Ben-David, S., & Schneider, O. (2005). Rape perceptions, gender role attitudes, and victim-perpetrator acquaintance. *Sex Roles, 53*(5–6), 385–399. <https://doi.org/10.1007/s11199-005-6761-4>
- Beres, M. A. (2014). Rethinking the concept of consent for anti-sexual violence activism and education. *Feminism & Psychology, 24*(3), 373–389. <https://doi.org/10.1177/0959353514539652>
- Bieneck, S., & Krahé, B. (2011). Blaming the victim and exonerating the perpetrator in cases of rape and robbery: Is there a double standard? *Journal of Interpersonal Violence, 26*(9), 1785–1797. <https://doi.org/10.1177/0886260510372945>
- Booth-Kewley, S., Larson, G. E., & Miyoshi, D. K. (2007). Social desirability effects on computerized and paper-and-pencil questionnaires. *Computers in Human Behavior, 23*(1), 463–477. <https://doi.org/10.1016/j.chb.2004.10.020>
- Bouffard, J. A. (2000). Predicting type of sexual assault case closure from victim, suspect, and case characteristics. *Journal of Criminal Justice, 28*, 527–542.
- Breiding, M. J., Smith, S. G., Basile, K. C., Walters, M. L., Chen, J., & Merrick, M. T. (2014, September). Prevalence and characteristics of sexual violence, stalking, and intimate partner violence victimization—National intimate partner and sexual violence survey, United States, 2011. *Morbidity and Mortality Weekly Report, 63*, 1–18.
- Brener, N. D., McMahon, P. M., Warren, C. W., & Douglas, K. A. (1999). Forced sexual intercourse and associated health-risk behaviors among female college students in the United States. *Journal of Consulting and Clinical Psychology, 67*(2), 252–259. <https://doi.org/10.1037/0022-006X.67.2.252>



- Burt, M. R. (1980). Cultural myths and supports for rape. *Journal of Personality and Social Psychology*, 38(2), 217–230. <https://doi.org/10.1037//0022-3514.38.2.217>
- Canan, S. N., Jozkowski, K. N., & Crawford, B. L. (2018). Sexual assault supportive attitudes: Rape myth acceptance and token resistance in Greek and non-Greek college students from two university samples in the United States. *Journal of Interpersonal Violence*, 33(22), 3502–3530. <https://doi.org/10.1177/0886260516636064>
- Cantor, D., Fisher, B., Chibnall, S., Harps, S., Townsend, R., Thomas, G., Lee, H., Kranz, V., Herbison, R., & Madden, K. (2019). *Report on the AAU campus climate survey on sexual assault and misconduct* (p. 305).
- Carey, K. B., Norris, A. L., Durney, S. E., Shepardson, R. L., & Carey, M. P. (2018). Mental health consequences of sexual assault among first-year college women. *Journal of American College Health*, 66(6), 480–486. <https://doi.org/10.1080/07448481.2018.1431915>
- Cheney, A. M., Ostrach, B., Marcus, R., Frank, C., Ball, C., & Erickson, P. I. (2014). A culture of future planning: Perceptions of sexual risk among educated young adults. *Qualitative Health Research*, 24(10), 1451–1462. <https://doi.org/10.1177/1049732314548595>
- Conley, A. H., Overstreet, C. M., Hawn, S. E., Kendler, K. S., Dick, D. M., & Amstadter, A. B. (2017). Prevalence and predictors of sexual assault among a college sample. *Journal of American College Health*, 65(1), 41–49. <https://doi.org/10.1080/07448481.2016.1235578>
- Coulter, R. W. S., & Rankin, S. R. (2017). College sexual assault and campus climate for sexual- and gender-minority undergraduate students. *Journal of Interpersonal Violence*, 088626051769687. <https://doi.org/10.1177/0886260517696870>
- Cranney, S. (2015). The relationship between sexual victimization and year in school in U.S. colleges: Investigating the parameters of the “red zone.” *Journal of Interpersonal Violence*, 30(17), 3133–3145. <https://doi.org/10.1177/0886260514554425>
- Davies, M., Gilston, J., & Rogers, P. (2012). Examining the relationship between male rape myth acceptance, female rape myth acceptance, victim blame, homophobia, gender roles, and ambivalent sexism. *Journal of Interpersonal Violence*, 27(14), 2807–2823. <https://doi.org/10.1177/0886260512438281>
- Davis, K. C., Gilmore, A. K., Stappenbeck, C. A., Balsan, M. J., George, W. H., & Norris, J. (2014). How to score the Sexual Experiences Survey? A comparison of nine methods. *Psychology of Violence*, 4(4), 445–461. <https://doi.org/10.1037/a0037494>
- de Heer, B., & Jones, L. (2017). Measuring sexual violence on campus: Climate surveys and vulnerable groups. *Journal of School Violence*, 16(2), 207–221. <https://doi.org/10.1080/15388220.2017.1284444>

- de Visser, R. O., Rissel, C. E., Richters, J., & Smith, A. M. A. (2007). The impact of sexual coercion on psychological, physical, and sexual well-being in a representative sample of Australian women. *Archives of Sexual Behavior, 36*(5), 676–686. <https://doi.org/10.1007/s10508-006-9129-0>
- DeMatteo, D., Galloway, M., Arnold, S., & Patel, U. (2015). Sexual assault on college campuses: A 50-state survey of criminal sexual assault statutes and their relevance to campus sexual assault. *Psychology, Public Policy, and Law, 21*(3), 227–238. <https://doi.org/10.1037/law0000055>
- Donde, S. D., Ragsdale, S. K. A., Koss, M. P., & Zucker, A. N. (2018). If it wasn't rape, was it sexual assault? Comparing rape and sexual assault acknowledgment in college women who have experienced rape. *Violence Against Women, 24*(14), 1718–1738. <https://doi.org/10.1177/1077801217743339>
- Emmers-Sommer, T. (2016). Do men and women differ in their perceptions of women's and men's saying "no" when they mean "yes" to sex?: An examination between and within gender. *Sexuality & Culture, 20*(2), 373–385. <https://doi.org/10.1007/s12119-015-9330-1>
- Eyssel, F., & Bohner, G. (2008). Modern rape myths: The acceptance of modern myths about sexual aggression (AMMSA) scale. In *The psychology of modern prejudice* (pp. 261–276). Nova Science Publishers.
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A.-G. (2009). Statistical power analyses using G\*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41*(4), 1149–1160. <https://doi.org/10.3758/BRM.41.4.1149>
- Fedina, L., Holmes, J. L., & Backes, B. L. (2018). Campus sexual assault: A systematic review of prevalence research from 2000 to 2015. *Trauma, Violence, & Abuse, 19*(1), 76–93. <https://doi.org/10.1177/1524838016631129>
- Flack, W. F. Jr., Hansen, B. E., Hopper, A. B., Bryant, L. A., Lang, K. W., Massa, A. A., & Whalen, J. E. (2016). Some types of hookups may be riskier than others for campus sexual assault. *Psychological Trauma: Theory, Research, Practice, and Policy, 8*(4), 413–420. <https://doi.org/10.1037/tra0000090>
- Garland, T. (2009). An overview of sexual assault and sexual assault myths. In *Sexual assault: The victims, the perpetrators, and the criminal justice system* (2nd ed., pp. 3–26). Carolina Academic Press.
- Gartner, R., & Macmillan, R. (1995). The effect of victim-offender relationship on reporting crimes of violence against women. *Canadian Journal of Criminology, 37*, 393.
- Gerger, H., Kley, H., Bohner, G., & Siebler, F. (2007). The acceptance of modern myths about sexual aggression (AMMSA) scale: Development and validation in German and English [Data set]. In *Aggressive Behavior* (Vol. 33, pp. 422–440). <https://doi.org/10.13072/midss.440>

- Gidycz, C. A., McNamara, J. R., & Edwards, K. M. (2006). Women's risk perception and sexual victimization: A review of the literature. *Aggression and Violent Behavior, 11*(5), 441–456. <https://doi.org/10.1016/j.avb.2006.01.004>
- Gravelin, C. R., Biernat, M., & Bucher, C. E. (2019). Blaming the victim of acquaintance rape: Individual, situational, and sociocultural factors. *Frontiers in Psychology, 9*. <https://doi.org/10.3389/fpsyg.2018.02422>
- Hackman, C. L., Witte, T., & Greenband, M. (2017). Social norms for sexual violence perpetration in college. *Journal of Aggression, Conflict and Peace Research, 9*(4), 305–313. <http://dx.doi.org.proxy.lib.sfu.ca/10.1108/JACPR-12-2016-0266>
- Haugen, A. D., Salter, P., & Phillips, N. L. (2019). "I know it when i see it": Recent victimization and perceptions of rape. *Journal of Interpersonal Violence, 34*(14), 2938–2959. <https://doi.org/10.1177/0886260516664314>
- Hayes, R. M., Abbott, R. L., & Cook, S. (2016). It's her fault: Student acceptance of rape myths on two college campuses. *Violence Against Women, 22*(13), 1540–1555. <https://doi.org/10.1177/1077801216630147>
- Hendrick, C., Hendrick, S. S., & Reich, D. A. (2006). The brief sexual attitudes scale. *Journal of Sex Research, 43*(1), 76–86. <https://doi.org/10.1080/00224490609552301>
- Hillier, L., & Foddy, M. (1993). The role of observer attitudes in judgments of blame in cases of wife assault. *Sex Roles, 29*(9–10), 629–644. <https://doi.org/10.1007/BF00289209>
- Humphreys, T., & Herold, E. (2003). Should universities and colleges mandate sexual behavior?: Student perceptions of Antioch College's consent policy. *Journal of Psychology & Human Sexuality, 15*(1), 35–51. [https://doi.org/10.1300/J056v15n01\\_04](https://doi.org/10.1300/J056v15n01_04)
- Hust, S. J. T., Rodgers, K. B., & Bayly, B. (2017). Scripting sexual consent: Internalized traditional sexual scripts and sexual consent expectancies among college students. *Family Relations, 66*(1), 197–210. <https://doi.org/10.1111/fare.12230>
- Johnson, S., Murphy, M., & Gidycz, C. (2017). Reliability and validity of the sexual experiences survey-short forms victimization and perpetration. *Violence and Victims, 32*(1), 78–92. <https://doi.org/10.1891/0886-6708.VV-D-15-00110>
- Jozkowski, K. N., Peterson, Z. D., Sanders, S. A., Dennis, B., & Reece, M. (2014). Gender differences in heterosexual college students' conceptualizations and indicators of sexual consent: Implications for contemporary sexual assault prevention education. *The Journal of Sex Research, 51*(8), 904–916. <https://doi.org/10.1080/00224499.2013.792326>
- Khan, S. R., Hirsch, J. S., Wamboldt, A., & Mellins, C. A. (2018). "I didn't want to be 'that girl'": The social risks of labeling, telling, and reporting sexual assault. *Sociological Science; Stanford, 5*, 432–460. <http://dx.doi.org.proxy.lib.sfu.ca/10.15195/v5.a19>

- Kilpatrick, D. G., Resnick, H. S., Ruggiero, K. J., Conoscenti, L. M., & McCauley, J. (2007). *Drug-facilitated, Incapacitated, and Forcible Rape: A National Study: (667182007-001)* [Data set]. American Psychological Association. <https://doi.org/10.1037/e667182007-001>
- Klein, V., Imhoff, R., Reiningger, K. M., & Briken, P. (2019). Perceptions of sexual script deviation in women and men. *Archives of Sexual Behavior, 48*(2), 631–644. <https://doi.org/10.1007/s10508-018-1280-x>
- Koss, M. P. (1996). The measurement of rape victimization in crime surveys. *Criminal Justice and Behavior, 1*, 55–69.
- Koss, M. P., Abbey, A., Campbell, R., Cook, S., Norris, J., Testa, M., Ullman, S., West, C., & White, J. (2007). Revising the SES: A collaborative process to improve assessment of sexual aggression and victimization. *Psychology of Women Quarterly, 31*(4), 357–370. <https://doi.org/10.1111/j.1471-6402.2007.00385.x>
- Koss, M. P., Gidycz, C. A., & Wisniewski, N. (1987). The scope of rape: Incidence and prevalence of sexual aggression and victimization in a national sample of higher education students. *Journal of Consulting and Clinical Psychology, 55*(2), 162–170. <https://doi.org/10.1037/0022-006X.55.2.162>
- Krebs, C. P., Lindquist, C., Martin, S., & Fisher, B. (2007). *The campus sexual assault (CSA) study*.
- Littleton, H. L., Rhatigan, D. L., & Axsom, D. (2007). Unacknowledged rape: How much do we know about the hidden rape victim? *Journal of Aggression, Maltreatment & Trauma, 14*(4), 57–74. [https://doi.org/10.1300/J146v14n04\\_04](https://doi.org/10.1300/J146v14n04_04)
- Loh, C., & Gidycz, C. A. (2006). A prospective analysis of the relationship between childhood sexual victimization and perpetration of dating violence and sexual assault in adulthood. *Journal of Interpersonal Violence, 21*(6), 732–749. <https://doi.org/10.1177/0886260506287313>
- Lombardi, E. L., Wilchins, R. A., Priesing, D., & Malouf, D. (2002). Gender violence: Transgender experiences with violence and discrimination. *Journal of Homosexuality, 42*(1), 89–101. [https://doi.org/10.1300/J082v42n01\\_05](https://doi.org/10.1300/J082v42n01_05)
- Lund, E. M., & Thomas, K. B. (2015). Necessary but not sufficient: Sexual assault information on college and university websites. *Psychology of Women Quarterly, 39*(4), 530–538. <https://doi.org/10.1177/0361684315598286>
- Lyon, T. D. (2009). Abuse disclosure: What adults can tell. In B. L. Bottoms, C. J. Najdowski, & G. S. Goodman (Eds.), *Children as victims, witnesses, and offenders: Psychological science and the law* (pp. 19–35). Guilford Publications. <http://ebookcentral.proquest.com/lib/sfu-ebooks/detail.action?docID=460405>
- Marcantonio, T. L., Willis, M., & Schisler, E. D. (2020). Associations of alcohol consumption, sexual assault history, severity, and revictimization with college women's bystander behaviors in alcohol-involved settings. *Journal of*

*Interpersonal Violence*. Advance online publication.  
<https://doi.org/10.1177/0886260520983513>

- Marx, B. P., Gross, A. M., & Adams, H. E. (1999). The effect of alcohol on the responses of sexually coercive and noncoercive men to an experimental rape analogue. *Sexual Abuse, 11*(2), 131–145.
- Melkonian, A. J., Ham, L. S., Bridges, A. J., & Fugitt, J. L. (2017). Facial emotion identification and sexual assault risk detection among college student sexual assault victims and nonvictims. *Journal of American College Health, 65*(7), 466–473. <https://doi.org/10.1080/07448481.2017.1341897>
- Mellins, C. A., Walsh, K., Sarvet, A. L., Wall, M., Gilbert, L., Santelli, J. S., Thompson, M., Wilson, P. A., Khan, S., Benson, S., Bah, K., Kaufman, K. A., Reardon, L., & Hirsch, J. S. (2017). Sexual assault incidents among college undergraduates: Prevalence and factors associated with risk. *PLOS ONE, 12*(11), 1–23. <https://doi.org/10.1371/journal.pone.0186471>
- Merrill, J. E., & Carey, K. B. (2016). Drinking over the lifespan: Focus on college ages. *Alcohol Research: Current Reviews, 38*(1), 103–114.
- Messman-Moore, T. L., & Brown, A. L. (2006). Risk perception, rape, and sexual revictimization: A prospective study of college women. *Psychology of Women Quarterly, 30*(2), 159–172. <https://doi.org/10.1111/j.1471-6402.2006.00279.x>
- Mitchell, J. C., MacLeod, B. P., & Cassisi, J. E. (2017). Modeling sexual assault risk perception among heterosexual college females: The impact of previous victimization, alcohol use, and coping style. *Violence Against Women, 23*(2), 143–162. <https://doi.org/10.1177/1077801216638767>
- Morgan, E. M., & Zurbriggen, E. L. (2012). Changes in sexual values and their sources over the 1st year of college. *Journal of Adolescent Research, 27*(4), 471–497. <https://doi.org/10.1177/0743558411432637>
- Moylan, C. A., & Lindhorst, T. (2015). Institutionalizing an ethic of coordinated care for rape victims: Exploring processes of legitimacy and decoupling in sexual assault response teams. *Social Service Review, 89*(1), 138–165. <https://doi.org/10.1086/679977>
- Muehlenhard, C. L., & Hollabaugh, L. C. (1988). Do women sometimes say no when they mean yes? The prevalence and correlates of women's token resistance to sex. *Journal of Personality and Social Psychology, 54*(5), 872–879. <https://doi.org/10.1037/0022-3514.54.5.872>
- Muehlenhard, C. L., Humphreys, T. P., Jozkowski, K. N., & Peterson, Z. D. (2016). The complexities of sexual consent among college students: A conceptual and empirical review. *The Journal of Sex Research, 53*(4–5), 457–487. <https://doi.org/10.1080/00224499.2016.1146651>

- Murdoch, A., & Gonsalkorale, K. (2017). Attributions of blame in acquaintance rape scenarios: The role of blame scale presentation order. *Psychiatry, Psychology, and Law, 24*(6), 853–865. <https://doi.org/10.1080/13218719.2017.1315787>
- Nickerson, A., Steenkamp, M., Aerka, I. M., Salters-Pedneault, K., Carper, T. L., Barnes, J. B., & Litz, B. T. (2013). Prospective investigation of mental health following sexual assault. *Depression and Anxiety, 30*(5), 444–450. <https://doi.org/10.1002/da.22023>
- Norris, J., Nurius, P. S., & Graham, T. L. (1999). When a date changes from fun to dangerous: Factors affecting women’s ability to distinguish. *Violence Against Women, 5*(3), 230–250.
- O’Connor, J., Cusano, J., McMahon, S., & Draper, J. (2018). Students’ articulation of subtle rape myths surrounding campus sexual assault. *Journal of College Student Development, 59*(4), 439–455. <https://doi.org/10.1353/csd.2018.0041>
- O’Neal, E. N. (2019). “Victim is not credible”: The influence of rape culture on police perceptions of sexual assault complainants. *Justice Quarterly, 36*(1), 127–160. <https://doi.org/10.1080/07418825.2017.1406977>
- Osman, S. L. (1995, April). *Predispositional and situational factors influencing men’s perceptions of date rape*. Eastern Regional Meeting of the Society for the Scientific Study of Sexuality, Atlantic City, NJ.
- Osman, S. L. (2003). Predicting men’s rape perceptions based on the belief that “no” really means “yes.” *Journal of Applied Social Psychology, 33*(4), 683–692. <https://doi.org/10.1111/j.1559-1816.2003.tb01919.x>
- Osman, S. L., & Davis, C. M. (1999). Belief in token resistance and type of resistance as predictors of men’s perceptions of date rape. *Journal of Sex Education and Therapy, 24*, 189–196.
- O’Sullivan, L. F., & Allgeier, E. R. (1994). Disassembling a stereotype: Gender differences in the use of token resistance. *Journal of Applied Social Psychology, 24*(12), 1035–1055. <https://doi.org/10.1111/j.1559-1816.1994.tb02372.x>
- Patel, U., & Roesch, R. (2018). Campus sexual assault: Examination of policy and research. *Journal of Aggression, Conflict and Peace Research, 10*(2), 103–111.
- Payne, D. L., Lonsway, K. A., & Fitzgerald, L. F. (1999). Rape myth acceptance: Exploration of its structure and its measurement using the Illinois rape myth acceptance scale. *Journal of Research in Personality, 33*(1), 27–68. <https://doi.org/10.1006/jrpe.1998.2238>
- Persson, S., Dhingra, K., & Grogan, S. (2018). Attributions of victim blame in stranger and acquaintance rape: A quantitative study. *Journal of Clinical Nursing, 27*(13–14), 2640–2649. <https://doi.org/10.1111/jocn.14351>

- Pugh, B., Ningard, H., Ven, T. V., & Butler, L. (2016). Victim ambiguity: Bystander intervention and sexual assault in the college drinking scene. *Deviant Behavior*, 37(4), 401–418. <https://doi.org/10.1080/01639625.2015.1026777>
- Rennison, C. M., & Addington, L. A. (2014). Violence against college women: A review to identify limitations in defining the problem and inform future research. *Trauma, Violence, & Abuse*, 15(3), 159–169. <https://doi.org/10.1177/1524838014520724>
- Romero-Sánchez, M., Megías, J. L., & Krahé, B. (2012). The role of alcohol and victim sexual interest in Spanish students' perceptions of sexual assault. *Journal of Interpersonal Violence*, 27(11), 2230–2258. <https://doi.org/10.1177/0886260511432149>
- Sakaluk, J. K., Todd, L. M., Milhausen, R., Lachowsky, N. J., & Undergraduate Research Group in Sex. (2014). Dominant heterosexual sexual scripts in emerging adulthood: Conceptualization and measurement. *The Journal of Sex Research*, 51(5), 516–531. <https://doi.org/10.1080/00224499.2012.745473>
- Simon, W., & Gagnon, J. H. (1986). Sexual scripts: Permanence and change. *Archives of Sexual Behavior*, 15(2), 97–120.
- Spohn, C., & Horney, J. (1992). *Rape Law Reform: A Grassroots Revolution and Its Impact*. Springer US. <https://doi.org/10.1007/978-1-4899-0709-7>
- Sprecher, S., Hatfield, E., Cortese, A., Potapova, E., & Levitskaya, A. (1994). Token resistance to sexual intercourse and consent to unwanted sexual intercourse: College students' dating experiences in three countries. *Journal of Sex Research*, 31(2), 125–132.
- Suarez, E., & Gadalla, T. M. (2010). Stop blaming the victim: A meta-analysis on rape myths. *Journal of Interpersonal Violence*, 25(11), 2010–2035. <https://doi.org/10.1177/0886260509354503>
- Swartout, K. M., Koss, M. P., White, J. W., Thompson, M. P., Abbey, A., & Bellis, A. L. (2015). Trajectory analysis of the campus serial rapist assumption. *JAMA Pediatrics*, 169(12), 1148. <https://doi.org/10.1001/jamapediatrics.2015.0707>
- Taylor-Gooby, P., & Zinn, J. O. (2006). Current directions in risk research: New developments in psychology and sociology. *Risk Analysis*, 26(2), 397–411. <https://doi.org/10.1111/j.1539-6924.2006.00746.x>
- Testa, M., Livingston, J. A., & Collins, R. L. (2000). The role of women's alcohol consumption in evaluation of vulnerability to sexual aggression. *Experimental and Clinical Psychopharmacology*, 8(2), 185–191. <https://doi.org/10.1037/1064-1297.8.2.185>
- Trottier, D., Benbouriche, M., & Bonneville, V. (2019). A meta-analysis on the association between rape myth acceptance and sexual coercion perpetration. *The Journal of Sex Research*, 1–8. <https://doi.org/10.1080/00224499.2019.1704677>

- Tuliao, A. P., Hoffman, L., & McChargue, D. E. (2017). Measuring individual differences in responses to date-rape vignettes using latent variable models. *Aggressive Behavior, 43*(1), 60–73. <https://doi.org/10.1002/ab.21662>
- Vaillancourt, R. (2010). *Gender differences in police-reported violent crime in Canada, 2008*. Statistics Canada, Canadian Centre for Justice Studies.
- Visschers, J., Jaspaert, E., & Vervaeke, G. (2017). Social desirability in intimate partner violence and relationship satisfaction reports: An exploratory analysis. *Journal of Interpersonal Violence, 32*(9), 1401–1420. <https://doi.org/10.1177/0886260515588922>
- Walsh, K., DiLillo, D., & Messman-Moore, T. L. (2012). Lifetime sexual victimization and poor risk perception: Does emotion dysregulation account for the links? *Journal of Interpersonal Violence, 27*(15), 3054–3071. <https://doi.org/10.1177/0886260512441081>
- Ward, C. A. (1995). *Attitudes toward rape: Feminist and social psychological perspectives* (p. 232). Sage Publications, Inc.
- Wells, B. E., & Twenge, J. M. (2005). Changes in young people's sexual behavior and attitudes, 1943–1999: A cross-temporal meta-analysis. *Review of General Psychology, 9*(3), 249–261. <https://doi.org/10.1037/1089-2680.9.3.249>
- Wilson, A. E., Calhoun, K. S., & Bernat, J. A. (1999). Risk recognition and trauma-related symptoms among sexually revictimized women. *Journal of Consulting and Clinical Psychology, 67*(5), 705–710. <https://doi.org/10.1037/0022-006X.67.5.705>
- Yapp, E. J., & Quayle, E. (2018). A systematic review of the association between rape myth acceptance and male-on-female sexual violence. *Aggression and Violent Behavior, 41*, 1–19. <https://doi.org/10.1016/j.avb.2018.05.002>
- Zinzow, H. M., Resnick, H. S., McCauley, J. L., Amstadter, A. B., Ruggiero, K. J., & Kilpatrick, D. G. (2010). The role of rape tactics in risk for posttraumatic stress disorder and major depression: Results from a national sample of college women. *Depression and Anxiety, 27*(8), 708–715. <https://doi.org/10.1002/da.20719>



# Appendix A.

## Demographic Survey

1. How old are you? (Select your age)
2. What year are you in university? (Select number of years)
3. Which degree are you completing? \_\_\_\_\_
4. Were you born and raised in Canada? (Select yes or no)
5. What is your race? (Select one)
  - White/Caucasian
  - Black/African
  - Asian/Pacific Islander (including South Asian)
  - Latino/Hispanic
  - Indigenous
  - Other: \_\_\_\_\_
6. Are you a domestic or international student? (Select one)

7. How would you best describe your sexual orientation? (Select one)

Exclusively Heterosexual/Straight		Exclusively Homosexual/Gay/Lesbian		
1	2	3	4	5

8. Are you currently in a romantic or sexual relationship? (Select yes/no)
9. What is your gender? (Select one)
  - Female
  - Male
  - Other

## Appendix B.

### Sexual Assault Vignettes

Vignette 1 (stranger/no alcohol): A man and woman *who just met that evening* have been out *at an event*. The man invites the woman over to his home. Inside the man's apartment, he welcomes the woman to sit on the couch. He asks if he could sit closer and the woman agrees. They have some small talk about their classes and he offers her coffee. She apologizes for behaving awkwardly at the event. He tells the woman he enjoyed spending time with her. She agrees.

Vignette 2 (stranger/alcohol): A man and woman *who just met that evening* have been out *to a happy hour where they have been drinking*. The man invites the woman over to his home. Inside the man's apartment, he welcomes the woman to sit on the couch. He asks if he could sit closer and the woman agrees. They have some small talk about their classes and he offers her coffee. She apologizes for behaving awkwardly at the event. He tells the woman he enjoyed spending time with her. She agrees.

Vignette 3 (acquaintance/no alcohol): A man and woman who have met before have been out *at an event*. The man invites the woman over to his home. Inside the man's apartment, he welcomes the woman to sit on the couch. He asks if he could sit closer and the woman agrees. They have some small talk about their classes and he offers her coffee. She apologizes for behaving awkwardly at the event. He tells the woman he enjoyed spending time with her. She agrees.

Vignette 4 (acquaintance/alcohol): A man and woman *who have met before* have been out *to a happy hour where they have been drinking*. The man invites the woman over to his home. Inside the man's apartment, he welcomes the woman to sit on the couch. He asks if he could sit closer and the woman agrees. They have some small talk about their classes and he offers her coffee. She apologizes for behaving awkwardly at the event. He tells the woman he enjoyed spending time with her. She agrees.

Vignette 5 (prior relationship/no alcohol): A man and woman *who used to date* have been out *at an event*. The man invites the woman over to his home. Inside the man's apartment, he welcomes the woman to sit on the couch. He asks if he could sit closer

and the woman agrees. They have some small talk about their classes and he offers her coffee. She apologizes for behaving awkwardly at the event. He tells the woman he enjoyed spending time with her. She agrees.

Vignette 6 (prior relationship/alcohol): A man and woman *who used to date* have been out to a *happy hour where they have been drinking*. The man invites the woman over to his home. Inside the man's apartment, he welcomes the woman to sit on the couch. He asks if he could sit closer and the woman agrees. They have some small talk about their classes and he offers her coffee. She apologizes for behaving awkwardly at the event. He tells the woman he enjoyed spending time with her. She agrees.

Each vignette is followed by the subsequent text in the same order.

Event	Phase (Critical Event)
1. The man kisses the woman. She kisses him back.	Mutual intimate contact
2. The man starts touching her breasts and buttocks. The woman politely turns down his advances. He apologizes.	Man's apology Woman sets boundaries
3. The man touches the woman inappropriately again. She tells him she is not ready for this kind of intimacy. He confronts her and asks if she really likes him.	Man's advances Woman sets boundaries Man's verbal coercion
4. The woman gives in to the man's advances after he promises that he will stop if the woman tells him to.	Woman pulls back boundaries
5. The woman tells him she's not sure if she wants to have sex. The man accuses her of being a tease. She tries to repair the relationship.	Woman sets boundaries Man's verbal coercion
6. The man reaches underneath woman's skirt. The woman tells him off. He threatens to end the relationship.	Man's advances Woman sets boundaries Man's verbal coercion
7. The woman stops the man from removing her underwear and tells him she does not want sex. He accuses her that she would not have let him go this far if she did not want to have sex.	Man's physical coercion Woman sets boundaries Man's verbal coercion
8. The man undresses the woman and she fights him off. They have sexual intercourse.	Man's physical coercion Sexual assault

## Appendix C.

### Vignette Survey

Now that you have read this section of the vignette, please answer the following questions about the most recent event.

1. As an observer, to what degree are you comfortable with this interaction? (scale 1-10)
2. How safe is the woman to remain in this situation? (scale 1-10)
3. To what degree is the man's behavior sexual harassment? (scale 1-10)
4. To what degree is the man's behavior sexual assault? (scale 1-10)
5. What is the probability the woman wants to have sex at this point?" (0-100%)
6. Is this situation consensual? (yes/no)
7. Should the woman report this incident? (yes/no)

## Appendix D.

### Sexual Experiences Survey - Short Form Perpetration

Please specify if these acts have taken place.

1. Have you done the following? Select all that apply.

- Fondled, kissed, touched, or rubbed up against someone's lips, breast/chest, genitals, or anus/butt without their consent
- Removed some or all of someone's clothing without their consent (but did not attempt sex)

2. If yes to any of the above, which of the following methods did you use? Select all that apply.

- Telling lies, verbal threats, making false promises, or using verbal pressure
- Showing displeasure, criticizing them, getting angry
- Taking advantage of them when they were too drunk or out of it to stop what was happening
- Threatening to physically harm someone or someone close to them
- Using force (for example: holding them down with my body weight, pinning their arms, or having a weapon)

3. Have you done the following? Select all that apply.

- Stared at someone in a sexual way or made sexual comments without their consent
- Showed or sent someone sexual or obscene messages, photos, or videos without their consent
- Watched or took photos/videos of someone while they were undressing, nude, or having sex without their consent
- Showed someone your genitals or made sexual motions towards someone (for example: grabbing your crotch, pretending to masturbate) without their consent
- Masturbated in front of someone without their consent

4. Even though it did not happen, have you TRIED to perform oral sex on someone without their consent?

- Yes/no

5. Even though it did not happen, have you ever...

	In their mouth	In their vagina	In their anus
Tried to penetrate someone with hands/objects? (Note where)			
Tried to penetrate someone with a penis? (Note where)			

6. If yes to any of the above, which of the following methods did you use? Select all that apply.

- Telling lies, verbal threats, making false promises, or using verbal pressure
- Showing displeasure, criticizing them, getting angry
- Taking advantage of them when they were too drunk or out of it to stop what was happening
- Threatening to physically harm someone or someone close to them
- Using force (for example: holding them down with my body weight, pinning their arms, or having a weapon)

7. Have you performed oral sex on someone without their consent?

- Yes/no

8. Have you been able to...

	In their mouth	In their vagina	In their anus
Penetrate someone with hands/objects? (Note where)			
Penetrate someone with a penis? (Note where)			

9. If yes to either of the above 2 questions, which of the following methods did you use? Select all that apply.

- Telling lies, verbal threats, making false promises, or using verbal pressure
- Showing displeasure, criticizing them, getting angry
- Taking advantage of them when they were too drunk or out of it to stop what was happening
- Threatening to physically harm them or someone close to them
- Using force (for example: holding them down with my body weight, pinning their arms, or having a weapon)

10. How old were you when the first of any of these incidents occurred? Enter 0 if these incidents never occurred.

11. If yes, what was the gender of the person(s) who engaged in these acts with you?

- Female only

- Male only

- Both females and males

- I reported no experiences/not applicable

12. Has anyone ever told you that you sexually assaulted them?

- Yes/no

## Appendix E.

### Sexual Experiences Survey - Short Form Victimization

Please specify if these acts have taken place.

1. Has anyone done the following? Select all that apply.

- Fondled, kissed, touched, or rubbed up against your lips, breast/chest, genitals, or anus/butt without your consent
- Removed some or all of your clothing without your consent (but did not attempt sex)

2. If yes to any of the above, which of the following methods did the other person(s) use? Select all that apply.

- Telling lies, verbal threats, making false promises, or using verbal pressure
- Showing displeasure, criticizing me, getting angry
- Taking advantage of me when I was too drunk or out of it to stop what was happening
- Threatening to physically harm me or someone close to me
- Using force (for example: holding me down with their body weight, pinning my arms, or having a weapon)

3. Has anyone done the following? Select all that apply.

- Stared at you in a sexual way or made sexual comments without your consent
- Showed or sent you sexual or obscene messages, photos, or videos without your consent
- Watched or took photos/videos of you while you were undressing, nude, or having sex without your consent
- Showed you their genitals or made sexual motions towards you (for example: grabbing their crotch, pretending to masturbate) without your consent
- Masturbated in front of you without your consent

4. Even though it did not happen, has someone TRIED to perform oral sex on without your consent?

- Yes/no

5. Even though it did not happen, has anyone ever...



	In your mouth	In your vagina	In your anus
Tried to penetrate you with hands/objects? (Note where)			
Tried to penetrate you with a penis? (Note where)			

6. If yes to any of the above, which of the following methods did the other person(s) use? Select all that apply.

- Telling lies, verbal threats, making false promises, or using verbal pressure
- Showing displeasure, criticizing me, getting angry
- Taking advantage of me when I was too drunk or out of it to stop what was happening
- Threatening to physically harm me or someone close to me
- Using force (for example: holding me down with their body weight, pinning my arms, or having a weapon)

7. Has someone performed oral sex on you without your consent?

- Yes/no

8. Has anyone been able to...

	In your mouth	In your vagina	In your anus
Penetrate you with hands/objects? (Note where)			
Penetrate you with a penis? (Note where)			

9. If yes to either of the above 2 questions, which of the following methods did the other person(s) use? Select all that apply.

- Telling lies, verbal threats, making false promises, or using verbal pressure
- Showing displeasure, criticizing me, getting angry
- Taking advantage of me when I was too drunk or out of it to stop what was happening
- Threatening to physically harm me or someone close to me
- Using force (for example: holding me down with their body weight, pinning my arms, or having a weapon)

10. How old were you when the first of any of these incidents occurred? Enter 0 if these incidents never occurred.

11. If yes, what was the gender of the person(s) who engaged in these acts with you?

Using force (for example: holding me down with their body weight, pinning my arms, or having a weapon)

- Female only
- Male only
- Both females and males
- I reported no experiences/not applicable

## **Appendix F.**

### **Token Resistance to Sex Scale**

Respond to the following statements by indicating the degree to which you agree (1 = strongly agree) or disagree (7 = strongly disagree) with the statement.

1. Women usually say "no" to sex when they really mean "yes".
2. When a man only has to use a minimal amount of force on a woman to get her to have sex, it probably means she wanted him to force her.
3. When a woman waits until the very last minute to object to sex in a sexual interaction, she probably really wants to have sex.
4. A woman who initiates a date with a man probably wants to have sex.
5. Many times a woman will pretend she doesn't want to have intercourse because she doesn't want to seem too loose, but she's really hoping the man will force her.
6. A woman who allows a man to pick her up for a date probably hopes to have sex that night.
7. When a woman allows a man to treat her to an expensive dinner on a date, it usually indicates that she is willing to have sex with him.
8. Going home with a man at the end of a date is a woman's way of communicating to him that she wants to have sex.

## Appendix G.

### Acceptance of Modern Myths about Sexual Aggression (AMMSA) scale

Please mark the appropriate response (1 = strongly agree to 7 = strongly disagree) to all statements below:

1. When it comes to sexual contacts, women expect men to take the lead.
2. Once a man and a woman have started "making out", a woman's misgivings against sex will automatically disappear.
3. A lot of women strongly complain about sexual infringements for no real reason, just to appear emancipated.
4. To get custody for their children, women often falsely accuse their ex-husband of a tendency towards sexual violence.
5. Interpreting harmless gestures as "sexual harassment" is a popular weapon in the battle of the sexes.
6. It is a biological necessity for men to release sexual pressure from time to time.
7. After a rape, women nowadays receive ample support.
8. Nowadays, a large proportion of rapes is partly caused by the depiction of sexuality in the media as this raises the sex drive of potential perpetrators.
9. If a woman invites a man to her home for a cup of coffee after a night out this means that she wants to have sex.
10. As long as they don't go too far, suggestive remarks and allusions simply tell a woman that she is attractive.
11. Any woman who is careless enough to walk through "dark alleys" at night is partly to be blamed if she is raped.
12. When a woman starts a relationship with a man, she must be aware that the man will assert his right to have sex.
13. Most women prefer to be praised for their looks rather than their intelligence.
14. Because the fascination caused by sex is disproportionately large, our society's sensitivity to crimes in this area is disproportionate as well.

15. Women like to play coy. This does not mean that they do not want sex.
16. Many women tend to exaggerate the problem of male violence.
17. When a man urges his female partner to have sex, this cannot be called rape.
18. When a single woman invites a single man to her flat she signals that she is not averse to having sex.
19. When politicians deal with the topic of rape, they do so mainly because this topic is likely to attract the attention of the media.
20. When defining "marital rape", there is no clear-cut distinction between normal conjugal intercourse and rape.
21. A man's sexuality functions like a steam boiler – when the pressure gets too high, he has to "let off steam".
22. Women often accuse their husbands of marital rape just to retaliate for a failed relationship.
23. The discussion about sexual harassment on the job has mainly resulted in many a harmless behavior being misinterpreted as harassment.
24. In dating situations the general expectation is that the woman "hits the brakes" and the man "pushes ahead".
25. Although the victims of armed robbery have to fear for their lives, they receive far less psychological support than do rape victims.
26. Alcohol is often the culprit when a man rapes a woman.
27. Many women tend to misinterpret a well-meant gesture as a "sexual assault".
28. Nowadays, the victims of sexual violence receive sufficient help in the form of women's shelters, therapy offers, and support groups.
29. Instead of worrying about alleged victims of sexual violence society should rather attend to more urgent problems, such as environmental destruction.
30. Nowadays, men who really sexually assault women are punished justly.

## Appendix H.

### Brief Sexual Attitudes Scale

Please mark the appropriate response (1 = strongly agree to 5 = strongly disagree) to all statements below:

1. I do not need to be committed to a person to have sex with him/her.
2. Casual sex is acceptable.
3. I would like to have sex with many partners.
4. One-night stands are sometimes very enjoyable.
5. It is okay to have ongoing sexual relationships with more than one person at a time.
6. Sex as a simple exchange of favors is okay if both people agree to it.
7. The best sex is with no strings attached.
8. Life would have fewer problems if people could have sex more freely.
9. It is possible to enjoy sex with a person and not like that person very much.
10. It is okay for sex to be just good physical release.
11. Birth control is part of responsible sexuality.
12. A woman should share responsibility for birth control.
13. A man should share responsibility for birth control.
14. Sex is the closest form of communication between two people.
15. A sexual encounter between two people deeply in love is the ultimate human interaction.
16. At its best, sex seems to be the merging of two souls.
17. Sex is a very important part of life.
18. Sex is usually an intensive, almost overwhelming experience.
19. Sex is best when you let yourself go and focus on your own pleasure.
20. Sex is primarily the taking of pleasure from another person.
21. The main purpose of sex is to enjoy oneself.
22. Sex is primarily physical.
23. Sex is primarily a bodily function, like eating.